

## 2 Economic Growth, Savings, and Investment

### 2.1 Global Scenario

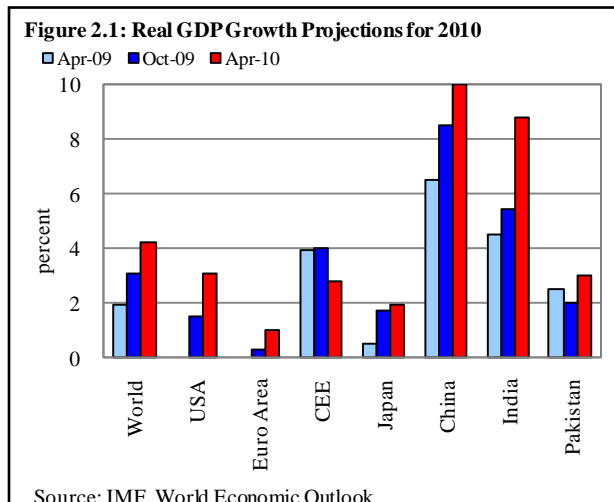
The recovery in global economy proved stronger than expected but the prospects for growth varied substantially across regions (see **Figure 2.1**). The output levels in developing Asia have already surpassed the pre-crisis levels, whereas the Euro Area hit hardest by the financial crisis was slowest to recover. Other economies including US, the epicenter of crisis, and the emerging and developing economies of Europe, Latin America, and Central Asia have shown a modest recovery.

Besides the pace, the growth across regions also varied in terms of fundamentals. For instance, the recovery in US and advanced Europe was mainly policy driven but private demand, and labor markets remained weak. There are growing concerns that the weak growth could persist in US with knock-on effects on Chinese exports. In some countries of advanced Europe, fiscal imbalances increased substantially. In contrast, while emerging economies also benefited from counter-cyclical policy support, its scale was smaller compared with that in advanced economies (see **Table 2.1**). For example, strong private demand in Asia (e.g., India and China), resumption of capital flows, and relative YoY increase in export demand were major factors supporting the recovery. Similarly, recovery seen in Central Asian economies was substantially helped by decline in commodity prices.

While the recovery in advanced economies is fragile with greater risks of a double-dip recession, Asian economies are likely to show reasonable growth. However, strong domestic demand in major Asian economies (e.g., India and China) poses additional challenges due to emerging inflationary pressures. The demand in these economies spurred from easy credit conditions and the emergence of inflationary pressures in recent months has restricted the scope for further monetary stimulus. For countries like Pakistan that made structural adjustments in the crisis period, the challenge remains to sustain the hard-earned macroeconomic stability without significantly hurting the nascent economic recovery.

### 2.2 Domestic Scenario

Pakistan's economy witnessed a moderate recovery in FY10 with real GDP growth rising to 4.1 percent in FY10 after falling to a multi-decade low of 1.2 percent in FY09<sup>1</sup> (see **Table 2.2**). This recovery was principally a reflection of: (a) a relative improvement in consumer confidence amid support from both fiscal and monetary policies, (b) significant rise in remittances, and (c) a low base. This growth seems even more impressive given a gradual reduction in a number of energy related



**Table 2.1: Comparison of Fiscal Deficit (as percent of GDP)**  
percent

	2007	2008	2009	2010
Advanced economies	-1.1	-3.6	-8.7	-8.3
Emerging and developing	0.5	-0.1	-4.4	-3.3
World	-0.4	-2.1	-6.7	-6.0

Source: IMF

<sup>1</sup> Pakistan recorded 1.0 percent real GDP growth in FY71.

subsidies in accordance with the IMF-SBA program. Since demand for energy products is relatively inelastic, the negative discretionary income effects are large. In specific terms, increase in the consumption of electricity and gas along with the tariff increase meant that households and corporate sector spending on energy related expenses actually increased during FY10. The negative repercussions of these reforms on domestic consumption demand could have been severe if not for substantial disinflation during the year.

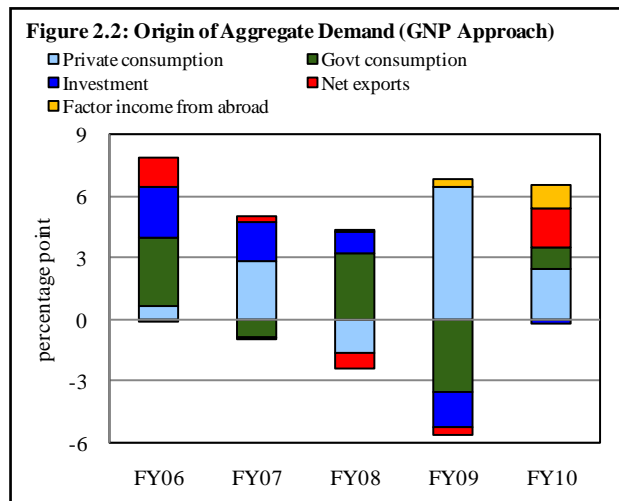
**Table 2.2: Key Macroeconomic Indicators**

percent	FY08	FY09	FY10
Nominal GDP growth	20.5	21.8	14.6
Real GDP growth	3.7	1.2	4.1
Real GNP growth	3.7	1.7	5.5
M2 growth	15.3	9.6	12.5
Budget deficit / GDP	7.6	5.2	6.3
GDP deflator growth	16.2	20.3	10.1

Pakistan made substantial efforts to correct the macroeconomic imbalances, supported by an IMF SBA program. Thus the slowdown in domestic economy in FY09 was mainly an outcome of depressed domestic demand; the direct contribution of global crisis was fairly small. However, as the FY09 proceeded, many of the macro imbalances began narrowing as a result of policy measures and, ironically, due to the impact of the global slowdown. Inflation and the current account deficit in particular fell substantially. This allowed SBP to begin easing monetary policy. This was first manifested in the monetary policy announced in April 2009, and later in August and November 2009.

Moreover, government announced pro-growth measures in the fiscal budget for FY10. Thus, by the start of FY10, it had become clear that policy focus would be to support recovery of domestic economy while avoiding a build-up of another round of macroeconomic imbalances.

In this backdrop, the economic recovery appears consequential to the correction of imbalances. For example, anecdotal evidence suggests that disinflation was pivotal in building up domestic demand (see **Figure 2.2**). Further support to consumption demand came from strong rural incomes (especially after higher wheat output and prices in FY09)<sup>2</sup> and tax breaks in the 2010 Budget (including removal of FED from automobiles and reduction in tax on cement).



Besides domestic policy support, a part of the recovery also stemmed from positive developments on the external front. While the revival in trade flows set the pace for production in exporting industries, record-high remittance inflows during the year strengthened domestic consumption. Other windfalls that came from the external front included relatively stability in both, global commodity prices and exchange rates, for most of the year, which helped in keeping inflation relatively low.

Consequently, construction and allied industries, consumer durables, and a few exporting industries showed substantial improvements during the year (see **Table 2.3**). Although a few sectors are still showing weaknesses despite strong demand, the overall industrial growth in FY10 was impressive especially given the prevailing energy shortages and reported productivity losses. The spillover of expanding industrial production and trade volumes widened to the services sector as *transport*,

<sup>2</sup> Phenomenon that perhaps reflects a high propensity to consume in the farm sector.

**Table 2.3: Gross Domestic Product (at constant prices of 1999-2000)**

values in million rupees; shares, growth rate in percent; contribution in percentage point.

Items	Value-added		Share in GDP		Growth		Contribution to growth	
	FY09 (R)	FY10 (P)	FY09	FY10	FY09	FY10	FY09	FY10
<b>Commodity producing sectors</b>	<b>2,555,948</b>	<b>2,646,845</b>	<b>47.1</b>	<b>46.9</b>	<b>0.8</b>	<b>3.6</b>	<b>0.4</b>	<b>1.7</b>
<i>Agriculture</i>	<i>1,195,031</i>	<i>1,218,873</i>	<i>21.3</i>	<i>21.9</i>	<i>4.0</i>	<i>2.0</i>	<i>0.9</i>	<i>0.4</i>
Crops	537,087	534,737	9.5	9.9	4.9	-0.4	0.5	0.0
Livestock	622,531	648,106	11.2	11.4	3.5	4.1	0.4	0.5
<i>Industry</i>	<i>1,360,917</i>	<i>1,427,972</i>	<i>25.8</i>	<i>25.0</i>	<i>-1.9</i>	<i>4.9</i>	<i>-0.5</i>	<i>1.2</i>
Mining & quarrying	137,707	135,411	2.6	2.5	-0.2	-1.7	0.0	0.0
Manufacturing	997,966	1,049,569	19.2	18.3	-3.7	5.2	-0.7	0.9
Large scale	664,405	693,355	13.4	12.2	-8.2	4.4	-1.1	0.5
Construction	112,884	130,203	2.4	2.1	-11.2	15.3	-0.3	0.3
Electricity, gas & water supply	112,360	112,789	1.6	2.1	30.8	0.4	0.5	0.0
<b>Services</b>	<b>2,892,089</b>	<b>3,023,923</b>	<b>52.9</b>	<b>53.1</b>	<b>1.6</b>	<b>4.6</b>	<b>0.8</b>	<b>2.4</b>
Transport, storage & communications	554,115	578,966	10.0	10.2	2.7	4.5	0.3	0.5
Wholesale & retail trade	921,015	968,150	17.4	16.9	-1.4	5.1	-0.2	0.9
Finance & insurance	314,813	303,521	6.3	5.8	-7.0	-3.6	-0.4	-0.2
Ownership of Dwellings	150,629	155,916	2.7	2.8	3.5	3.5	0.1	0.1
Public administration & defense	332,108	357,134	6.0	6.1	3.6	7.5	0.2	0.5
Social, community & personal services	619,409	660,236	10.6	11.4	8.9	6.6	0.9	0.7
<b>GDP (at factor cost)</b>	<b>5,448,037</b>	<b>5,670,768</b>	<b>100.0</b>	<b>100.0</b>	<b>1.2</b>	<b>4.1</b>	<b>1.2</b>	<b>4.1</b>

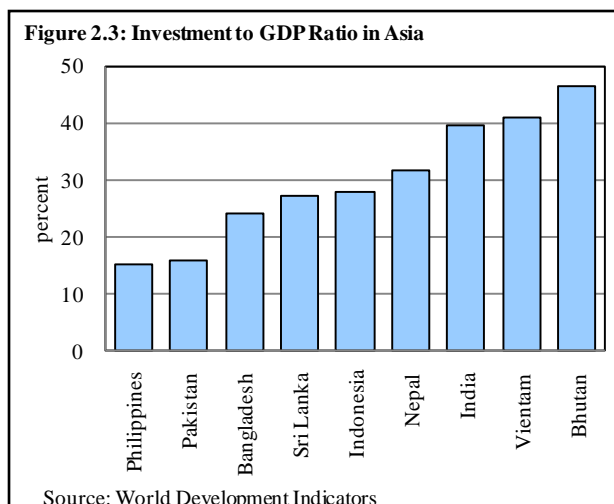
Source: Economic Survey, Budget documents

*storage, and communication* and *wholesale & retail trade* activities staged a strong recovery. Nonetheless, a part of these gains were offset by a weaker agriculture sector in FY10 mainly due to water shortages, declining yields of cotton and wheat, and lower area under sugarcane and rice cultivation.

Thus, the recovery during FY10 was induced by relatively better macroeconomic fundamentals, improved business and consumer confidence, as well as, recovery in global demand. Despite this, however, the growth seems fragile. Specifically, the growth in FY10 features a number of structural weaknesses in the economy. For example, aggregate demand was supported during the year by an expansion in public expenditures, which is already crowding out the private sector and is, therefore, not sustainable.

Another concern is the re-emergence of inflationary pressures in the latter half of FY10 as rising energy prices seeped into the broader economy, especially in food prices. The persistence in inflationary pressures is a source of concern as the monetary policy cannot remain supportive or even neutral for long.

The above concerns are further amplified with a decline in investment for the second consecutive year. A key factor here could be the unfavorable security situation in the country. Almost the entire decline was due to lower foreign direct investment. Furthermore, it also appears that some investors are probably not certain of the strength and resilience of demand especially in view of insufficient



macroeconomic stability, low production and sale levels compared with pre-crisis level. Domestic investors, in contrast, seem relatively more convinced of the strength in domestic demand and made significant capital spending, especially in the second half of the year. The present decline in investments in the country put Pakistan in an extremely disadvantageous place across Asian nations as it has one of the lowest investments to GDP ratios in the region (see **Figure 2.3**). It appears that Pakistan needs to maximize productivity gains through investment.

Moreover, if the capital spending remains scarce, it would become hard to respond to higher demand without putting significant pressure on inflation and thus growth will be self-defeating in the medium term.

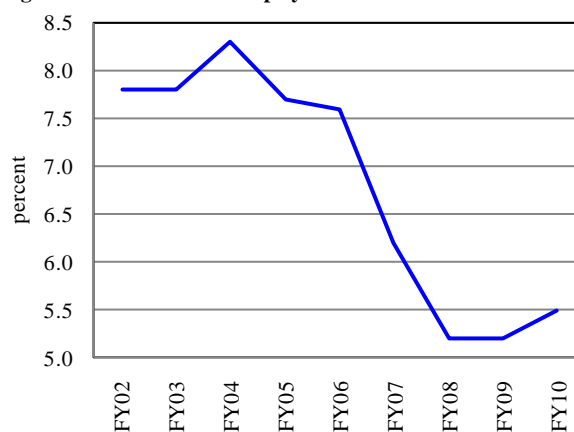
Specifically, the production increases in FY10 were possible mainly because major manufacturers were sitting on idle capacities. Not only did this allow manufacturers' to respond quickly to growing demand, this also allowed production increases without significant pressures on inflation. This is not to suggest that investments are required only for capacity augmentations so that future demand increases could be met easily.

Investments are also desirable to achieve productivity gains by ensuring the maximum and efficient utilization of available capacities. In this context, perhaps the most crucial area of investment is the energy sector. Energy bottlenecks have reportedly caused significant productivity and employment losses in the small scale sector that cannot afford to run back-up supplies due to financial limitations. As the manufacturing sector intends to compensate capital productivity losses with labor productivity gains, the rampant energy shortages may be viewed as one of the major factors causing limited job creation (see **Figure 2.4**). Thus, it appears that economy is under a vicious cycle that in the absence of capital spending in key sectors, the growth prospects would remain unpromising and the resultant unemployment would increase social unrest that in turn would keep foreign investors away.

Therefore, to keep the economy on a modest growth trajectory, participation from both the public and private sector will be required for meeting investment needs of the energy sector. Private investment in energy sector has particularly low over the past four years due to lack of well-defined policies. Moreover, for a long time, high subsidies on electricity and gas tariffs drained public funds that could have been utilized for expansion and up-gradation projects (see **Table 2.4**) resulting in two years of continuous decline in public investment in the energy sector.

Moreover, while investment is essential for future growth, sustainable growth hinges on how future expenditures are financed. Specifically, domestic savings must be enhanced to contain imbalances arising out of fiscal over-runs. It is also important to note that while low private sector investment needs are usually met from (low) private savings, shortfall in public sector savings is a major source of savings-investment gap in Pakistan. It is therefore essential that efforts be made to: (a) increase

**Figure 2.4: Pakistan's Unemployment Rate**



Source: Economic Survey 2009-10

**Table 2.4: Subsidies and Investment in the Power Sector**  
billion Rupees

Category	FY07	FY08	FY09	FY10
Subsidies to WAPDA & KESC	-	-	92.8	187.0
Investment in power & gas	32.7	34.8	29.7	26.4
Public investment	19.5	21.9	19.2	18.1
Private investment	13.2	12.9	10.5	8.3

Source: Economic Survey, Budget documents.

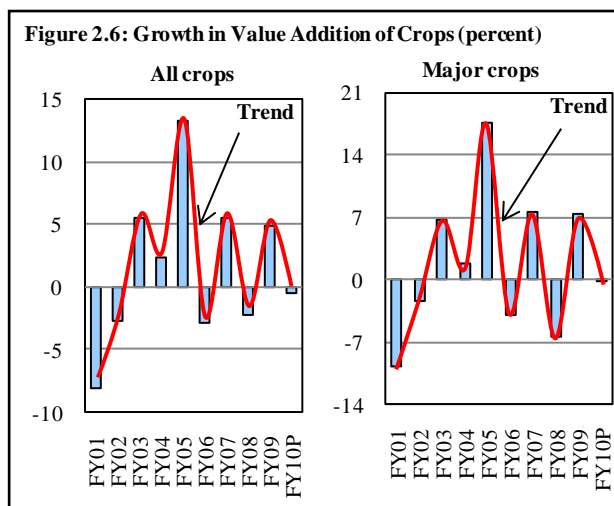
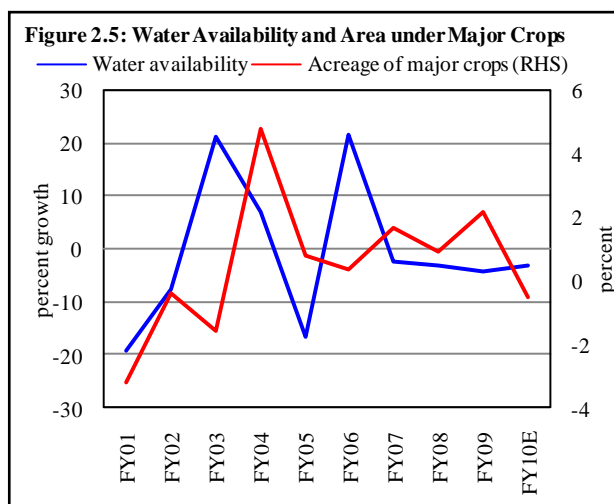
investment in private sector; (b) generate higher savings in the private sector; as well as, (c) reduce public sector savings-investment gap.

### 2.3 Agriculture Sector

The agriculture growth dropped from 4.0 percent in the preceding year to 2.0 percent in FY10. This deceleration was not only attributed to a negative growth by the crops sub-sector but also because of a relatively higher base; offsetting the impact of significant growth in livestock. The performance by the crops sub-sector suffered in FY10 due to: (a) irrigation water shortages; (b) inadequate availability of certified seeds relative to FY09; and (c) lower rains during critical *rabi*<sup>3</sup> sowing period, i.e, Nov-Jan FY10. In addition, uncertainty over prices of rice and sugarcane also contributed to the negative growth of cropping sector. These factors primarily led to a decline in area under cultivation as well as yields of some major crops. While a strong recovery was anticipated by major crops in FY11, damages to *kharif*<sup>4</sup> crops by the recent floods means that these will not be realized.

The cropping sector had low irrigation water availability at crucial cultivation phases in FY10. This restricted farmers from aggressive sowing; consequently area under major crops declined. The acreage of major crops registered a negative growth of 0.5 percent YoY in FY10, as against an average increase of 0.5 percent per annum during the decade (see **Figure 2.5**). Nonetheless, due to a better price outlook at sowing times, area under cotton and wheat crops increased.

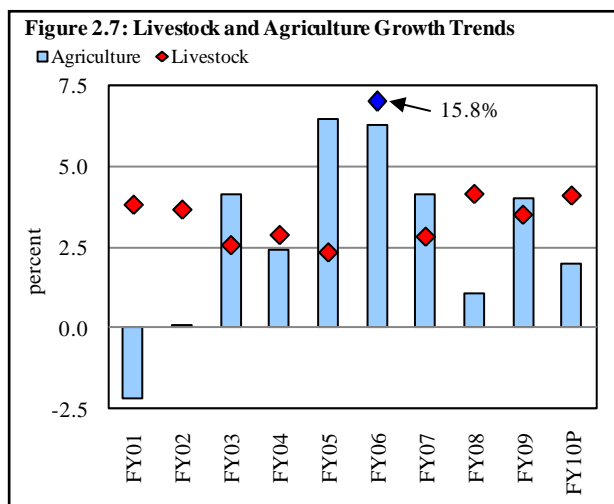
Cropping sector, especially major crops, followed a cyclical pattern, which is reflected in boom-bust growth cycle since FY02 (see **Figure 2.6**). This boom-bust cycle is mainly attributed to market imperfections, as when farmers opted for a crop on the basis of attractive prices, either due to changes in international prices or abundant supply, domestic prices collapsed at harvest times. Consequently, in the following year farmers switch to other crop. This is a classical cobweb production cycle in economic literature. Timely information to farmers on future market trends can reduce resource misallocation and improve farmers' income. Healthy futures market will reduce farmers' losses. If futures market is available, farmer can sell his produce at a certain price and could compute his returns. Improvement in market structure would not only help reduce volatility in agri-production, it would also lower volatility in prices of agri-commodities. Moreover, better storage facilities may also help farmers to make marketing decisions according to price signals.



<sup>3</sup> *Rabi* season starts from October to March.

<sup>4</sup> *Kharif* season starts from April to September.

Despite low irrigation water availability, lower acreage and slower pace of agri-credit disbursement, growth in fertilizer off-take remained strong. Low fertilizer prices, ample supply, and expectations of better prices of wheat encouraged farmers to increase the use of fertilizers during FY10. On the other hand, water shortages at crucial *kharif* and *rabi* sowing periods and cautious lending by the banks resulted in slowdown in agri-credit growth during FY10. In addition, since agri-credit disbursement is based on revolving credit scheme, significant lending for development purposes by one of the specialized bank also reduced the disbursement for short-term production loans.



On the positive side, strong livestock growth helped the agriculture sector in achieving a modest growth in FY10 (see **Figure 2.7**). The healthy livestock growth is attributed to growing domestic and external demand. It is important to note that Pakistan has enormous potential to export livestock products (meat, meat preparations, and live animals) to Middle East, EU, and Malaysia. There is a need to attract investment in this important segment to tap this potential. In this backdrop, it is encouraging that the number of borrowers in livestock sub-sector is rising.

The impact of lower water availability was also visible on the performance of fishing sub-sector as its value added growth rate decelerated to 1.4 percent in FY10 from 2.3 percent in FY09. Forestry sub-sector witnessed a positive growth in its value addition after a decline for six years in a row. Although, the combined share of fishing and forestry sub-sectors in GDP is only 0.6 percent, their forward linkages with other sectors, their contribution in trade and more importantly in employment absorption is enormous. Therefore, serious efforts are needed to achieve sustained growth in these sectors.

Some measures were announced in FY11 budget for the combined development of agriculture and energy sector: (a) raising Mangla Dam water storage capacity is to be completed in 2010-11, (b) Diamir-Basha Dam would be launched in 2010-11, which will generate 4500 MW electricity with water storage, and (c) Rs 40.0 billion have been allocated for development of water, agriculture, livestock, and dairy sectors.

### 2.3.1 Agri-export

In spite of weaker crop production, export of agri-commodities showed a healthy growth in FY10.<sup>5</sup> Strong foreign demand and weaker harvests in other key producing countries supported the growth in exports of Irri & other non-basmati rice, livestock, fruits & vegetables, spices and raw cotton to traditional as well as new markets.<sup>6</sup> Among food group, export of rice increased on account of better growth in Irri & other rice varieties, contrary to negative growth witnessed in basmati. Low exports of basmati rice is attributed to lower unit value, as quantum of basmati increased by 1.2 percent during FY10 in contrast to 14.4 percent negative growth last year. The strong exports of rice group dominated the aggregate growth of agri-exports (see **Figure 2.8**). Fruit exports exhibited impressive growth in quantity as well as in value terms, mainly due to strong demand and better production of citrus and mango. Despite slower growth of vegetables quantum exports, higher unit value helped a

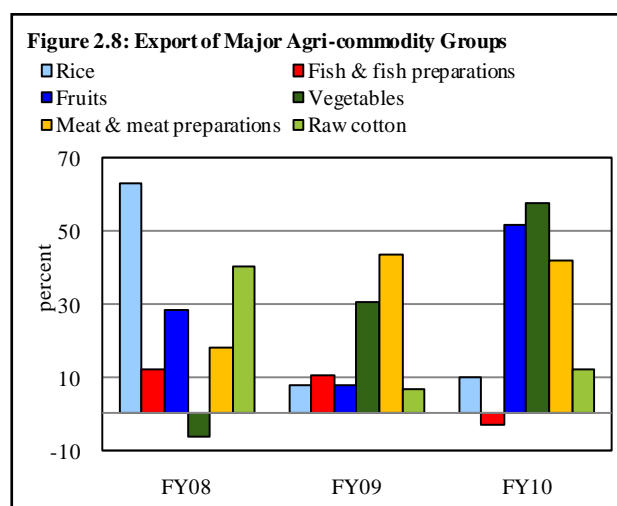
<sup>5</sup> In value terms (US\$)

<sup>6</sup> China, Malaysia, Indonesia and Singapore



strong 57.3 percent increase in value terms during FY10 compared with 30.7 percent increase last year. Further, despite lower domestic production than consumption, exports of raw cotton and yarn surged in terms of quantum and value during FY10 as higher international prices amid global supply concerns attracted domestic traders to export aggressively.

The export of meat and meat preparations increased to US\$100.0 million during FY10 from US\$ 70.5 million last year. Exports of livestock products have doubled since FY08, which is a positive sign for the prospects of livestock growth, rural incomes as well as economy. However, exports of fish & fish preparations were highly disappointing. In value terms it posted 2.7 percent negative growth on the back of slowdown in quantum growth during FY10. Investment in storage, packaging and adoption of international standards could help increase exports of fish & fish products to EU, Japan, and other countries.



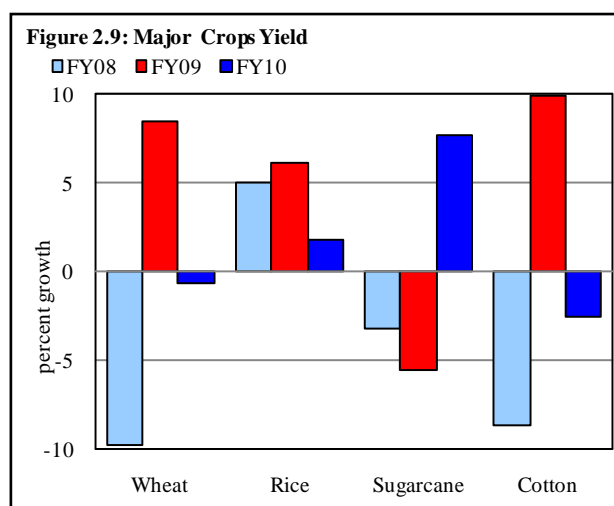
Growth in exports of agri-commodities is a welcome development given attractive commodity prices. This would not only ease pressures on country's trade deficit, it would also help increase income of farm sector. In this backdrop, it is pertinent to point out that substantial exportable surplus of agri-commodities could be generated by reducing post-harvest losses. This requires awareness amongst the farmers, training, investment in infrastructure and construction of storage facilities and improvement of the transportation system.

### 2.3.2 Major crops

After recording a substantial growth of 7.3 percent in FY09, value addition by major crops posted a decline of 0.2 percent in FY10. This was due to the combined impact of fall in area under major crops (except cotton and wheat) amid water shortages at crucial sowing stages and gloomy price outlook for sugarcane and rice crops (see **Figure 2.9**).

However, wheat crop was an exception due to clear price incentive signals as government announced its intentions to maintain FY09 support price for FY10 crop ahead of the sowing period, although international prices were declining.

Therefore, despite irrigation water shortages and poor winter rains, wheat cultivated area increased by 0.7 percent. The farmers were also optimistic given relatively lower prices of fertilizers, which helped increase in off-take during FY10. Although, late winter rains supported wheat yield, water shortages at sowing time and attack of deadly rust disease in lower Punjab and upper Sindh regions took its toll in terms of lower yield during FY10 relative to FY09. In this background, achieving 23.9 million tons wheat production in FY10 was impressive, though it is below target of 25.0 million tons and actual harvest of 24.0 million tons in



FY09. The growth of gram was initially hit by low plantation and then its yield dropped due to lower winter rains, as this crop is largely cultivated in non-irrigated (barani) areas. Gram harvest posted a negative growth of 22.9 percent in FY10 against a strong increase of 56.0 percent last year.

The production of rice, sugarcane, and maize declined in FY10 due to lower acreage. Notably, despite a fall in rice production, the country had the second highest harvest in FY10. This was the principal factor for record rice exports in FY10. Negative growth of sugarcane production, for the second year in a row, was the result of lower area under cultivation and water shortages followed by lower rains. The impact was further compounded by frequent disruptions in electricity supply which halted operations of tube-wells.

Cotton primarily benefited from the substitution of cultivated area from competing crops. A strong growth in cotton harvest in Sindh increased the overall production. Cotton production could have been higher, if the incidence of disease/insects were properly controlled in Punjab, the major producing region. In addition, plantation of poor quality seeds instead of proper Bt cotton also contributed to lower yield in Punjab (see **Table 2.5**). In contrast, fewer insect/disease attacks and cultivation of proper Bt cotton seed, well supported by good luck in terms of favorable weather - low temperature, and weaker monsoon rains, contributed substantially to an exceptional cotton output in

**Table 2.5: Performance of Agriculture Sector**

Value addition	Unit	FY06	FY07	FY08	FY09 <sup>R</sup>	FY10 <sup>P</sup>	percent growth	
							FY09	FY10
Agriculture VA	billion Rs	1,092.1	1,137.0	1,148.9	1,195.0	1,218.9	4.0	2.0
<i>Of which</i>								
Major crops	-do-	370.0	398.6	373.2	400.5	399.7	7.3	-0.2
Minor crops	-do-	126.5	125.2	138.9	136.6	135.0	-1.6	-1.2
Livestock	-do-	561.5	577.4	601.4	622.5	648.1	3.5	4.1
<b>Crops production</b>								
Cotton	million bales	13.0	12.9	11.7	11.8	12.9	0.9	9.3
Wheat	million tons	21.3	23.3	21.0	24.0	23.9	14.7	-0.5
Rice	-do-	5.5	5.4	5.6	7.0	6.9	25.0	-1.0
Sugarcane	-do-	44.7	54.7	63.9	50.0	49.4	-21.7	-1.3
<b>Non-crops</b>								
Meat production	000 tons	2,515.0	2,618.0	2,728.0	2,843.0	2,965.0	4.2	4.3
Milk consumption (Human use)	-do-	31,970.0	32,986.0	34,064.0	35,160.0	36,299.0	3.2	3.2
Fish production	-do-	604.9	640.0	885.0	914.1	925.7	3.3	1.3
Forest production	000 cu.mtr.	265.0	373.0	363.0	347.0	356.0	-4.4	2.6
<b>Inputs</b>								
Improved seed distribution	000 tons	226.1	218.6	264.7	314.6	305.8	18.9	-2.8
Fertilizer off-take	(million N/T)	3.6	3.8	3.7	3.6	3.7	3.6	17.4
Sale of tractors	(Number)	48802	54052	53203	60351	64377	13.4	6.7
<b>Credit availability</b>								
Credit disbursement	billion Rs	137.5	168.8	211.6	233.0	248.1	10.1	6.5

R: revised, P:provisional,

Source: SBP, NFDC, MINFA, Economic survey of Pakistan 2009-10

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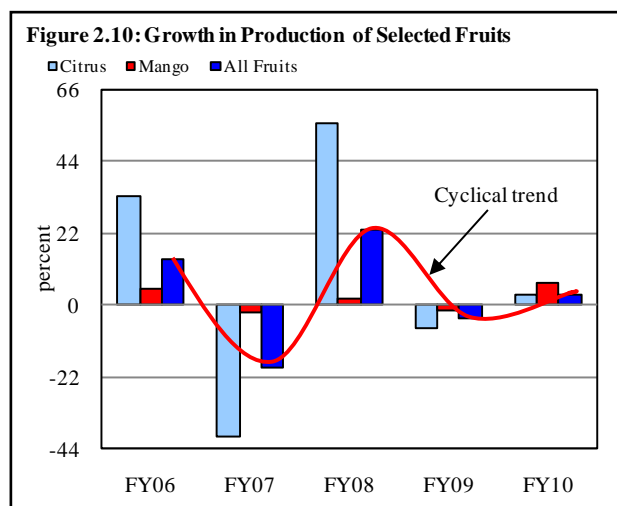
Among other major crops, lower area under maize, jowar and sesamum led to decline in production of these crops during FY10 compared with the preceding year. The fall in acreage under these crops was a function of lower availability of irrigation water and unfavorable weather. However, rise in maize yield partly compensated the impact of lower acreage, whereas decline in yields of bajra, jowar and sesamum further augmented the impact of decline in area during FY10.



### 2.3.3 Minor crops

Production of potato and onion crops increased during FY10 relative to the preceding year, mainly because of better prices, increased external demand in the preceding year and higher acreage under these crops. Late winter rains also boosted better harvesting of these crops. Despite higher prices, output of chillies, mash, and mung crops decreased mainly due to fall in their cultivated area. Production of mung and mash pulses witnessed a decline for another year in row in FY10. Masoor (lentils) production remained unchanged at preceding year's level of 14.0 thousand tons during FY10. Nonetheless, production of pulses was insufficient to meet domestic consumption; hence country was a net importer of pulses. Since international lentil prices were significantly higher in FY10 relative to the previous year, it added to the pressures on domestic inflation and import bill. One of the major issues in low production of pulses was low irrigation water availability (see **Box 2.1**).

Provisional estimates of production of combined group of fruits suggest an increase of 3.3 percent in FY10 against 3.9 percent decline witnessed last year. Production of citrus, mango, grapes and guava increased, while apple, apricot, banana, and almond decreased in FY10. Higher production of citrus and mango largely contributed to 51.9 percent increase in exports of fruits in FY10 compared with a rise of 7.8 percent in FY09.

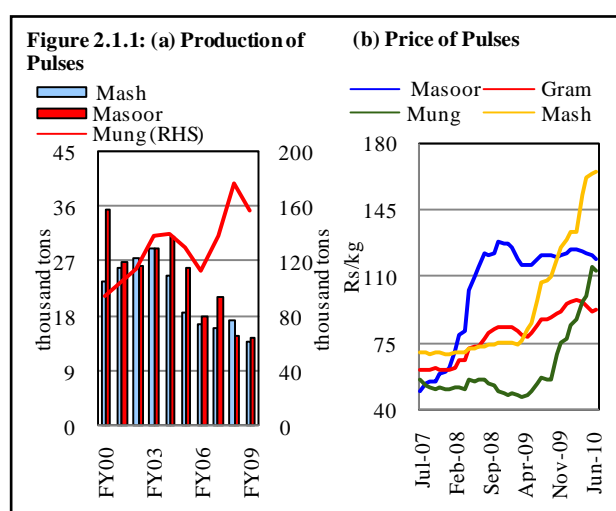


Production growth of citrus and mango and combined group of fruits seems influenced by regular cyclical behavior since FY06, as these crops showed increase in one year and vice-versa in the following year (see **Figure 2.10**). This may be the effect of weakening nutritional values of soil as well as slowdown in productivity of fruit trees, owing to poor management. In addition, lower rains and rising insect/disease attacks also weakened production of fruits despite strong domestic and external demand. In this context, replacement of old plants with fresh plants - import of better seedling of fruit crops, efficient soil management and increase in water availability would be useful to improve fruits production in the country.

#### Box 2.1: Pulse Production, Supply and Prices

Pulses are a major source of vegetable protein in South Asia. Major varieties of pulses like gram, mung, mash, masoor (lentils) and peas are harvested and consumed for non-meat protein. Pakistan has to import significant quantum of pulses due to inadequate domestic production. During FY10, while output of masoor remained unchanged, production of mung and mash dropped, principally due to lower rains, as these crops are largely cultivated in *barani* areas. Interestingly, on one hand, the country imported substantial quantum of masoor as domestic production was far below than the consumption and on the other hand, mung pulse was exported to India.

Given the importance of pulses in domestic consumption, particularly for low-income groups, a continued decline in production of pulses is a source of concern (see **Table 2.1.1**). It is important to note that the share of area under pulses in total cropped area declined from 6.2 percent in FY00 to 4.6 percent during FY10. However, rise in output of mung over the domestic consumption needs in past few years enabled the country to export the surplus to regional countries (see **Figure 2.1.1**). Area under mung crop increased by an average of 0.5 percent during FY01-FY10.



The impact of increased area was compounded by an average rise of 3.2 percent in its yield during this period. In contrast, production of mash and masoor pulses showed a declining trend. Acreage under mash and masoor registered an average fall of 3.9 and 6.7 percent respectively during FY01-FY10. The impact of this was further compounded by a drop in yields. Some major factors responsible for lower pulses production are: (a) cyclical variation in weather; (b) poor quality of seeds; (c) weak soil and crop management; (d) high incidence of disease/insect, (as pulse crops are vulnerable, particularly at the initial stage); and (e) uncertain returns due to variation in prices. Thus growers shifted to other high-value, low-risk crops.

**Table 2.1.1: Changes in Production, Imports, and Price of Pulses**  
percent

	FY09	FY10
<b>Production</b>		
Masoor	-6.7	0.0
Mung	-11.8	-24.2
Mash	-17.6	-21.4
<b>Pulses imports</b>		
Imports	12.0	14.6
<b>Prices</b>		
Masoor	74.9	0.2
Mung	-4.4	54.3
Mash	8.5	68.5

Source: SBP & FBS

However, it has been observed that the prices of imported pulses (masoor and gram) are relatively stable; but prices of pulses which are being exported (mung) and domestically consumed (mash) are generally rising (see **Table 2.1.1**). To increase domestic production of pulses, drought tolerance varieties and high yield seed varieties need to be developed. This will offer our farmers better returns and will ease pressures on the import bill. Recent floods and rains damaged mung crop, therefore it is likely that the country would not be able to export and its prices are likely to increase during FY11. Fortunately, international price outlook for pulses prices is gloomy for FY11 so far, thus it is likely that the domestic prices of gram and masoor will remain stable in the year.

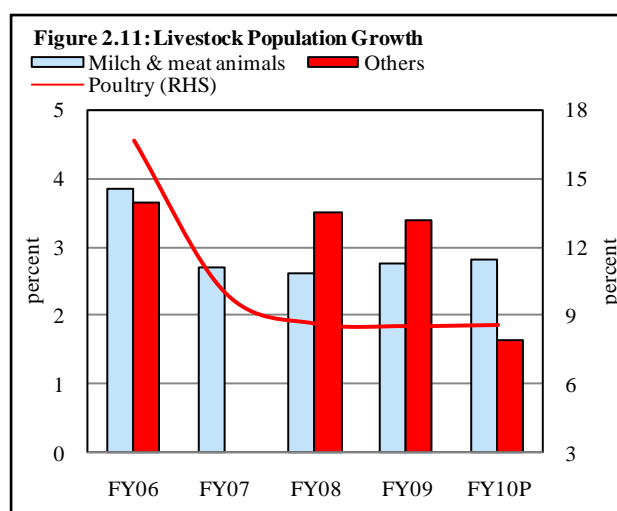
### 2.3.4 Livestock

Livestock sector registered a strong 4.1 percent growth in FY10, higher than both the target of 4.0 percent for the year and 3.5 percent growth registered in FY09. The strong growth in numbers of milch and meat animals attributed to this

growth (see **Figure 2.11**). Growing domestic as well as external demand for milk, meat, meat products, and live animals is the major factor for increasing activities in this sector.

Livestock sector has strong linkages with economic growth. It is an important source of proteins for the landless farmers and also a source of employment. Therefore, this sector could play a significant role in poverty reduction in the country. This sector has also emerged as a strong foreign earning and major raw material providing source for leather and other industries - fat, skin, wool/hair, etc.

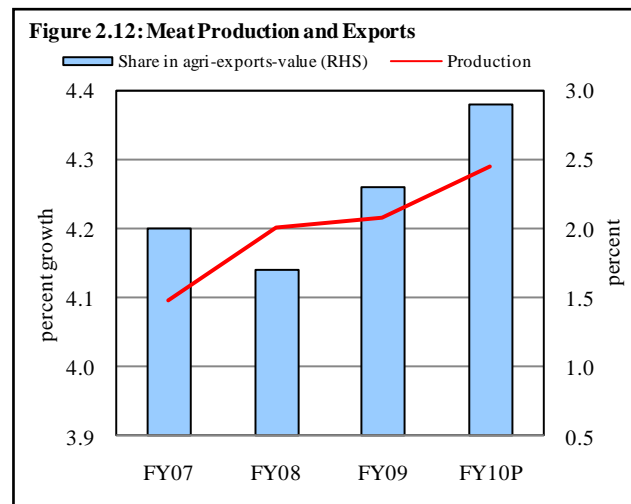
Strong demand for livestock is mainly because of population growth and rising income levels (that are altering dietary habits), as well as for exports. Due to mismatch between demand and supply, prices of most livestock products, particularly milk and meat, have shown a secular uptrend in recent years.



Milk and meat with combined share of 86.0 percent in total livestock value addition have great potential to enhance growth prospects of livestock sector. The increasing demand for milk and meat products suggest that their contribution in the economy may be increased many folds with improvement in storage and transportation. Present milk processing and marketing system is largely inefficient. A sizeable increase in investment by the private sector in value chain of milk will be critical to improve domestic supply.

Rising demand for livestock products increased production and raised its share in total agri- exports by 0.6 percentage points in FY10 over the last year (see **Figure 2.12**).

The growth prospects of livestock seem bright considering the rising domestic consumption and overseas exports. Pakistan is about to join Halal meat exporting countries as Gulf & Middle Eastern countries as well as Malaysian importers have shown interest in Halal meat. Malaysia agreed to import 60.0 thousand tons of Halal meat from Pakistan annually. Private sector may avail this opportunity to come forward and invest in the corporate farming and development of infrastructure-dehydration technology, investment in cold storages, value added processes, speedy export transportation, and exploration of new markets. This will not only raise rural incomes but will also speed up economic activities, generate employment and help reduce poverty.



A few projects are being initiated<sup>7</sup> for the development of livestock sector (are under feasibility study) costing Rs 5.5 billion. These include: (a) establishment of Halal Food Certification infrastructure; (b) establishment of National Research and Extension Network-assets for re-organization of camel growth;(c) Progressive Control of Foot and Mouth Disease (FMD) – prepare FMD control strategies and establish modern FMD vaccine production facility in the country; and (d) Poverty reduction with establishment of 400 small livestock farms to cater the needs of poor and landless livestock smallholders. These farms will be managed and run by the communities for commercial activities along with recycling of waste to produce bio-gas/composite and electricity.

Poultry sector is growing rapidly on the back of strong demand amid rising incomes, increase in urbanization and changing dietary habits. Poultry farming is also gradually increasing in rural areas as it has proved to be a good source of income. Rising population and limited jobs opportunities attract rural landless farmers to poultry farming business, though at small scale but it would have a big impact on poverty reduction in rural areas. The newly created Livestock & Dairy Development Ministry is working on improving rural poultry farming by encouraging private sector investment. In addition, some initiatives are also underway regarding regulatory framework, genetic improvement in rural poultry, disease management and improvement in value chain-collection, transportation, packaging and efficient marketing. Further, the Ministry is also developing strategy for bio-security, research, training and education for speedy growth of the poultry sector.

### 2.3.5 Agri-credit Performance

Growth rate of agriculture credit disbursement dropped to a ten-year low of 6.5 percent in FY10 (see **Figure 2.13**). Correspondingly, agri-credit disbursement target was missed by 4.6 percent for FY10 (i.e. Rs 11.9 billion). The impact of cautious lending by five big commercial banks amid rising NPLs was further compounded by imposition of short term restriction on effective mutation of village land by the revenue department of Sindh as well as law and order situation in Khyber Pakhtoonkhwa. NPLs of agri-sector increased by 6.2 percent in FY10 on top of 6.4 percent in FY09. More importantly, substantial amount was outstanding against the government for commodity operations in FY09 and government's additional appetite in FY10 at higher rates diverted funds to more secure end.

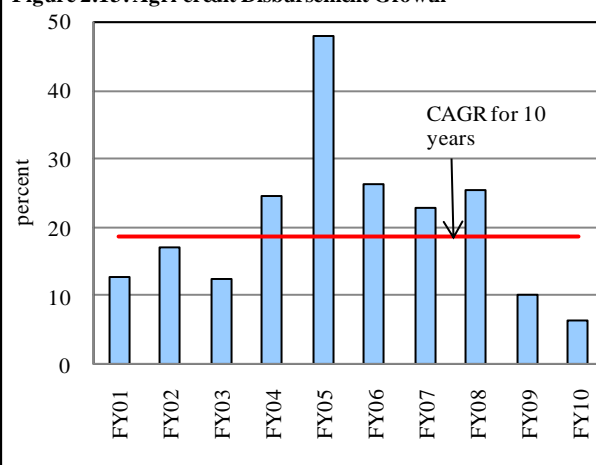
<sup>7</sup> By Ministry of Livestock and Dairy Development

A decline in the number of borrowers in farm sector is consistent with a sharp slowdown in lending to this sector. In contrast, growth in credit disbursement and borrowers in non-farm sector remained strong. Particularly, short term poultry related loans with better recovery make this sector an attractive segment for the banks. Since, farm sector (crops and orchards) has a dominant share of 69.2 percent in total agri credit, thus, slowdown in credit to farm sector amid cautious lending by the commercial banks led to a deceleration in overall agri-credit growth (see **Figure 2.14**) during FY10.

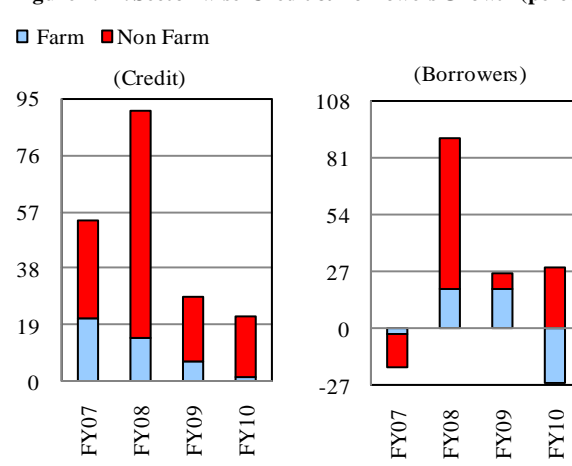
A disaggregate analysis of purpose wise credit reveals a contrasting performance of commercial and specialized banks during FY10. While commercial banks witnessed a reasonable growth for (short tenured) production loans, specialized banks focused on (medium to long term) developmental loans. Development loans by the five large commercial banks dropped by 53.4 percent during FY10 against a rise of 56.5 percent in FY09.<sup>8</sup> While domestic private banks (DPBs) recouped growth in production loans during FY10 following liquidity crunch driven setback in FY09, their lending for development loans contracted. In contrast, the focus of specialized banks was development and mechanized farming. The share of these banks in tractor financing is about 95.0 percent. The credit disbursement by these institutions, as a whole, is based on recovery. Therefore, any exposure in long term financing reduces their ability to lend for production loans (see **Figure 2.15**).

Strong growth in development loans in farming sector is attributed to successful implementation of tractor financing schemes mostly in Sindh during FY10.<sup>9</sup> Therefore, the impact was more visible in the farm sector as development loans to non-farm sector declined during the year (see **Figure 2.16**).

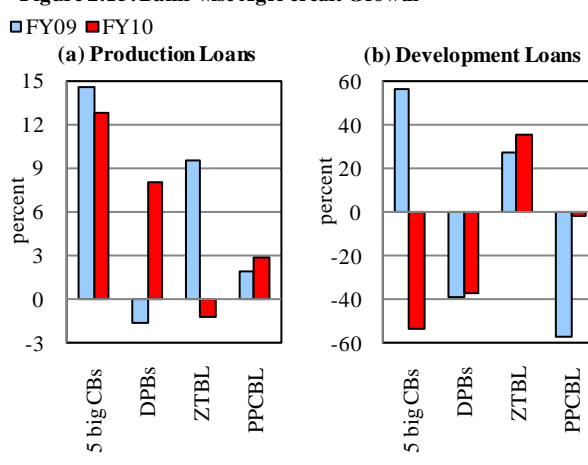
**Figure 2.13: Agri-credit Disbursement Growth**



**Figure 2.14: Sector-wise Credit & Borrowers Growth (percent)**



**Figure 2.15: Bank-wise Agri-credit Growth**

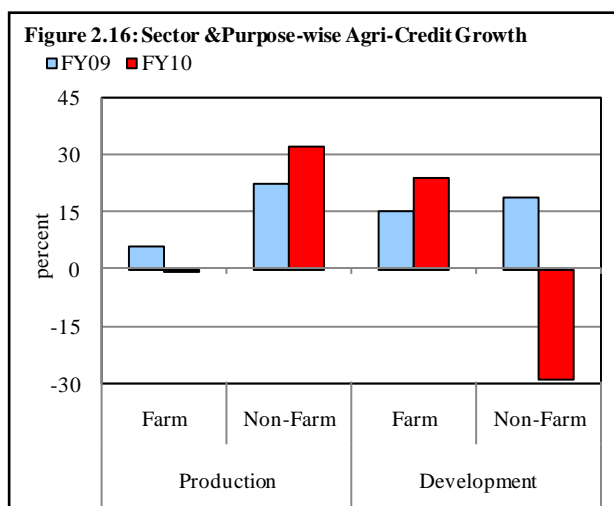


<sup>8</sup> A default in food processing, minor crop processing units is major reason of declining growth in development loans by MCB in FY10. The share in development loan (disbursement through five big commercial banks) is 25.6 percent during FY10 compared to 57.8 percent last year.

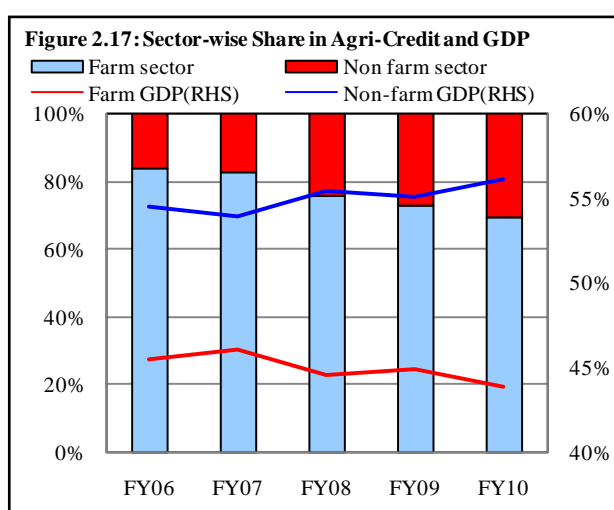
<sup>9</sup> In FY10, 59.7 percent growth in development loans in Sindh compared to a 60.2 percent negative growth last year. While negative 6.2 percent growth in FY10 compared to 33.7 percent growth in FY09 was observed in Punjab.

In brief, growth in production loans to non-farm sector by the commercial banks and rise in development loans to farm sector by the specialized banks helped agri credit disbursements to post a positive growth during FY10.

Poultry sector exhibits high turnover and lower chances of bad loans. Investment in livestock value added products like meat processing; milk collection center, chillers, and infrastructure have a positive effect on the growth of agri-credit in livestock sector. High turnover in poultry sector mostly in feed mills and processing units encouraged banks to increase lending to this sector. Therefore, the share of non-farm sector credit in total disbursement almost doubled in the last five years (16.0 percent in FY06 to 30.8 percent in FY10). Moreover, the impact of this increasing share was also reflected in respective shares of these sectors in GDP (see **Figure 2.17**).



Agri-credit policies and schemes are encouraging commercial farming and small and medium enterprises.<sup>10</sup> Agri-credit pilot project phase III of SBP was to motivate all banks to attract new farmers as borrowers. However, major impediment to institutional credit to agriculture sector is the absence of proper collateral, limited coverage of crop insurance scheme, complex and lengthy procedures and limited branch network of the banks. The outlook for the institutional credit to agri-sector during FY11 will largely be determined on policy support from the government since rising NPLs and likely write offs due to floods may hinder commercial banks to extend agri-loans.



### Agri-Credit Recovery

Growth in recoveries follows the same pattern as credit disbursement in agriculture. Therefore, recoveries growth slowed to 7.6 percent in FY10 compared with strong growth of 19.9 percent during the last year. Encouragingly, recovery ratios<sup>11</sup> witnessed 1.0 percentage point improvement during FY10 over an already remarkable 98.7 percent in FY09. This improvement was mainly due to the revolving credit scheme for working capital in non-farm sector and production purposes in farm sector. However, excessive lending for development purposes and tractor financing (medium and long term financing) was a cause of low recovery ratio of specialized banks.

Recent heavy rains and flood damaged most of the crops, livestock, and poultry in affected areas. Those banks having more exposure in these regions may face difficulties in recovery.

<sup>10</sup> SBP initiatives are : (1) Introduction of credit guarantee schemes for small and rural enterprises. (2) Financing facility for storage of agricultural produce; and (3) refinancing facility for modernizing SME -rice husking mills.

<sup>11</sup> Recovery as percent of disbursements.



## 2.3.6 Farm Inputs

### 1) Seeds

One of the key reasons for the drag on growth and yields of major crops was lower supply of improved seeds in FY10 relative to the preceding year. Distribution of improved seed, for all crops, declined by 2.8 percent in FY10 against 18.9 percent increase last year. Non-availability of Bt cotton seed as per demand promoted supply of sub-standard seeds to farmers, which resulted in higher costs to farmers without desired gains in productivity. Provincial Departments and Federal Seed Certification and Registration Departments should control illegal sale of non-Bt cotton seed as this seed is being sold on high prices (in Punjab seed is being sold at Rs 800 per kg). In addition, appropriate awareness is also needed amongst farmers regarding the high yield offered by Bt cotton.<sup>12</sup> In view of poor irrigation water availability, Pakistan should explore drought tolerant and fast maturing seed technology to raise yield.

### 2) Farm Mechanization

Farm mechanization is crucial for rapid growth of agriculture sector. Following the subsidized tractor schemes, production and sale of tractors increased by 8.2 percent and 6.7 percent respectively in FY10 over last year. Increase in sale of tractors is encouraging for agri-sector growth. However, farming sector showed concerns about rising prices of diesel. As farm machinery consumes substantial diesel. Any relief/reduction in its price, would be beneficial for the farming sector. High prices of tube-well machinery, diesel oil, and frequent electricity load shedding stalled the installation of new tube-wells in FY10. In the process to improve soil and irrigation water efficiency and reduce cost of production, subsidies are being given for technology operation. These include LASER land leveling, soil test laboratories and meters. This will enhance irrigation water efficiency at plant level, improve input effectiveness, reduce cost of production and increase yield. Recent floods probably severely damaged the agriculture machinery in affected areas. With increased requirements for land leveling after the floods, government has plan for an early replacement/repair of farm machinery in the flood hit regions.

**Table 2.6: Fertilizer Off-take**

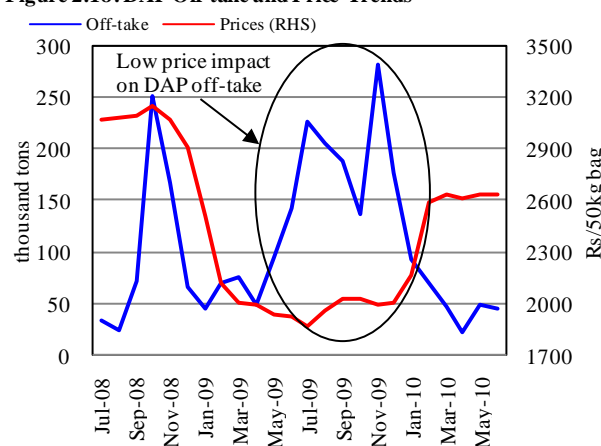
million tons

	FY07	FY08	FY09	FY10
Urea	4.7	5.6	5.8	6.5
DAP	1.6	1.1	1.1	1.5
Total	6.3	6.7	6.8	8.1
<b>Growth (%)</b>				
Urea		19.3	3.2	13.7
DAP		-32.6	0.3	40.8
Total		6.0	2.7	18.0
<b>Share (%)</b>				
Urea	74.4	83.7	84.1	81.0
DAP	25.6	16.3	15.9	19.0

Source: NFDC

Note: Total numbers may not tally due to separate rounding off.

**Figure 2.18: DAP Off-take and Price Trends**



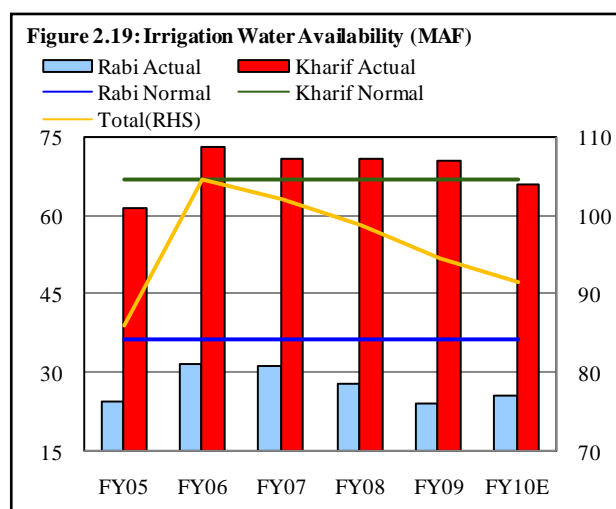
### 3) Fertilizers

Despite a decline in domestic fertilizer production during FY10, fertilizer off-take increased significantly by 18.0 percent compared with 2.7 percent rise in FY09. Timely imports, high inventories and efficient transportation helped achieve this impressive growth.

<sup>12</sup> Bt cotton seed is sensitive to temperature at plantation period in many cases, in Punjab, its plantation failed because of high temperature –growers were forced into second plantation of non-Bt cotton seed.



Fertilizer off-take of both urea and DAP registered strong growth during FY10 compared with a small increase last year (see **Table 2.6**). This rise was mainly driven by: (a) relatively lower prices of nutrients particularly DAP (see **Figure 2.18**) (b) better prices of most of the crops, and (c) sufficient supply, ensured by timely imports, high inventories, and efficient transportation. Moreover, farmers purchased DAP well before the *rabi* season, when prices had bottomed out, in Q4-FY09 and Q1-FY10. Higher DAP off-take also partially compensated for the impact of low irrigation water availability.



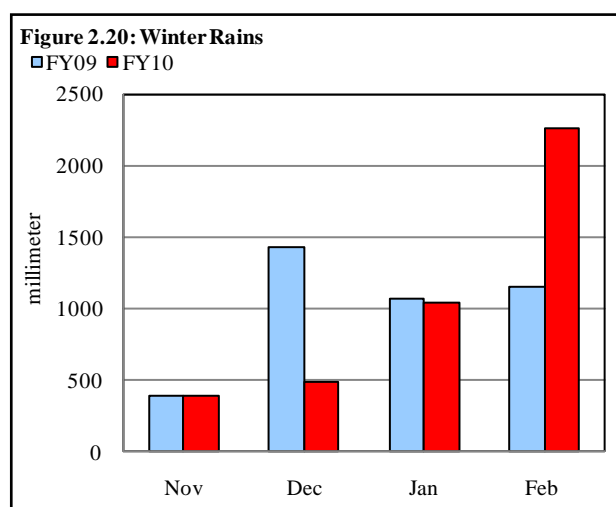
DAP off-take posted a robust YoY growth of 40.8 percent in FY10 compared with only 0.3 percent increase in the previous year. Strong off-take was recorded in Q1-FY10 as subsequent two quarter's observed deceleration in growth while Q4-FY10 witnessed a negative growth due to high base effect.

The impact of higher DAP off-take on total fertilizer growth resulted in increasing its share by 3.1 percentage points in aggregate fertilizer off-take during FY10 against 0.4 percentage points decrease last year. Higher DAP off-take helped in use of balanced use of nutrients. If this tendency continues, crops yield will improve further. The rate of fertilizer off-take per hectare witnessed an increase of 21.1 percent in FY10 against 1.0 percent decrease reported last year.

Given rising international wheat prices and probably lower area available for *rabi* season due to recent floods, use of balanced fertilizers will be critical to raise yields and achieve a reasonable wheat harvest in FY11. It is believed that the recent substantial monsoon rains would help raise yields in the cultivable area. Therefore, smooth supply of fertilizer at reasonable prices will be important. The government has to make timely imports as well as take administrative measures to ensure smooth availability of fertilizers to the farmers before sowing season. In case of shortages or supply disruptions, wheat yield may decline in FY11 and country may require import to meet domestic consumption.

#### 4) Water Availability

Canal head water availability declined for the fourth consecutive year in FY10 (see **Figure 2.19**). Water availability dropped by 3.2 percent during FY10 to 91.4 million acre feet (MAF). However, this decline was registered entirely in *kharif* season as water availability in *rabi* FY10 increased by 6.4 percent on the back of substantially higher rains in Feb 2010 (see **Figure 2.20**).



It is important to note that water availability during *Rabi* FY10 sowing was substantially low due to below normal rainfall during the period. Consequently, farmers brought lower area under wheat crop.<sup>13</sup> The water availability at major dams remained low during most of FY10 and water levels reached near dead levels at these reservoirs in the final quarter of the fiscal year (see **Figure 2.21**). This situation guided the water regulatory authorities to forecast unprecedented shortage during the *kharif* FY11 period (see **Figure 2.22**).

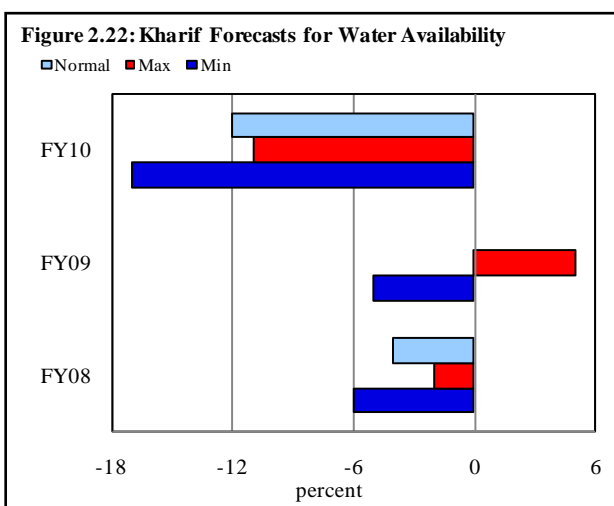
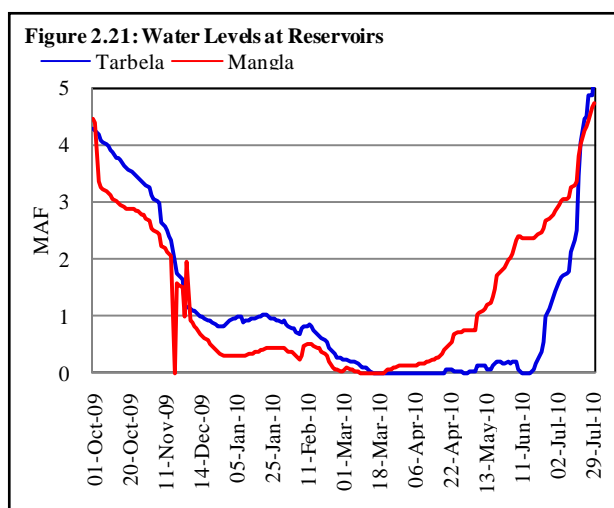
Initial estimates (based on winter rains) for *kharif* FY11 (April-September 2010) showed continued water shortages in the country. However, unusual heavy monsoon rains in the catchment areas that also included the western stretches of Suleiman Range caused floods all over the country; the rains did however help the reservoirs to fill in the run up to the FY11 *rabi* season.

Keeping in view the basic characteristics of the Pakistani irrigation system that depends evenly on the glacial resources in the northern Karakoram-Hindu Kush - Himalayas and the timely arrival of Bay of Bengal monsoons; high temperatures in April<sup>14</sup> were responsible for rain bearing systems that benefited sugarcane and rice crops in India; while hitting all over Pakistan in the third week of July 2010.

### Post-Flood Water Outlook

The rapid depletion of the reservoirs due to the demand and supply imbalance was arrested through an exceptionally heavy monsoon rain spell that followed the shortage. These not only filled reservoirs to the near optimal capacity earlier than in the previous year but also generated unprecedented floods.

The flooding in the major rivers especially Chenab tested the limited capacity of the reservoirs in Pakistan. The apparent pass through of water to Marala headworks that surpassed the normal level during the recent season was a positive side of the otherwise devastating monsoons (see **Figure 2.23**). The rains in the catchment area were also instrumental in swelling the key rivers especially those allocated to Pakistan under the Indus Basin Treaty 1960. The area served by other three rivers, i.e., Ravi, Sutlej and Beas also benefitted as these rivers were also filled by rains or water discharges by India.



<sup>13</sup> Sowing of wheat in *barani* areas of Punjab fell by 19.0 percent YoY in *rabi* FY10.

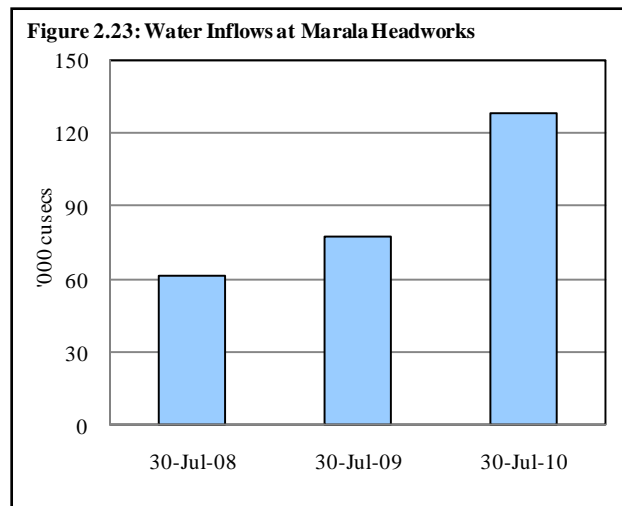
<sup>14</sup> High temperatures in April cause the buildup of sustained monsoons in the Bay of Bengal.

Water availability at reservoirs is expected to meet the sowing needs of the *rabi* crops in FY11 especially wheat in autumn. At the same time, the climatic after-effects, like pest attack on the maturing cotton crop, cannot be ruled out. Any excessive fog during autumn can also add up to the negative impact of rains on the agri-economy especially the remaining standing cotton crop. The likely impact of the spillover of water courses in the form of floods calls for successive reservoirs at strategic points where excess water can be retained.

### Agriculture Outlook for FY11

Recent floods have had devastating impacts on Pakistan's agriculture sector, which was otherwise poised to achieve significantly higher growth during FY11. Not only were standing *kharif* crops severely damaged by the floods and heavy rains in the country's main agriculture districts, some part of the flood hit area may not even be available for cultivation in the forthcoming *rabi* season. It is likely that mud, water logging and non-availability of infrastructure and farm machinery would adversely impact agriculture activities in the months ahead.

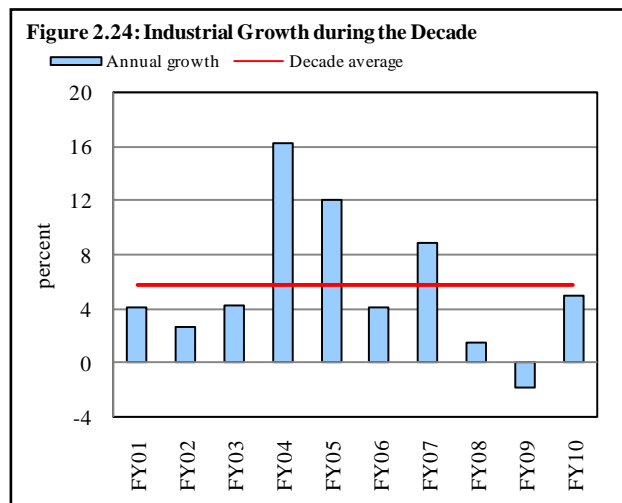
Similarly, livestock has also suffered heavy losses from floods and rains. Therefore, agriculture growth during FY11 is likely to be lower than seen in FY10, although the long term dividends of the floods will be in the form of improved water table and the availability of alluvial soil for future crops.



## 2.4 Industrial Sector Performance

The domestic industrial sector recovered from the longest-ever decline (seen in the previous year), to record a decent growth of 4.9 percent during FY10. The recovery came mainly due to supportive macroeconomic policies, relatively lower inflation, improved prospects of global economy, and relatively better credit availability. The FY10 growth was the fourth highest growth rate in the decade, but was still below the 10-year average of 5.7 percent (see **Figure 2.24**).

The industrial growth during FY10 stemmed mainly from a rebound in manufacturing and construction sectors as government reversed some taxes imposed last year (see **Figure**

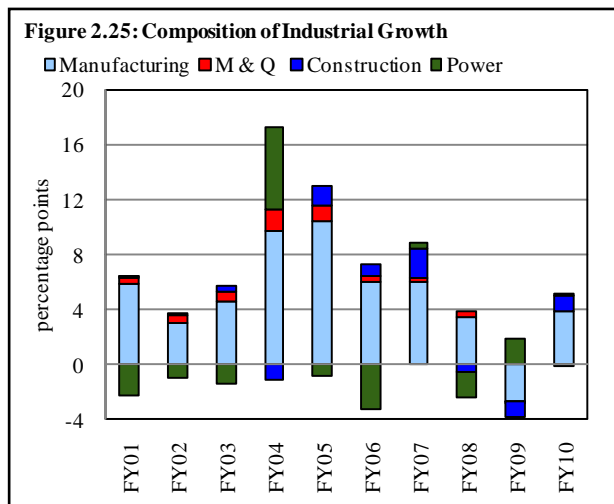


**2.25**). The resultant price adjustments were immediately followed by the pick-up in domestic demand which coupled with available capacities ensured positive growth rate in most sectors. Specifically, while manufacturing sector growth was driven mainly by a strong rebound in consumer durable industries, the growth in construction is explained mainly by lower building material prices that revitalized construction activities in the private sector.

On the other hand, the production in mining & quarrying sector declined in FY10, mainly on account of natural decline in some oil and gas fields. The decline in these activities is a major source of disquiet at a time when energy shortages are already curtailing economic growth and the import burden of major fuels has increased substantially. The slowdown in electricity and gas distribution arising from deteriorating financial conditions of energy related companies has further worsened the energy crisis.

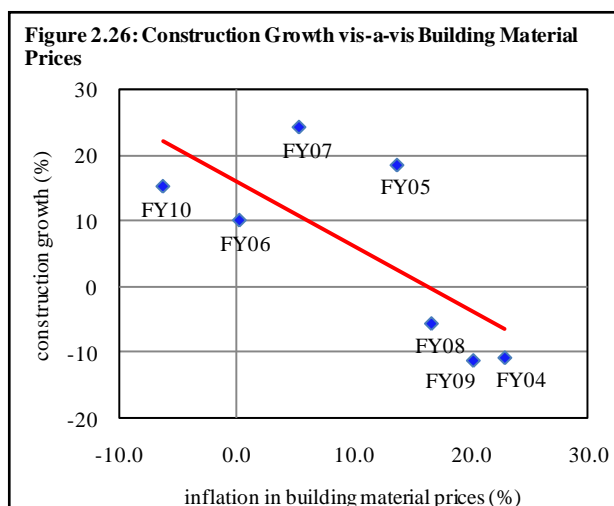
Industrial performance during the year can be summed up as follows:

1. Although production has recovered in FY10 after a decline last year, it nonetheless remained low compared with FY07 and FY08. This suggests that the industrial sector is still working below its potential. And perhaps the contribution of industrial growth on emerging inflationary pressures in the economy is so far limited.
2. The growth in industrial sector in FY10 had a sizable effect on imports growth; however most of its affect was offset by lower commodity prices compared to FY09.
3. The increasing demand-supply gap of energy means that available energy supplies are insufficient to fuel even the low production levels of industry. This means that any demand pull stimulus to the industry may not be sufficient to ensure a high growth unless the industry has ample, uninterrupted energy supplies.



### 2.4.1 Construction

Construction sector exhibited a strong 15.3 percent growth in FY10 compared with a contraction of 11.2 percent in FY09. This remarkable performance was driven mainly by a decline in building material prices, which, in turn, was caused by reduction of duty on cement sales, and decline in global prices of coal, iron, and wood (see **Figure 2.26**). Anecdotal evidence suggests that most of the construction growth was led by the private sector.



The growth in construction industry is indeed a welcome development given the existing backlog of housing units in the country and the industry's backward and forward linkages with other industries. It is estimated that the country has a backlog of around 8 million housing units which is increasing every year due to inadequate spending on housing sector. The major factor causing this backlog is the non-availability of financing means with the lower income segment of the country. The financing available through banks is expensive and not many of the banks are keen in developing long-term house loan market. However, a number of new housing projects for lower income groups have been initiated recently in the private sector that allows consumers to make payments in relatively easy installments.

Foreign direct investment in construction sector has also been impressive during the previous five years (see **Figure 2.27**). Foreign investments constituted almost 30 percent of the total private investments in construction industry during FY05-FY09. The investments in construction industry in recent years reflect investors' confidence over the strong potential in the sector which has improved tremendously with the acceleration in per capita income growth and macroeconomic stability through most of 2000s. More importantly, this has come after its weakening for two consecutive decades. The rapid expansion in construction activities triggered growth in a number of allied industries including cement, metal, paints & varnishes, and home appliances.

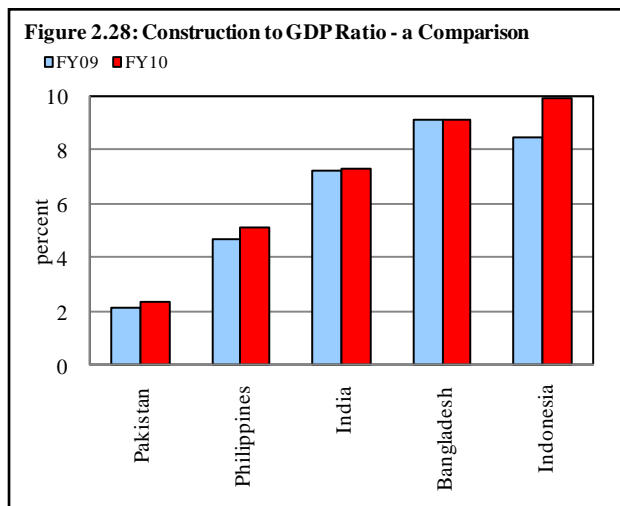
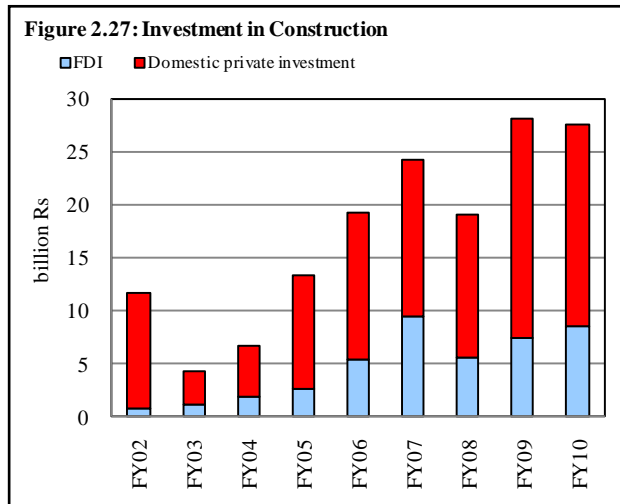
Unfortunately, the construction sector has a very small contribution in Pakistan's GDP especially when compared with other Asian countries (see **Figure 2.28**). The sector has a huge potential to grow. The growth in construction industry is extremely crucial for employment generation also.

#### 2.4.2 Mining & quarrying

The performance of mining & quarrying sub-sector worsened further as production declined by 1.7 percent in FY10 on top of a fall of 0.2 percent in the preceding year. The decline was caused mainly by lower quarrying of crude oil and coal during FY10. A part of decline was, however, offset by slight gains in natural gas and a few other minerals including limestone, gypsum and silica sand. Interestingly, the decline in M&Q during FY09 and FY10 came after a continuous growth throughout the decade. This mainly reflects the adverse security situation in resource rich areas, natural decline in minerals, and operational problems in a large oil & gas exploration company.

#### 2.4.3 Large Scale Manufacturing

Large-scale manufacturing recovered from last year's distressing performance and registered a decent growth of 4.8 percent during FY10.<sup>15</sup> A large part of the growth stemmed from reversal of fiscal measures that were taken last year to curb domestic demand. Furthermore, overall



<sup>15</sup> It is important to note that LSM growth of 4.4 percent during Jul-Mar FY10 was incorporated in compilation of provisional real GDP growth for FY10. It implies that at least this component will push up revised FY10 real GDP growth.

slowdown in inflation, relatively better security situation in the country and some improvement in global demand caused production increases in consumer and export industries. However, the second round effect of consumer and external demand growth on the production of intermediate goods was limited mainly due to financial constraints (e.g., metals and POL) but started to reflect in higher production in capital goods industries by the latter half of the year. As a result, LSM growth across

**Table 2.7: Growth in LSM Sector during FY10**

percent

Sectors showing production decline				Sectors showing production increase			
	Adj. Wts.	FY09	FY10		Adj. Wts.	FY09	FY10
<b>1. Textile</b>	<b>32.6</b>	<b>0.0</b>	<b>-2.3</b>	<b>1. Chemicals</b>	<b>6.4</b>	<b>1.2</b>	<b>0.1</b>
Cotton Yarn	17.4	0.0	-4.3	Synthetic resins	2.6	-6.6	1.3
Cotton Cloth	10.1	0.1	-0.7	Soda Ash	0.1	0.1	12.1
Cotton (ginned)	4.5	1.4	5.8	<b>2. Leather Products</b>	<b>3.0</b>	<b>5.4</b>	<b>21.2</b>
<b>2. Food, Beverages, Tobacco</b>	<b>19.1</b>	<b>6.5</b>	<b>-22.7</b>	<b>3. Cement</b>	<b>5.5</b>	<b>6.1</b>	<b>9.8</b>
Vegetable Ghee	5.7	-9.5	-2.8	4. Pharmaceuticals	6.7	2.6	6.5
Sugar	5.5	-6.5	0.7	<b>5. Automobile</b>	<b>5.3</b>	<b>-39.6</b>	<b>36.3</b>
Wheat & grain milling	1.3	-32.6	-1.8	Jeeps and Cars	3.4	-48.7	44.1
Beverages	0.4	0.3	-2.6	Tractors	0.9	12.1	19.3
<b>Cigarettes</b>	<b>4.1</b>	<b>3.0</b>	<b>-19.1</b>	Motorcycles	0.2	-13.2	50.5
<b>3. Petroleum Products</b>	<b>7.0</b>	<b>12.1</b>	<b>-13.6</b>	Trucks	0.1	-37.2	9.3
<b>4. Metal Industries</b>	<b>4.7</b>	<b>-9.2</b>	<b>-7.7</b>	<b>6. Fertilizers</b>	<b>4.5</b>	<b>18.9</b>	<b>9.4</b>
Coke	2.1	-9.6	-25.9	<b>7. Electronics</b>	<b>3.3</b>	<b>-34.2</b>	<b>29.0</b>
Pig iron	1.9	-20.4	-38.9	Refrigerators	0.8	-7.1	13.5
Billets/Ingots	0.5	45.6	-18.6	Deep freezers	0.5	-9.3	23.0
Re-rolled products	0.1	-32.4	-14.4	Air-conditioners	0.1	-52.7	68.2
<b>5. Paper &amp; Board</b>	<b>0.8</b>	<b>-31.0</b>	<b>0.8</b>	<b>8. Engineering</b>	<b>0.6</b>	<b>-4.9</b>	<b>17.6</b>
<b>6. Wood &amp; Wood Products</b>	<b>0.0</b>	<b>33.9</b>	<b>-40.4</b>	<b>9. Rubber Products</b>	<b>0.4</b>	<b>5.7</b>	<b>24.5</b>

sectors varied significantly, with half of the sub-sectors exhibiting strong growth while the other half continued to cut back production (see **Table 2.7**).

### ***LSM growth is driven mainly by domestic demand: fiscal measures boost demand***

The LSM growth in FY10 was driven mainly by a recovery in domestic demand following the support from favorable macroeconomic policies. The demand was triggered initially by substantial improvement in rural incomes following better prices, fetched by farmers, for many crops. The high global cotton prices in FY10 and government's support for rice and wheat producers continued to support the rural incomes throughout the year, which was crucial in lifting domestic demand.

Additional government support came from the elimination of FED on automobile and its reduction on cement in Budget 2009-2010 that caused downward price adjustments. Since production in these sectors is strictly order-based, the resultant rise in demand immediately translated into production. In fact these two sectors constituted the major part of LSM growth during the year. Excluding these two groups, the LSM production gains fall sharply, as huge production losses in petroleum refining, metals, and sugar industries offset good performance by pharmaceuticals, chemicals, rubber industries, etc. (see **Figure 2.29**).

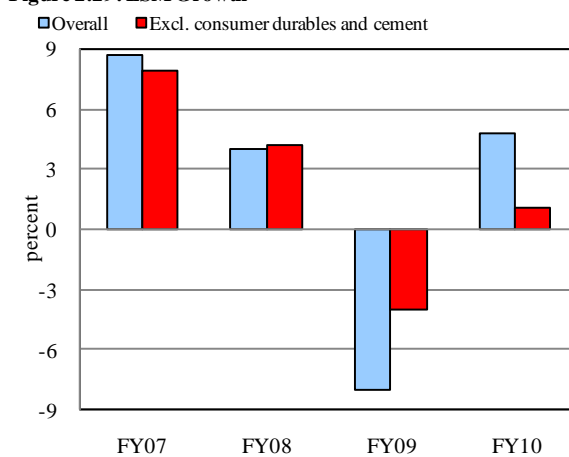


That said, the role of monetary policy in LSM recovery cannot be ignored, either. The lower inflation in FY10 compared with the preceding year has been cited by a number of manufacturing firms as the key in improving demand for their produce. This improvement was in part achieved by stringent monetary measures. Also, improvement in credit availability during FY10 was vital for the manufacturing sector to respond to higher domestic demand. More importantly, a sharp rise in disbursements to consumers for car purchases strengthened auto demand in H2-FY10 especially for smaller (engine of 1000 cc and below) cars.

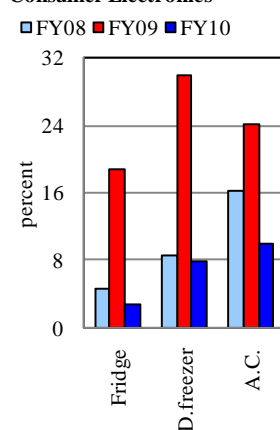
Within the automobiles sector, most of the growth was seen in car segment, especially of those with engine capacity above 1000 cc, as the demand for newly introduced brands of two major car assemblers picked up. According to a leading assembler in this category, rural sector constituted most of the sales growth. The sales growth of cars with engine capacity of 1000 cc and below remained weak in the initial months of FY10, but picked up sharply December 2009 onwards as banks re-entered the auto finance market. The sales levels in this segment are still lower compared with FY08. Motorcycle industry continued to post high growth in FY10.

As far as commercial vehicles are concerned, the demand for tractors remained strong as expected due to easy and cheap availability of credit for tractor finance, particularly under Sindh government scheme. The demand for trucks remained low in the initial months as trade activities were low; however, as trade revived November 2009 onwards, the production and sales of trucks also increased. Auto sector growth also increased the demand for rubber tyres & tubes, paints & varnishes and above all, motor fuels. It appears that business conditions for the auto sector next year will be somewhat different from FY10. Although, the Budget for 2010-11 is neutral for the auto sector, monetary stance has already been reversed in August 2010 due to re-emerging inflationary pressures. Moreover, recent floods substantially damaged rural houses and cultivable land. Therefore, resources are likely to be diverted towards reconstruction and rehabilitation.

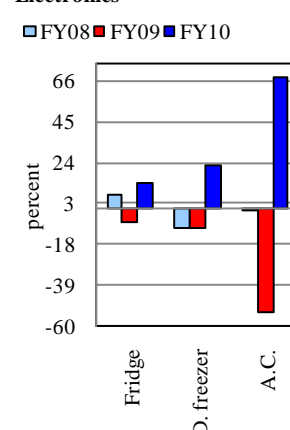
**Figure 2.29: LSM Growth**



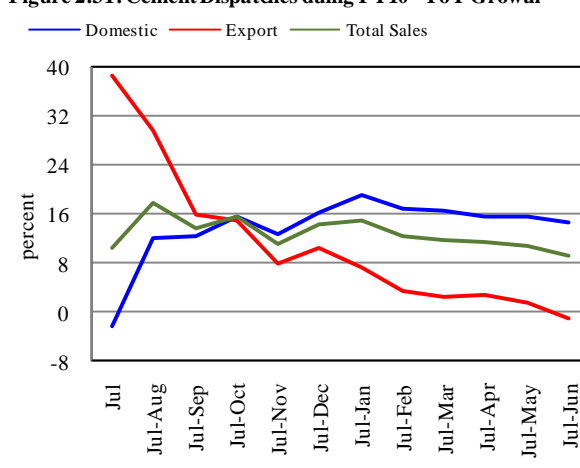
**Figure 2.30: (a) Disinflation in Consumer Electronics**



**(b) Growth in Production of Electronics**



**Figure 2.31: Cement Dispatches during FY10 - YoY Growth**



Production of electronic items also remained strong as the demand for key consumer electronics, e.g., refrigerators, air-conditioners, deep freezers, increased sharply. Four factors appear dominant in improving the demand for durables: (a) lower inflation in the economy (especially in food items) that brought some stability in consumers' purchasing power; (b) moderate increases in the prices of electronics (see **Figure 2.30**); (c) a remarkable growth in construction-related activities that increased the demand for home appliances; and (d) some expenditure shift from back-up power equipments as evident in the decline in imports of UPS and generators during the year.<sup>16</sup> However, it seems that the growth in electronics demand will subside next year as government has imposed an FED to discourage sales of two energy-intensive appliances, deep freezers and air conditioners.

Finally the demand for cement registered a sharp increase as price of cement and other complementary building materials declined during the year. As a result, cement sales increased by 9.3 percent during FY10 compared to a weak increase of 3.3 percent in FY09. The entire increase in cement demand emanated from domestic construction activities as exports registered a marginal decline during the year (see **Figure 2.31**). This decline in exports was anticipated given the slowdown in construction industry in UAE and commissioning of new capacities in India. In contrast,

**Table 2.8: Capacity Utilization in Selected Industries**

percent

	FY08	FY09	FY10		FY08	FY09	FY10
<b>POL</b>	89.5	81.9	75.1	<b>Paper &amp; board</b>	105.3	105.6	106.3
<b>Cement</b>	68.1	65.5	70.5	<b>Industrial chemicals</b>			
<b>Food</b>				Caustic soda	75.5	74.6	55.4
Wheat milling	17.0	17.0	16.6	Soda ash	128.0	128.2	117.0
Edible oil & ghee	46.9	44.6	45.5	<b>Fertilizers</b>	111.9	104.3	104.8
Sugar	72.8	49.1	48.2	Urea	131.4	131.3	133.1
<b>Metal</b>				DAP	80.0	102.1	104.3
Pig iron	80.8	64.3	39.3	<b>Electronics (single shift)</b>			
Coke	30.0	43.7	35.5	Refrigerators	33.7	31.3	35.6
<b>Automobiles</b>				Deep freezers	21.8	19.8	24.4
Cars & jeeps	96.8	49.6	71.5	Air conditioners	28.6	16.1	13.7
Motorcycles	131.1	113.7	171.2	TVs	45.6	21.6	36.3
LCVs/trucks	48.3	35.4	34.8				

Source: OCAC, PFMA, PVMA, PSMA, Pakistan Steel Mills, PAMA, PEMA, and individual firms

increase in domestic construction activities was anticipated given the higher budgetary allocations for housing and works. However, due to inadequate resource mobilization, most of the PSDP targets were not met and government's actual spending on housing and works was just 70.8 percent of the total allocations. Most of the growth in construction industry was driven by private sector as a number of housing projects were initiated during the year.

### Idle capacity in manufacturing helps revival without spurring inflationary pressures

Although inflationary pressures re-appeared in H2-FY10, it seems that (1) the major impetus to inflation is from rising international prices of raw material that particularly affected WPI, and (b) the effect of manufacturing sector revival was limited on the CPI inflation so far.<sup>17</sup> This assessment is supported by:

<sup>16</sup> The import of generators registered a decline of 23.8 percent while the import of UPS declined by 33.2 percent in Jul-May FY10.

<sup>17</sup> A double digit CPI non-food inflation is principally due to rise in administered fuel prices, fares and electricity/gas tariff during FY10.

- a. The capacity utilization in most of the manufacturing firms has remained low (see **Table 2.8**). In most of the food industries, production could not exceed half of the existing capacities. The same holds true for major electronics industries that contributed largely to the FY10 LSM growth. Interestingly, high inflation was observed in the metal and POL sectors where capacity utilization has remained quite low. This was because the prices of these products are linked quite closely with international prices.

#### **Box 2.2: Capacity Utilization and Inflation**

Economic theory suggests that increases in demand, if not met by proportionate increases in productive capacity, translate into inflation; a theory termed as “demand-pull inflation”. As higher demand propels production, and hence utilization of production capacity, it opens up several channels through which inflation seeps into the economy. These can be broadly categorized as:

**Price increase in factor markets.** The higher the level of capacity utilization, the greater would be demand for labor and raw material. Resultantly, prices rise in factor markets pushing up production costs. Since demand is already high, producers are assumed to have price-setting power, enabling them to pass on the cost increase onto consumers.

**Wage contagion.** A second round of inflation occurs when the wage increases, (say) the manufacturing sector also pushes salaries up in the services and government sectors. This effect has been found to be stronger in the countries where labor unions are well-organized.

**Investment effect.** Higher demand and production generally also entails healthy profit margins, which encourages firms to expand capacities. Hence, even if the initial strong demand was limited to a few industries, the increase in investment demand leads to higher capacity utilization in capital goods producing industries; further accentuating the first two effects.

However, there are reasons why these transmission channels may not always be frictionless. For instance, pass-through via the factor markets channel is limited to the degree of openness of the economy. If raw materials can be imported, their prices will depend on global rather than domestic capacity utilization levels. Moreover, the weight of imported goods in the basket of commodities in the price index can also significantly affect the relationship between domestic utilization of capacity and inflation.

Similarly, if capital goods are largely imported, then the higher demand for physical investment will only result in higher capacity utilization in the capital-exporting country, where it may or may not entail inflation. In fact, out of a sample of 15 major industrialized economies, Kock and Nadal-Vicens (1996) found the investment-inflation hypothesis to hold strongly only in the case of Germany, the world’s largest producer of capital goods, while a weak relation was found for the US economy.

Lastly, the inflation-capacity utilization link was also found to be weak in economies where the monetary policy targets inflation. This is because an active monetary policy regime influences inflation by targeting the level of production, i.e., capacity utilization: to elaborate, the policy works by increasing borrowing rates to lower inflation, which raises firms’ financial costs; firms then respond by reducing output. Thus capacity utilization becomes an endogenous variable in the system, and loses some of its predictive power for future inflation.

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- b. The recovery in the manufacturing sector was not sizable enough to cause employment growth. Manufacturing firms are perhaps still gauging the strength of demand recovery and are reluctant in hiring permanent staff. The limited employment generation despite recovery in manufacturing is because employers opt for short-term, informal hiring where they have more flexibility in wage-setting. Employers contain costs as much as possible in the wake of increasing industrial gas and

electricity tariffs. The increase in minimum labor wages (from Rs 6,000 to Rs 7,000) announced in May 2010 could also have negative repercussions for the labor market as it will serve to divert employers from contract-based to informal hiring.

- c. A look at the financial results of different industries in FY10 suggests that the aggregate demand was not strong enough to allow firms to widen their profit margins (see **Table 2.9**). Instead, due to depressed prices of most commodities in the international market, e.g., cement, soda ash, textiles, the retention levels of most of the firms remained low.

Furthermore, due to high energy related prices, production costs increased which squeezed profit margins of firms. The increase in energy prices was due to both the increase in tariffs, as well as forced switching to furnace oil- or diesel-fired power generation in times of electricity and gas shortages. The compression in profits suggests that pricing power of firms has remained low due to shaky demand, which kept them from adjusting prices likewise.

**Table 2.9: Profit After Tax (as % of Sales)**

	FY08	FY09	FY10
Cement	8.7	11.5	9.6
Auto	4.6	1.3	3.4
Refining	2.9	-4.4	-0.9
Spinning textile		-2.0	6.1
Weaving textile		0.7	1.0
Composite textile		3.9	3.7
Glass	13.6	13.7	14.3
Caustic		7.7	7.2
Soda ash	7.6	6.0	6.3
Fertilizers	-2.6	10.5	18.7
Paper	8.4	11.5	0.7

Source: Brokerage Houses.

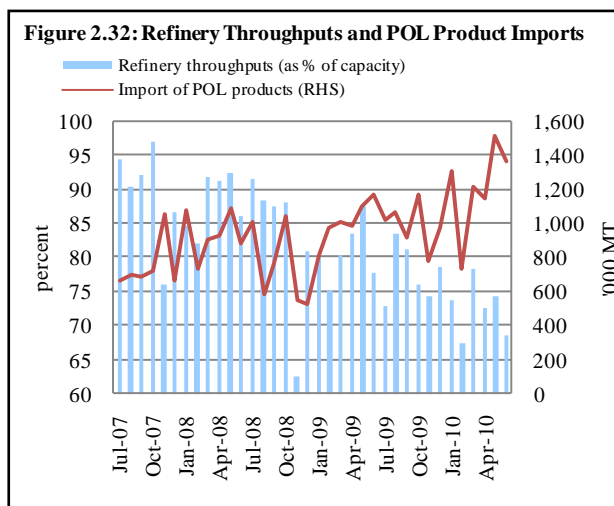
Note: Selected companies from each sector.

### Major Setbacks that constrained growth

Detailed analysis suggests that a higher growth was possible in the LSM sector if not for government's liquidity constraints, unfavorable administrative mechanism, unsuitable climatic conditions, and export of key manufacturing inputs.

### Government's liquidity constraints

It is true that tax reductions and agriculture transfers had a substantial contribution in building-up private demand, but it is also true that inability of public sector entities to make timely payments, left the most important intermediate industry, i.e., petroleum refining, starved of liquidity. The refining industry in FY10 operated at all time low throughputs at a time when demand for petroleum products increased substantially (by 8.0 percent during Jul-May FY10, see **Figure 2.32**).



The lackluster performance of the metal industry is another case where liquidity constraints hampered production. The low capacity running of Pakistan Steel Mills not only caused production decline but is also affecting production of value-added goods in the private sector. Pakistan Steel has been facing severe liquidity constraints since FY09 when the Mill allegedly sold out high-cost steel products at throw-away prices. Since then, the Mill is short of liquidity to procure raw-materials and is thus forced to run at low capacity. Steel production in private sector, however, performed relatively better and the production of re-rolled items increased significantly. The demand for these products emanated from revival in construction activities in the country.

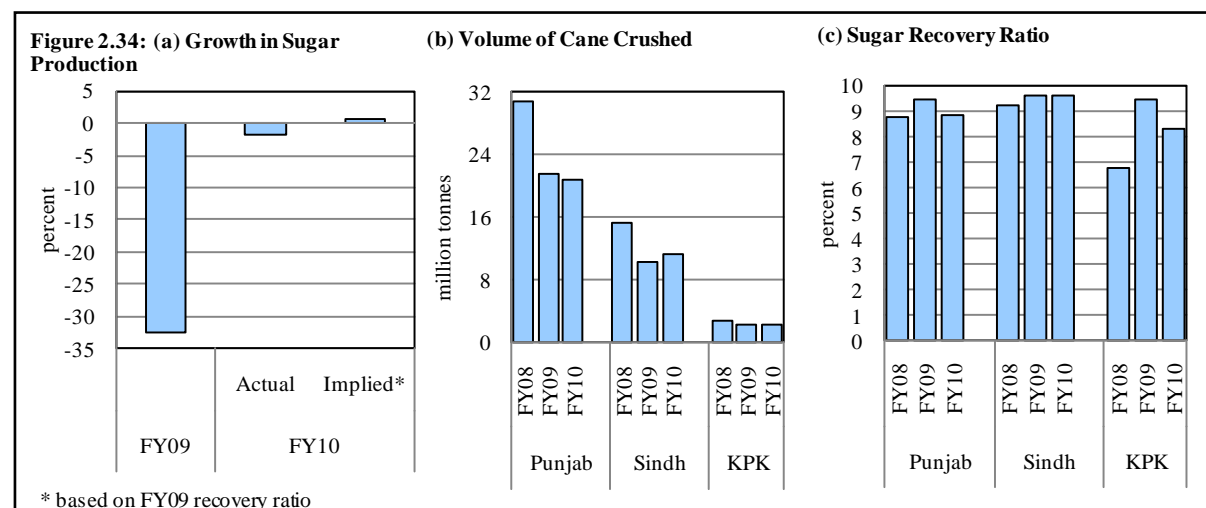
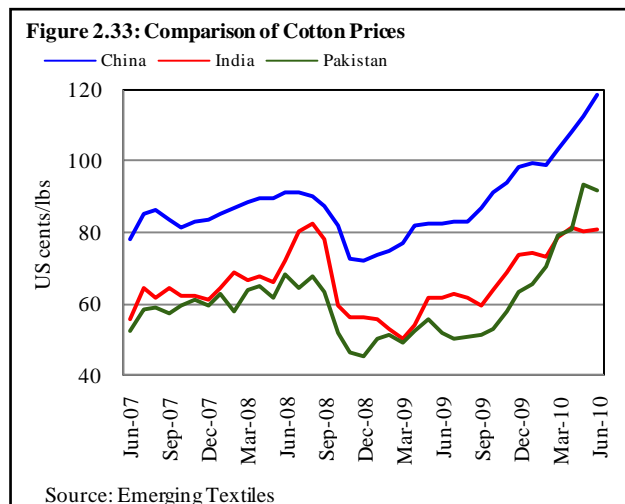
In case of beverages and cigarettes, surge in sugar prices, as well as, the availability of beverages produced by informal sector severely hit production in the formal sector. Specifically, the prices of beverages and cigarettes are increasing sharply since last two years, which diverted the demand to cheaper substitutes available in the informal market. Ironically, the sector that gets hurt by lower turnaround in cigarette industry is the government itself. In specific terms, the cigarette industry is major revenue spinner of FED to the government and contributes 30 to 35 percent of total FED collected by the government every year. Due to the decline in cigarette production, there was a sharp growth in the export of raw tobacco by 35.4 percent.<sup>18</sup>

### The export of key manufacturing components

The gradual recovery in global demand substantially improved the production in a number of exporting industries in FY10, including pharmaceuticals, cotton ginning, cotton spinning, and soda ash. However, it appears that manufacturers at lower end of the value chain exported their produce in the global market. This was especially true in case of the textile industry (see **Figure 2.33**).

The global demand for textile products increased substantially with the improving consumer and business confidence. However, the production declines in cotton in US and China increased the demand for Pakistani cotton and cotton yarn abroad especially in China and Hong Kong. Thus cotton exports increased sharply during the year which put significant upward pressure on domestic cotton prices. As a result, cost of production for local spinners increased.

Fortunately for spinning industry, however, the global demand and global prices of cotton yarn were also high which enabled local firms to export yarn in large quantities at wide profit margins. This resulted in stark improvement in the financial health of local spinning industries that were financially stressed in



<sup>18</sup> There is no change in domestic tobacco production during FY10 compared with FY09, therefore a fall in domestic absorption seems consistent with a surge in exports.

previous few years. The local value-added industry, however, paid for this improvement. Specifically, increase in yarn exports in FY10 not only increased the prices of yarn in local market but also affected the local yarn availability. As a result, production and export of cotton fabrics and other value-added products declined.

Similar was the case in leather industry. During Jul-May FY10, the sharp increase in exports of live animals is considered as a major constraint to growth in leather industry. The export of semi-manufactured tanned leather also increased sharply during FY10. As a result, the growth in production and export of leather footwear was fairly limited and calls for immediate policy response to rising raw material shortages.

### Unfavorable climatic conditions

In other agro-based industries, the production could have increased if climatic conditions were

**Table 2.10: Import Pressure of LSM Growth**

Industry	Key intermediates	units	Import Quantities			Growth	
			FY08	FY09	FY10	FY09	FY10
Edible oil	Palm oil	000 MT	1,763.9	1,773.6	1,703.4	0.5	-4.0
Cement	Coal (Jul-Mar)		..	3,647.7	3,873.5	..	6.2
Textiles	Cotton	000 MT	886.8	397.2	345.7	-55.2	-13.0
	Synthetic yarn	000 MT	135.5	158.7	201.9	17.1	27.2
Metal	Iron and steel scrap	000 MT	2,229.7	2,255.3	1,651.1	1.1	-26.8
	Vessels for breaking (Jul-Apr)	No.	33	59	115	78.8	94.9
Auto	CKD/SKD auto	million USD	534.0	361.1	601.3	-32.4	66.5
Rubber	Rubber crude	000 MT	83.5	67.8	76.3	-18.8	12.5
Home electronics	Refrigerators & air conditioners parts <sup>1</sup>	MT	..	3,221.2	3,989.2	..	23.8
Glass	Chemicals <sup>2</sup>	000 MT	..	62.86	28.16	..	-55.2

<sup>1</sup> includes the following HS-codes: 84159091, 841590 99, 84189100, 84189910, 84189920, 84189930, and 84189990.

<sup>2</sup> includes: sodium sulphate, sodium carbonate, selenium, cobalt oxide, chromium oxide, sodium dichromate, and sodium nitrate.

suitable for improving yield. For example, the decline in sugar production in FY10 was due to lower sugar recovery ratio compared with the preceding year since cane crushing for sugar manufacturing during the FY10 season increased slightly by 0.6 percent. However, lower recovery ratio especially in the Punjab zone caused overall sugar production to decline (see **Figure 2.34**).<sup>19</sup>

Similarly, the premature arrival of wheat crop this year is cited as one of the factors causing decline in production of wheat milling units. However, in addition to this, the decline in production of wheat milling in the country for the second consecutive year is also attributed to: (a) high price of wheat that kept financially weaker firms out of the business; (b) restriction on inter-district movement of wheat from Punjab to Sindh and Balochistan; and (c) limited export of wheat products to Afghanistan.

### *The upward pressures of LSM growth on imports counterbalanced*

The recovery in LSM production caused a rise in import of different raw materials and capital goods during the year (see **Table 2.10**). However, the impact on trade balance was more than offset by a decline in import of key food items, mainly wheat and palm oil. While the decline in import of wheat was due to improved domestic availability, the decline in palm oil imports was caused by lower production of oil and ghee in FY10 resulting from lower export demand for the same from Afghanistan.

Besides, the import of CKDs and parts of automobiles and different consumer electronic items increased sharply during the year due to the low level of indigenization. Similarly, higher demand for

<sup>19</sup> Sugar production in Sindh was higher in FY10 compared with FY09.



motor tyres and tubes necessitated an increase in crude rubber imports. The decline in import of iron and steel scrap looks puzzling especially given the increase in production of re-rolled steel products during the year. However, this decline is mainly substituted by increase in import of vessels for breaking as most of the local demand for scrap was met by the domestic ship breaking industry (see Box 2.2).

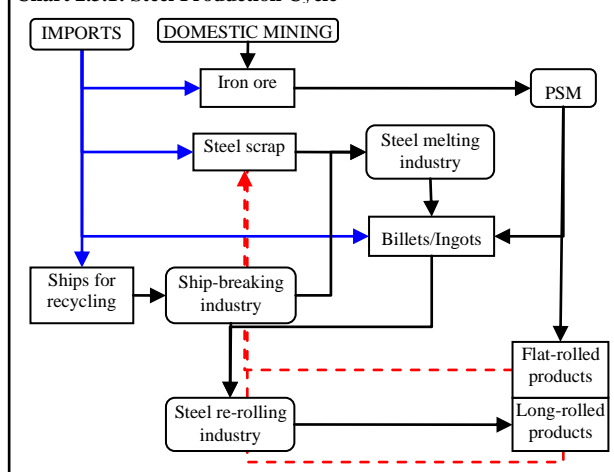
### Box 2.3: Reducing Reliance of Private Steel Producers on Imported Scrap

Despite having substantial iron ore reserves, estimated around 430 million MT, Pakistan's steel industry is highly dependent on imports. Although domestic facilities are available to carry out all stages of production – from smelting of ore, to melting of pig iron to produce steel, and then re-rolling of steel into final products – imported raw materials enter in each stage of the production cycle. There are several reasons for this import dependence, ranging from lack of adequate technology and low volumetric capacity, to the market structure and price mechanisms.

#### The steel production cycle

The structure of Pakistan's steel industry can be divided into four broad categories: Pakistan Steel Mills (PSM), steel melting sector, steel re-rolling sector, and the ship-breaking industry (see Chart 1). PSM is the sole manufacturer of coke and pig iron in the country, the two major raw materials used to make steel. The PSM mostly imports iron ore, and has only recently begun using local ore reserves.

Chart 2.3.1: Steel Production Cycle

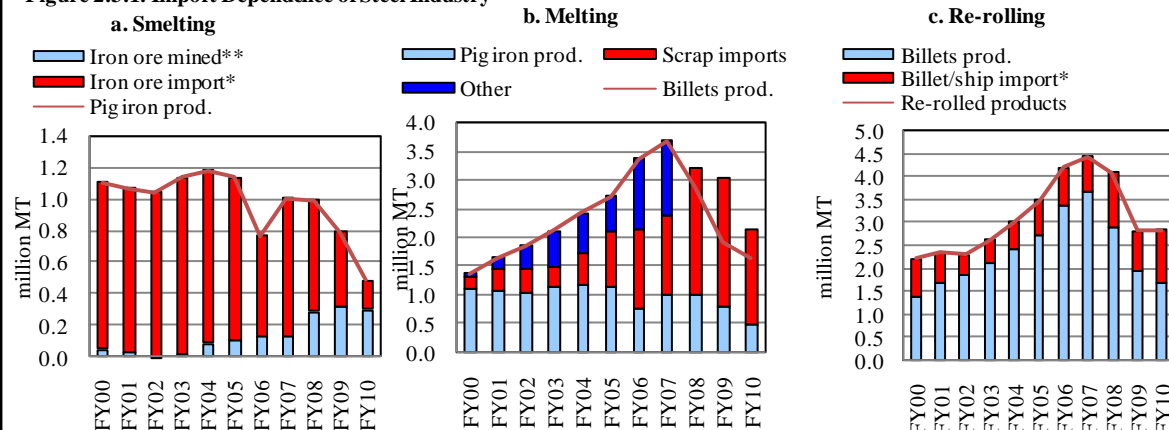


The coke and pig iron produced at the PSM is usually for internal consumption (less than four percent of pig iron produced was sold outside the Mill during FY07-09), used for production of billets. The PSM produces 'virgin steel' (so called because of its high level of purity) which has around 15 percent share in the billet/ingot market. The remainder 85 percent of billet/ingot production takes place in around 168 private melting furnaces across the country. The private sector has three sources of raw material: domestically recycled scrap, imported scrap, and scrap from ship-breaking.

The re-rolling mills process the billets and ingots produced by the PSM and private furnaces to produce two kinds of rolled products, flat rolled and long rolled. The PSM is the country's only manufacturer of flat-rolled products, such as hot-/cold-rolled sheets, strips, and slabs. The annual production of flat-rolled items is around one to 1.5 million MT. Other than that, there are approximately 370 re-rolling mills in the private sector which produce long-rolled items, such as rebars, D-bars, I-sections, beams, etc. The production capacity of these is approximated at four to 4.5 million MT per year.

Another source of raw material for both the melters and the re-rollers is the scrap obtained from re-cycling of ships. Around 70 percent of the ship scrap is directly re-rollable into end-products. However, only small re-rollers (around one-fifth of the

Figure 2.3.1: Import Dependence of Steel Industry



\* estimated as production of final good less raw material available domestically. \*\* value for FY10 is an estimate.

market) utilize this scrap. Of the remainder, some ship parts, such as crockery and utensils, are sold into flea markets and only 15-20 percent reaches furnaces (according to the Engineering Development Board). However, activity in the ship-breaking industry is largely cyclical, accelerating when global shipping freights are low and vice versa. It is therefore not a reliable source of scrap supply.

Apart from the small re-rollers and the PSM, the re-rolling industry comprises high-tech automatic mills (30 percent market share) and locally fabricated heavy mills (50-60 percent share). Both of the latter categories only use billets as raw material.

### Growing import dependence

The highest import-dependence exists at smelting and melting stages, with re-rolled items largely being made using local raw material (see **Figure 2.3.1**). However, during FY10, while pig iron and billet/ingot production saw a significant YoY decline, production in re-rolling mills increased on the back of active ship breaking as well as higher billet/ingot imports. As of now, it appears that only the top tiers of the value-addition chain are functional, with the base tier of pig iron posting negative growth for 15 successive months. Overall, the factors that have led to high import dependence are:

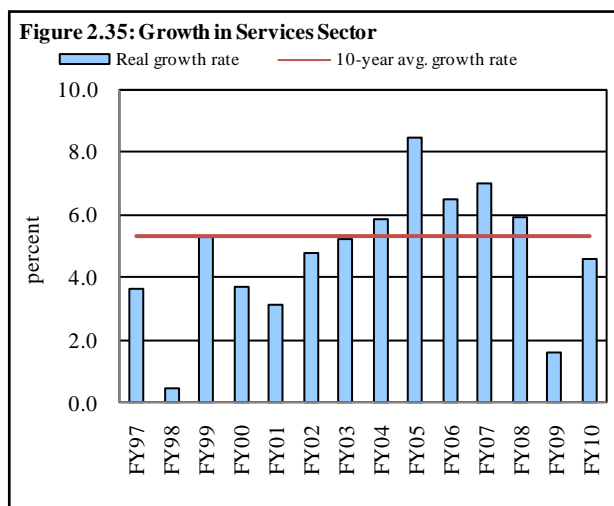
- Usage of local iron ore remains low because of lack of proper road and rail networks connecting mines with mills. Moreover, ore quality varies substantially, and there is no proper mechanism in place to test the ore then and there and price it accordingly. Moreover, local supply is intermittent due to law and order issues.
- Demand for imported scrap has increased over the years due to both increases in the local steel demand coupled with virtually no capacity expansion for pig iron production. Furthermore, financial constraints faced by the PSM have led to lower-than-capacity production of pig iron of late. The demand-supply gap is being met by the imports of scrap by melters and billets and ingots by the re-rolling industry.
- Frequent changes in international metal prices lead to high inventory costs with the PSM if prices recline, as was witnessed during the previous year. Moreover, high running costs of the PSM add to the end-product prices, often making it cheaper for the private sector to buy scrap and billets from the international market instead.
- Unstructured local supply system. Local scrap supply is informal business and therefore there is a lot of fluctuation in consistency, quality, and prices of supply, causing more dependence on imports.

However, it is encouraging that both the private sector and the government are receptive to these issues and have undertaken efforts for utilization of local ore. Specifically, Pakistan Petroleum Limited undertook a venture to explore iron reserves at Dilband, Balochistan. Following that, the PSM has also begun mining iron ore at Naukandi, Balochistan. Moreover, a newly commissioned private steel mill also plans to follow suit in Balochistan and Punjab. However, large-scale and consistent utilization of local ore will require the necessary infrastructure to support it, namely a proper road and rail network and establishment of law and order. Developing a well-defined policy to encourage local and foreign private investment could also serve to promote iron ore mining.

## 2.5 Services

After reaching an 11-year low during FY09,<sup>20</sup> the services sector rebounded strongly in FY10 with 4.6 percent growth (see **Figure 2.35**). The higher growth was an outcome of pick up in commodity producing sector activities and was evident mainly in higher than expected contributions of wholesale & retail trade, public services, telecom, and personal services.

While some of the developments observed in FY10 can be singled out as being transient – for example, the negative growth in financial sector and the high growth in public administration and defense – others are reflective of more enduring trends that emerged during the 2000s decade (see **Figure 2.36**). Rapid growth has been observed in technical and skill-based services, such as telecommunications, software development, and accounting and finance. Moreover, growing automation and trained manpower have significantly changed the landscape by increasing efficiencies in wholesale & retail



<sup>20</sup> Services sector witnessed a record low growth of 1.58 percent growth in FY09 compared with 1.64 percent in FY98 and only 0.85 percent in FY00.

and public transport in the country. The single feature that characterizes these trends is the use of modern technology in the services sector.

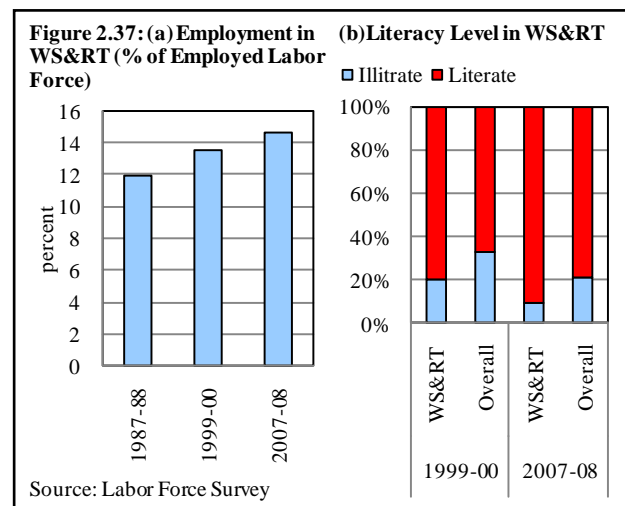
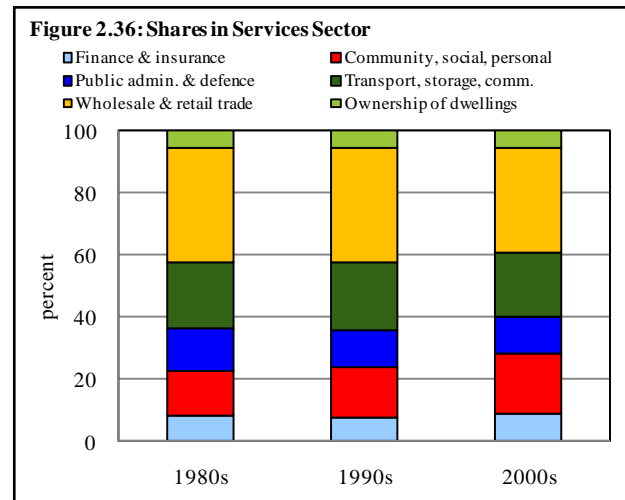
#### ***Emergence of structured wholesale & retail trade***

The stronger than expected industrial growth during FY10 also led to rapid increase in *wholesale & retail trade* (WS&RT). The increased imports of raw materials and a rebound in exports further reinforced demand for these services.

Consequently, WS&RT sector posted a strong recovery in FY10 with 5.1 percent growth in gross value-addition, well above the 1.4 percent negative growth seen last year, and a decade average of 4.6 percent.<sup>21</sup>

The recovery is more than welcome given the large employment intensity of the sector and the fact that the recovery would further encourage the structural shift in *wholesale & retail trading* that emerged in recent years. In specific terms, WS&RT sector has witnessed significant vertical expansion in recent years with the mushrooming of modernized, medium- to large-scale retail and wholesale centers which have helped re-structure this formerly unorganized and small scale sector. In fact, the evolution of WS&RT beyond the concept of an essential to a highly customized service, requiring considerable level of automation and skilled sales agents, was a trend that gathered roots during the current decade and is consolidating gradually.

This transformation has been brought about by the massive inflow of foreign investment which led to spillovers of technology and management skills. Growing automation (such as the use of computers, cash registers, security scanners, etc.) has also led to higher demand for skilled and educated human resource. Overall improved service delivery has also increased the need for manpower, as evident by the increasing share of WS&RT in overall employment (see **Figure 2.37**)



However, the sector is facing several headwinds. Although consumers have been responsive to these sophisticated trading centers, the growth of well-structured wholesale and retail centers has so far been limited to a few large cities. Traders attribute this clustered growth to lack of educated human resource and poor supply chain management in smaller cities. The absence of well-established trading houses, as present in the advanced economies, means that retailers have to allocate additional resources to ensure quality and smooth supply.

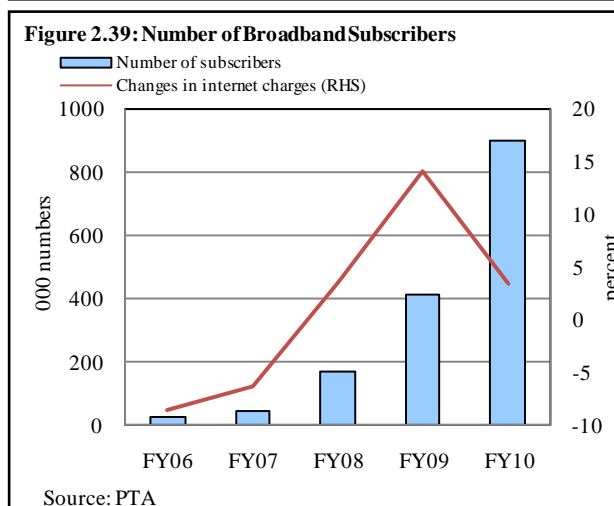
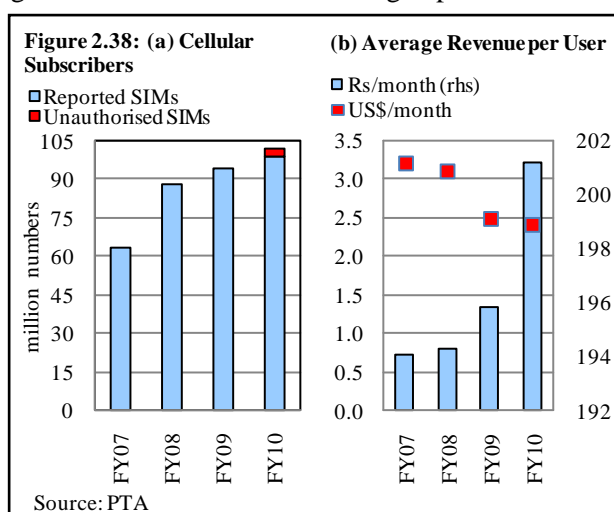
<sup>21</sup> Gross value addition (GVA) in the wholesale and retail trade sector is computed as the sum of (i) a fixed margin on imports, industrial production, and agriculture, and (ii) hotels and restaurants value addition computed using a fixed growth rate (10.0 percent). These margins and growth rate have been based on a survey conducted in the year 1999-2000. For detailed methodology of national income accounts visit: [http://www.statpak.gov.pk/depts/fbs/statistics/national\\_accounts/methodology.pdf](http://www.statpak.gov.pk/depts/fbs/statistics/national_accounts/methodology.pdf)

Moreover, large WS&RT businesses have a hard time competing with small traders. First, large shopping centers have enormous overhead costs (electricity, human resource training, higher salaries for retention of trained staff, land/rent, etc.) compared to smaller traders. Second, they have well-placed mechanisms for sales tax accounting, which is easier for small traders to evade. Resultantly, the profit margins of wholesalers in formal and informal market vary considerably. Tax incentives for proper documentation of transactions could go a long way in nurturing the growth momentum in this sector by leveling the field for registered WS&RT businesses.

### ***The advent of information and communication technology (ICT)***

ICT-based businesses posted strong growth during FY10 on the back of increasing exports as well as a rebound in the domestic demand for telecommunication services. The growth came mainly in response to supportive fiscal measures. Specifically, due to the contraction witnessed in the sector during FY09, the government eliminated and reduced certain duties on services and cellular phone imports which led to demand recovery. Part of the growth also stemmed from the completion of several telecom projects undertaken under the Universal Services Fund (USF).<sup>22</sup> Moreover, supportive export policy for the IT sector also helped sustain high IT export growth.<sup>23</sup>

The increasing demand for telecommunication services was evident in the expansion in teledensity as well as the cellular subscribers' base. The increase in the number of cellular subscribers was not very substantial, because over three million unauthorized mobile connections were cancelled during the year, bringing the net growth in connections at par to that observed last year (see **Figure 2.38**). Mobile companies also benefited from exchange rate depreciation, which in rupee terms translated into the highest growth in average revenue per user (ARPU) seen in three years (see **Figure 2.38**). The number of fixed line connections posted a decline; a trend that has continued since 2006. Taking note of this downtrend, the country's largest fixed line services provider has reduced subscription charges in July 2010. Since telecom demand is highly price elastic, it appears that fee reduction could be significant in promoting new connections in FY11.



<sup>22</sup> The USF is funded by annual contributions by the telecom operators and is being utilized to promote outreach of basic telephony and broadband services to remote areas and special persons by subsidizing private sector's investments. Initiated in 2007, the USF has so far undertaken 10 contracts for rural basic telephony, five each for optic fiber extension and special projects, while six regions have been contracted for broadband. Of these, six rural telecom projects came online in FY09 and two special projects were completed in FY10, while the remaining are expected to be completed next year.

<sup>23</sup> IT exports include foreign earnings of software and hardware businesses and call centers. According to the Pakistan Software Export Board, IT exports amount to 57 percent of the total IT business in Pakistan.

High demand for broadband services also came largely in response to a slowdown in rising internet tariffs during the year (see **Figure 2.39**), which in turn was triggered by increased competition in the sector. However, apart from prices, increased subscriptions also came about in response to expansion in service outreach. The USF projects have been crucial in this regard and are expected to be central in sustaining broadband growth in the country.

Rapid growth was also observed in other ICT sectors on the back of growing demand for automation from domestic businesses. In addition, growing demand for business outsourcing in the developing countries led the way for rapid growth of IT exports, such as call centre services and software development. Pakistan's lower cost of labor, land, and tariff exemption on IT exports gives the sector an advantage over other competitors.

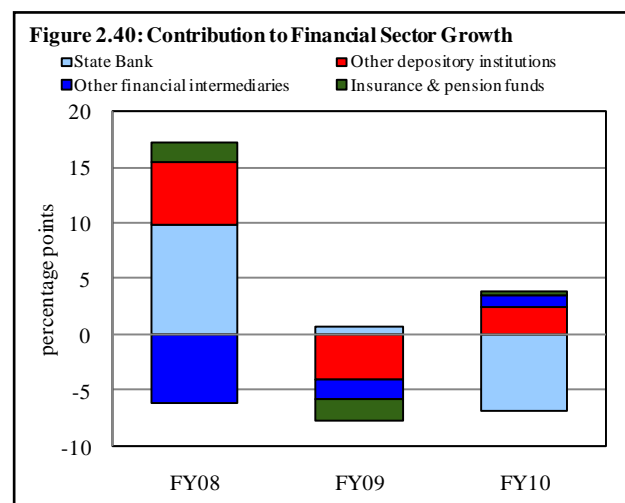
However, businesses are of the view that Pakistan might have reached saturation in the field of ICT. Of a number of ICT-based businesses in the sector, most view lack of skilled human resource and brain drain as the top constraint to future growth. Another problem faced by the industry is that the small size of the local market for call centers and software houses does not allow economies of scale. On the other hand, in the case of exports, first movers like India and the Philippines have a strong brand image abroad, which helps them get more orders despite having higher service costs than Pakistan. Further, it is very difficult for the sector to get loans as ICT businesses have no tangible collaterals to offer. Although the industry has little dependence on banks for meeting running costs, scale expansions need bank financing.

Interestingly, ICT-based businesses are of the view that technology is not a major constraint to expansion. Although highly automated, the IT industry is more labor- than capital-intensive, and therefore can serve as an ideal engine for future growth. However, with aggressive marketing and rapid skill development the industry can achieve its growth potential.

### ***The financial infrastructure matured... but there is room for improvement***

Following the growth in real economic activities, the demand for financial services increased modestly during the year. Within the financial sector, a large part of the growth was driven by commercial banks and other non-bank financial intermediaries. The commercial banks benefited mainly from volumetric expansion in loans and advances, a slight increase in non-interest revenue, and lower provisioning expenses.<sup>24</sup> However, the recovery in commercial banking was entirely offset by a decline in the central bank's profits, which resulted from lower exchange rate gains and dividend income in FY10 compared with the previous year (see **Figure 2.40**).

Nevertheless, the negative growth in FY10 appears transitory considering the strong expansion in financial services seen during the past decade. In specific terms, the finance and insurance services grew by a cumulative average growth rate of 11.7 percent during the decade from FY01 to FY10, compared to 4.5 percent growth in the previous decade. This growth can be attributed to the strengthening of financial sector reforms



<sup>24</sup> During FY10, the SBP relaxed conditions regarding loan classification and forced sale value benefits in loan provisioning.



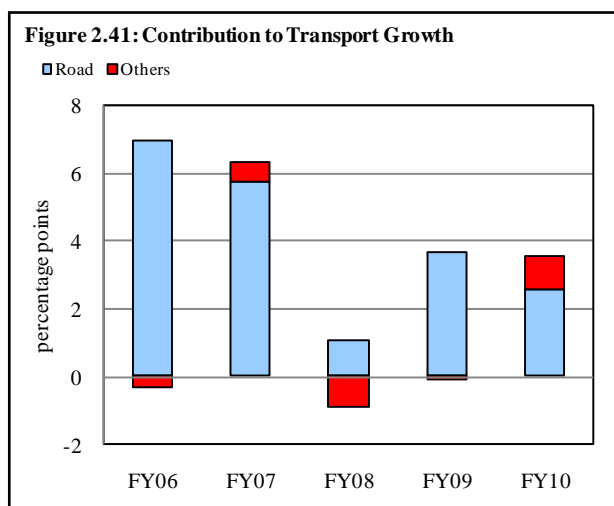
initiated in the 1990s which led to the emergence of private sector as a dominant player in financial system during the 2000s.

The ailing loan portfolios of state-owned banks were restructured before offering the banks for competitive bidding by the private sector. Moreover, improved risk management following the introduction of electronic CIB 2003 and Prudential Regulations in 2006 led to healthier loan portfolios than in the past decade. As a result, the 2000s were marked by sharp growth in the credit to private sector, especially niche sectors such as agriculture and consumer loans.

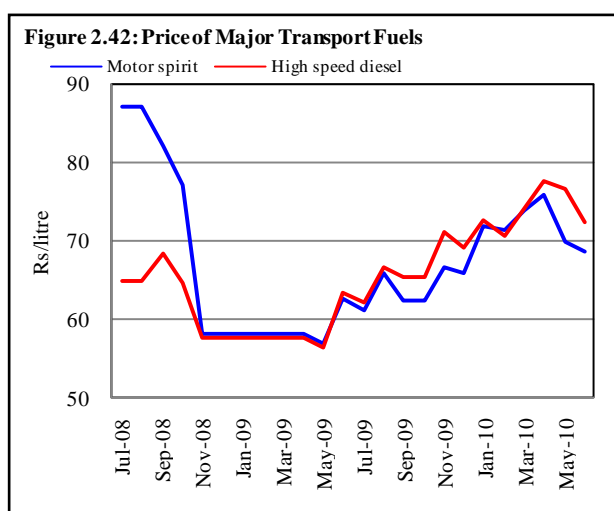
Although the banking infrastructure has rapidly expanded, there is still a lot of room for further expansion in terms of outreach and penetration. Several parts of the country are still underserved in terms of banking services and the deposit base and access to formal credit is still low.

### ***The ailing transport system; need for greater private sector participation***

Transport services witnessed a slowdown of 0.1 percentage point during FY10, registering 3.6 percent growth. This slowdown was counterintuitive to some extent as growing economic activities were expected to lift the demand for transport, which manifested in high cargo handling growth at the ports<sup>25</sup> and sales of commercial road vehicles. However, infrastructural weaknesses, particularly in railways and shipping, were expected to have a drag on overall transport services. (See **Figure 2.41**)



As anticipated, shortage of vessels with the Pakistan National Shipping Company (PNSC)<sup>26</sup> coupled with a slowdown in shipping charges due to slack in global demand led to a decline in shipping revenues during the year.<sup>27</sup> Another predictable decline was registered in railways stemming from persisting shortage of locomotives. Lastly, pipeline transport was also not expected to perform strongly given the lower imports of crude oil - the major commodity transported via the oil pipeline network - and marginal growth in gas supply.<sup>28</sup>



<sup>25</sup> Cargo handling activity at ports saw 18.1 percent YoY growth during FY10 compared to 1.6 percent growth last year.

<sup>26</sup> Four vessels of the PNSC were disposed off in FY09 while another was scrapped in FY10, bringing the total number of vessels available for most part of the year to eight. Only two new vessels were added in February 2010. The total number of available vessels now is 10.

<sup>27</sup> Chartering revenues of the PNSC declined YoY by 43.3 percent during FY10, compared to 13.9 percent growth posted in the previous year.

<sup>28</sup> Although natural gas is also transported via pipelines, this transport is not computed in the accounting of pipeline services by the Federal Bureau of Statistics. According to SSGC data, there was 1.1 percent growth in gas supplied during FY10 compared to 1.9 percent growth last year during the same period last year while SNGPL data for Jul-Apr FY10 showed a decline of 0.5 percent as compared to a decline of 2.6 percent in Jul-Apr FY09.

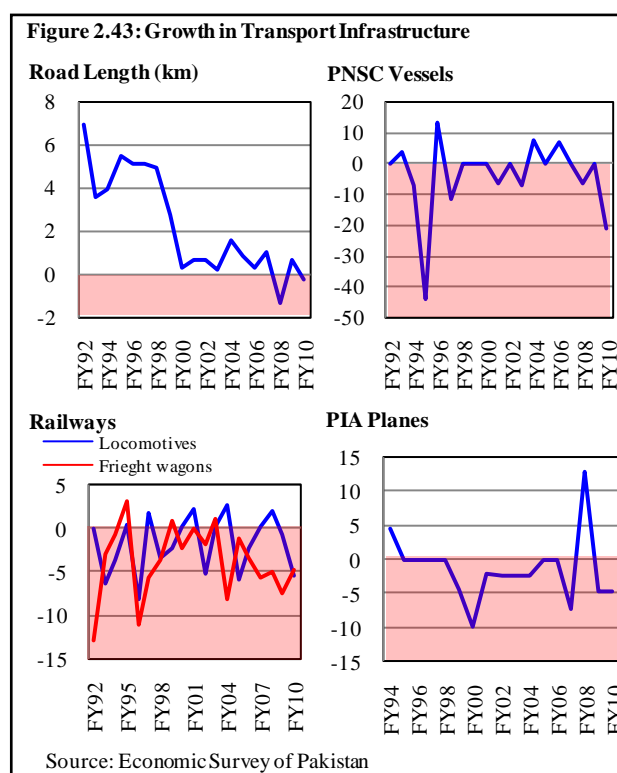


As far the road transport, it was expected that due to the shortage of railway services and substitution of pipeline support, the demand for road transport will increase for inter-city movements. This view was further supported by increased sales of commercial vehicles during the year. However, due to a sharp increase in diesel prices (as government phased out subsidy on HSD) it appears that the demand for road transport remained limited (see **Figure 2.42**). Thus, contrary to expectations, no acceleration was reflected in the official statistics. Rather, road transport posted a slowdown from 4.0 percent in FY09 to 2.9 percent in FY10.

Nevertheless, privately-run bus services have grown rapidly filling the service gap created by rail service. According to a big private firm providing inter- and intra-city bus services, there is immense growth potential in the sector, given the good service and competitive rates. However, there are supply side constraints: first, fares have to be adjusted frequently to pass on changes in diesel prices, which entails up to 65 percent of the total cost. Although intra-city travel is not much affected by these changes, inter-city passengers immediately switch to the informal sector or private transport if fares are increased. Moreover, the inter-city bus services are also subject to moral pressure by the municipal governments to keep fares low, while no fuel or tax subsidy is provided, virtually zeroing profits. Second, delay in completion of initiated road and highway projects severely affect service quality and costing, as sometimes alternate routes have to be adopted. Last, despite the strong demand for bus services to remote areas, this cannot be met due to poor road networks. To add to the worry, the already stressed road network was severely damaged by the recent floods.

Persistent low investment has led to erosion of the country's basic infrastructure, as evident from the deterioration in the road network and declining number of functional railway locomotives as well as the fleet of ships and airplanes (see **Figure 2.43**). One major reason for this continued downtrend has been the dominance of the public sector in the transport system. High inefficiencies in public-run utilities and services are a well-established fact. One factor that adds to these inefficiencies is the easy bailout available which reduces incentive for profit-making, or avoiding losses – losses incurred are inevitably financed by the government. Other reasons are commonly high overhead costs arising from excessive number of employees, inefficient service delivery, and often too low prices that do not even cover costs.

It is encouraging that the government is taking note of the country's ailing transport infrastructure and is aligning expenses to improve this sector, as evident from higher allocations for physical infrastructure in the provincial budgets. The country's two ports are also undergoing capacity expansion: at Port Qasim, a new container terminal is set to become functional by August 2010 and construction of an LNG terminal is underway, while a four-berth deep water container terminal at the Karachi Port is expected to come online in FY12. The PNSC is also expecting five new vessels during the next nine months.



However, the long term solution for sustained infrastructure development lies in eliminating the inefficiencies in this sector, which in due course could lead to improved profits and will encourage investment. Encouraging private sector participation in transport sector could be one way of inducing efficiency. Much could also be learnt from the experiences of privately-run transport services, and incentives could be provided for expanding services.

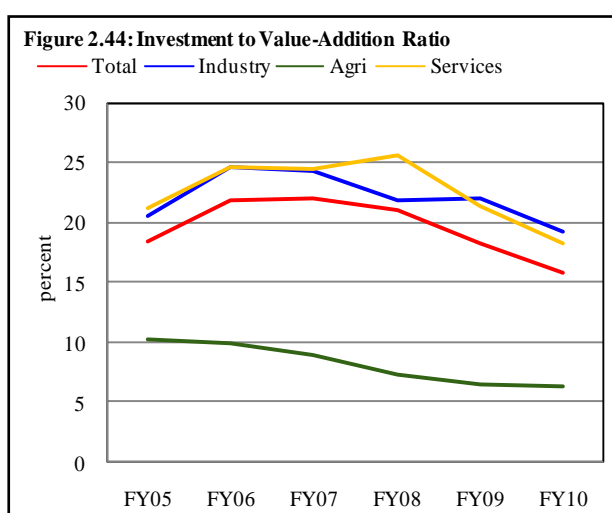
## 2.6 Prospects and Opportunities for the Real Sector

The deadliest floods in Pakistan's history choked the otherwise strong prospects for economic growth in FY11. According to initial estimates, sugarcane, cotton, and rice crops in many parts of the country were damaged by the floods along with the loss of livestock. Flood water has reportedly entered the key strategic areas including gas fields, oil refineries, power plants that further disrupted energy supplies and hurt production activities at one of the refineries. Though the expected reconstruction activities are likely to offset part of the economic losses; the growth target for FY11 appears unachievable. The above assessment is not only based on production losses alone but also encompasses the wide ranged repercussions of these losses on overall macro economy. Specifically, the loss of crops, livestock, and supply disruptions caused shortages of food items and resulted in a temporary spike in food inflation. Furthermore, government's plans to reduce the budget deficit may also be delayed given the need for massive reconstruction in the flood-hit areas. Government's debt burden is also likely to escalate for the same reason. Thus the floods have already thwarted efforts to improve the macroeconomic conditions on which rested the prospects of consolidation in medium-term economic recovery.

While the production losses in agriculture sector seem quite certain, the prospects of industrial growth are mixed. On the one hand, resource based industries including textiles, sugar and leather are likely to suffer from raw material shortage; construction related industries will benefit from reconstruction activities in the flood-hit areas. Furthermore, capacity expansions in number of industries also bode well for industrial growth prospects. Similarly, trade and transportation activities in services sector may suffer temporarily. Strong growth in social services, public administration & defense, and likely positive contribution by the finance & insurance may help services sector to achieve above target growth during FY11.

## 2.7 Investment

The investment demand in the country declined for the second consecutive year in FY10; one of the major factors generating skepticism regarding growth sustainability. More importantly, investment-to-GDP ratio declined for the third consecutive year. This decline is mainly evident in industrial and services sector (see **Figure 2.44**). Major factors constraining investment growth were: (a) reluctance of foreign investors to invest in Pakistan due to negative country image, (b) domestic banks invested more in government papers, (c) intense competition in cellular business that limited investments in this sector, (d) uncertainties regarding strength of global recovery, and (e) skepticism in the initial months of FY10 regarding recovery in domestic demand.



Perhaps the negative country image despite improvement in security situation over FY09 contributed most to the investment decline in the country. This is evident from the fact that the entire decline in investment was in foreign direct investment (see **Figure 2.45**). In fact, despite the recovery seen in global liquidity and increase in FDI across Asian region, foreign investors shied away from investing in Pakistan. Their reluctance stemmed mainly from uncertainties surrounding domestic political and economic outlook.

Thus, it appears that the confidence of at least domestic investors has improved following the recovery seen in consumption demand (both domestic and foreign) by the end of Q2-FY10. Consequently, demand for capital goods increased November 2009 onwards as evident from increase in production and import of capital goods. However, capital spending was concentrated mainly in agriculture sector and textiles industries. Within textiles, value-added industry did most of the capital spending and a large volume of weaving, knitting, and other value-added machinery was imported in the country. The demand for agriculture machinery was mainly concentrated in import of parts of agriculture machinery for soil preparation and cultivation. It was supported by stronger farm incomes and consistently supportive government policy for agriculture sector (see **Figure 2.46**)

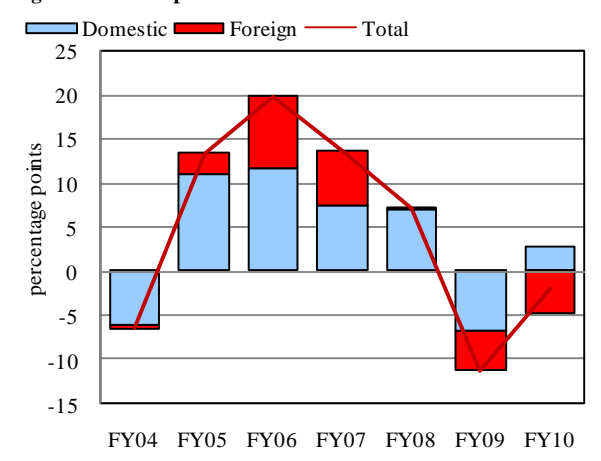
In services sector, a large part of the decline in investments stemmed from finance & insurance and telecommunications. This decline was explained by fall in foreign investment. Besides, although the earnings of domestic banks improved in FY10, the prevailing credit risk in the corporate sector kept pressures on banks to increase statutory reserves.

#### Do we need more investments especially at a time when firms have unutilized capacities?

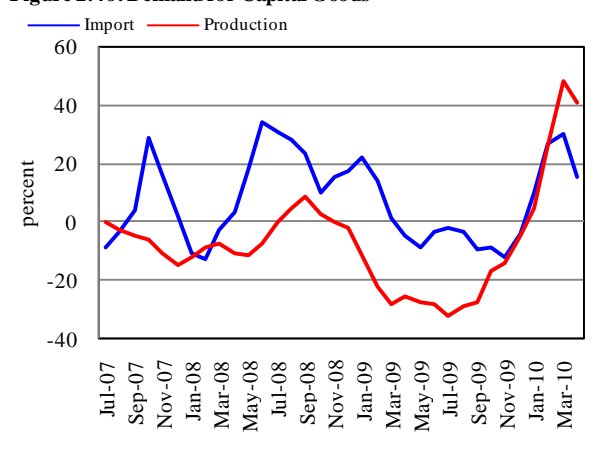
It is true that a large number of manufacturing sectors are presently running at low capacity, however investment decisions regarding capacity augmentations are made keeping in view the demand growth in medium to long run growth prospects. Furthermore, there is wide variation in the level of capacity utilization across sectors.

For instance, food related industries have excess capacities whereas, in industrial chemicals, fertilizer sector, firms are operating beyond nameplate capacity.

**Figure 2.45: Composition of GFCF**



**Figure 2.46: Demand for Capital Goods**



**Table 2.11: Import of Textile Machinery - sector wise (Jul-Apr)**  
million rupees, growth in percent

	FY09	FY10	Growth
Extrusion	26.6	238.7	
Spinning	4,093.9	3,485.9	-14.8
Weaving	2,171.9	3,384.1	55.8
Knitting	2,056.1	4,220.3	105.3
Value-added	3,571.7	3,860.6	8.1
Bleaching/dyeing/washing	2,276.0	3377.2	48.4

Capacity expansion is not, and should not, always be the prime objective of capital spending. In specific terms, firms all over the world increase their capital spending for three broad objectives: (a) capacity expansions; (b) increasing efficiency; and (c) replacement of existing capacity. Interestingly, increasing the level of efficiency has been cited as the prime motivation for capital spending in leading economies according to various business surveys held recently, while capacity expansion was the least frequent prime objective.

The present state of both commodity producing and services sector in Pakistan offers enormous potential for efficiency gains. Although productivity has apparently improved in recent years, as is evident from rising agri yield and increasing financial penetration, domestic producers need to focus more on taking cost cutting measures, such as indigenizing raw material, ensuring energy efficiency measures, etc.

In the industrial sector, a number of manufacturing firms are operating with obsolete technology. Moreover, although huge investments were made under the Textile Vision 2005, the major beneficiary was only the low-value added sector (see **Table 2.11**).

The government has already granted exemption of customs duty on import of a wide range of textile machinery and equipments including machines for extruding, drawing, texturing or cutting manmade textile materials and textile winding (including weft-winding) or reeling machines under the SRO 809(I)/2009 of September 19, 2009. Furthermore, estimates suggest that spinning sector constituted almost 60 percent of the total investments in textile industry in last ten years, followed by textile processing and weaving sectors. Investments in other sectors like knit wear, made ups and synthetic textile remained quite low. In FY10, however, the remarkable growth of 28.9 percent in the import of textile machinery was largely concentrated in value-added sectors (see **Table 2.12**).

**Table 2.12: Disbursement Under LTFF**  
million rupees

	<b>FY09</b>	<b>FY10</b>
Spinning Textiles	3.9	290.5
Weaving Textiles	563.8	2204.9
Wearing Apparel, Readymade Garments	622.6	1379.7
Made ups of textile articles	510.0	846.3
Towels	111.0	126.4
Others textiles	987.2	1469.6
<b>Total Textile Sector</b>	<b>2798.5</b>	<b>6317.3</b>

The services sector also needs to be strengthened to support the growth in the commodity sectors. Poor infrastructure and service provision is significantly holding back potential output. For example, storage is one of the most under-rated services when it comes to investment; causing rampant wastages right from the ex-farm/factory stage. There is a dire need to invest in construction of on-field silos in the farm sector to minimize crop wastages and improving farm living. Moreover, exports of climate-sensitive goods, such as cement and pharmaceuticals, need specialized supply lines as well as storage facilities for protection from extreme temperatures and humidity. Unfortunately, the ports have insufficient silos and storehouses to meet these specific requirements. This also increases man-handling which can significantly reduce value. Secondly, roads and railways are the lifeline of the industry, as they can dramatically reduce the cost of doing business. Moreover, lack of proper roads connecting rural areas reduces market access for farmers, which keeps them from getting a fair crop price and increase the role and leverage of middlemen.

Other services sectors that attracted significant investment in the past few years are telecommunications, finance, and wholesale & retail trade activities. Investment in the telecom sector has declined over the last year owing to the general uncertainty surrounding the global and domestic economic scenario and also because it appears that the market profitability has begun to converge. Pakistan has one of the highest teledensities in the region, which implies that the marginal revenue that each additional user brings is likely to follow a declining trend (see **Figure 2.47**). This is unless the market size increases. As it happens, several rural and remote areas continue to be unserved or

underserved. Although these areas certainly have lower profit opportunities than the more densely populated and higher income urban areas, it is encouraging that the government is promoting service delivery to these areas via the USF.

The telecommunication sector is a huge power consumer, requiring constant electricity supply at all its connection towers. Therefore, any network expansion carries substantial energy costs. In order to reduce these costs, the Punjab government and Enercon have taken an encouraging initiative requiring telecom service providers to replace their electricity use with solar power supplies.

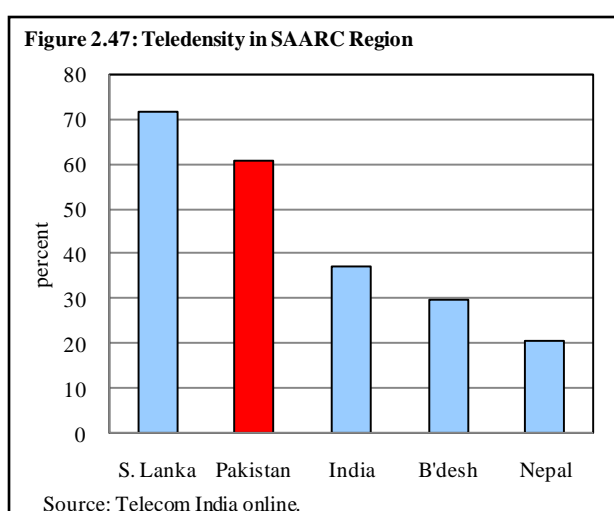
In a similar vein, the Enercon has also completed detailed energy audits in the construction industry and has formulated a draft of 'building energy codes' that will be implemented after required consultations. Incorporating these regulations in new constructions will also entail significant investment by building contractors.

Although adopting energy-conserving technologies is a step in the right direction, this does not undermine the need to augment existing energy supplies by employing all domestic resources. This means the construction of dams and utilization of Pakistan's vast coal reserves should be an important national priority. Furthermore, there must be no let up in exploration of crude oil and natural gas. Timely completion of the Iran-Pakistan pipeline will also be crucial in this regard. Apart from expanding production, efficiencies must be enhanced in the power generation and distribution sector as the country can no longer afford to bear losses on this front. This will require minimization of line losses by replacing ailing transmission lines, increasing public awareness, and inculcating management efficiencies, which may require higher private sector participation. Lastly, foreseeing power shortages, a number of firms (including cement, textiles, glass, etc.) made hefty investments in alternative power arrangements, run on furnace oil or natural gas. However, their production costs significantly increased in the face of recent increase in gas and oil prices.

## 2.8 Savings

National savings as percent of GDP were registered at 13.8 percent in FY10, up by 0.6 percentage points over the preceding year. This rise is entirely came from improvement in private *household* savings, as public savings declined and private corporate savings remained unchanged during the year. Although savings rate has improved but the level of saving rate in Pakistan especially with respect to investment, remains low.

Savings are critical for the economic development though there has been a debate that whether saving is an outcome or a cause for economic growth. Cross-country analysis shows that countries having higher economic growth usually have a higher rate of savings (see



**Table 2.13: Savings and Investment**

	Billion Rs.		% of GDP	
	FY09	FY10	FY09	FY10
I: National savings	1,677.2	2,027.4	13.2	13.8
a) Public savings	285.5	203.1	2.2	1.4
i. General	264.3	129.7	2.1	0.9
ii. Others	21.3	73.3	0.2	0.5
b) Private savings	1,391.7	1,824.3	10.9	12.4
i. Household	1,136.9	1,530.9	8.9	10.4
ii. Corporate	254.8	293.4	2.0	2.0
II: Net factor income from abroad	344.5	570.6	2.7	3.9
III: Domestic savings (I-II)	1,332.7	1,456.8	10.5	9.9
IV: Total investment	2,414.7	2,431.7	19.0	16.6
V: Resource gap (I-IV)	-737.5	-404.3		

Source: Planning Commission, Government of Pakistan



**Table 2.13).** There are other factors as well that determines the level of saving pattern in a country including per capita income, demographic structure, dependency ratio, financial depth, the rate of returns, expected inflation, consumption pattern (religious and cultural).

**Table 2.14: Country Comparison of Gross National Saving (as a % of GDP)**

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
China	37.1	38.4	37.7	37.1	37.3	38.2	40.3	43.6	46.6	48.2	49.5	51.8	52.2
Sri Lanka	20.5	22.9	23.8	21.9	19.1	20.6	20.5	21.1	21.5	23.1	22.3	23.3	18.2
Philippines	19.3	21.2	22.6	21.7	24.2	24.5	26.6	28.1	29.7	30.0	29.1	30.2	30.8
Thailand	34.2	33.0	31.7	30.1	31.5	30.3	30.5	28.6	28.5	27.7	29.9	31.8	30.4
Bangladesh	20.0	20.7	21.8	22.3	23.1	22.4	23.4	24.9	25.4	25.8	27.7	28.7	30.2
India	24.9	25.8	23.9	26.7	25.5	25.8	28.9	32.6	33.9	36.5	38.1	40.6	
Indonesia	27.8	28.9	22.1	13.0	26.0	28.5	23.0	20.7	20.8	24.3	25.8	25.1	28.2
Pakistan*	13.4	13.4	16.7	13.3	15.7	16.5	18.6	20.8	17.9	17.5	17.7	17.4	13.4

Source: ADB, Key Indicators 2009, \* Economic Survey, Planning Commission

As shown in **Table 2.14**, savings ratio in China is the highest among major Asian countries and has reached 52.2<sup>29</sup> percent in 2008. More importantly, the domestic saving rate has crossed the 50 percent in 2008 which is the highest in the world.<sup>30</sup> Empirical evidence suggests that the saving rate in China is determined, among other macroeconomic factors, by imperfect social security system in the absence of which people have to save for their retirement needs.<sup>31</sup> Furthermore, cultural traits of almost the entire East Asia signify an important role of savings in these economies.

Pakistan's saving rate is the lowest in emerging Asian economies. It appears that this low level of national savings is an outcome of multiple factors, including (a) consumption oriented society; (b) dissaving by the public sector on the back of lower tax base and rigid current expenditures block; (c) loss making public sector commercial enterprises; (d) higher penetration of small and medium scale units in local business industry; (e) low and highly skewed per capita income; and (f) lack of appropriate instruments of financial savings with limited access to financial services to the masses. As a result, public sector savings constitute the lowest fraction of national savings whereas domestic private sector constitutes more than 90 percent of the national savings. Within the private sector, households' savings dominates with more than 75 percent share in national savings.

### 2.8.1 Saving-Investment Gap

In Pakistan, the private saving-investment gap remained positive until FY09 when private savings equaled the investment because of a slight shift from formal channel to informal channel amid stock market turmoil. In comparison, the private saving-investment gap in India has been heading upward from almost 1.4 percent in 1982-83 to reach 22.7 percent of GDP in 2005-06. The public gap is symmetrical to private gap both in India as well as in Pakistan and it is private savings which are responsible to finance a portion of government's investments as well as financing the fiscal debts. The rest are financed through foreign savings and remittances. The reason for low public saving is the low tax-GDP ratio which is less than 10 percent in Pakistan. India has 18 percent tax-GDP ratio<sup>32</sup> but still its public gap is worse than Pakistan's public gap (see **Figure 2.48**). Tax evasion is quite common in Pakistan and government also paid subsidies in different sectors and funded the PSEs which are operating inefficiently and most of them incurred huge losses. They pay heavily on salaries and administrative expenses and are unable to maintain sufficient cash flows. Fiscal deficit remained

<sup>29</sup> ADB statistics

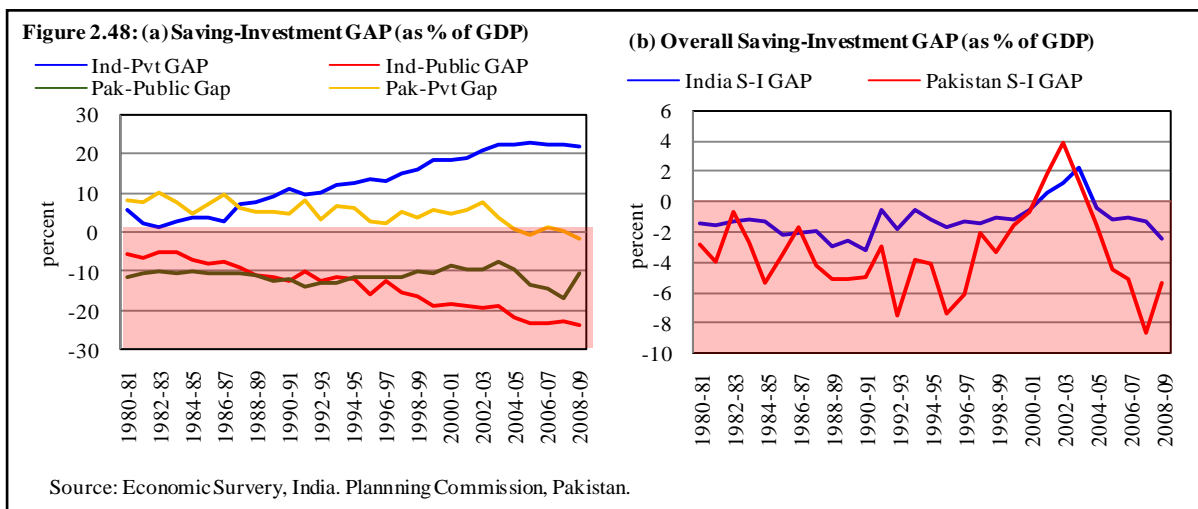
<sup>30, 32</sup> Horioka, Charles Y. and Wan J. (2007), "The Determinants of Household Saving in China: A Dynamic Panel Analysis of Provincial Data", Journal of Money, Credit and Banking, 39 (8)

<sup>32</sup> South Asia Economic Update 2010, World Bank



more than 5 percent of the GDP while current account deficit also averaged more than 5 percent since FY06.

To improve the S-I gap, the government needs to widen the tax base. The government has announced the VAT but its implementation was deferred due to concerns of the business community. PSEs should also be made efficient by offloading their burden and making them productive. To improve private savings, penetration of financial services in the rural areas is necessary. Microfinance banks and schemes already started operations in some areas but efforts are required to improve awareness in the people. Private pension schemes should also be encouraged.



### Special Section 2.1: Reflections on Economic Growth in the Decade 2001-2010

The average growth in the decade 2001-2010 was 4.8 percent; an acceleration of 0.4 percentage points over the 1990s and an equal deceleration compared with the 1980s. Among the major drivers of growth during the 2000s were, a more liberalized trade regime that lent impetus to industrial growth, particularly textiles; import substitution of consumer durables; a more dominant role of the government, in terms of higher expenditure and a stronger regulatory role, especially in the financial sector; and lastly, the advent of services sector as telecommunication and consumer banking made their way into the domestic economy. The growth during 2000s was more employment-intensive, particularly as services sector rapidly created jobs for educated workers.

*The sectoral contribution of economic growth in the 2000s was more concentrated* compared with the preceding two decades (see **Figure 2.1.1**). The increased concentration was mainly due to higher contribution of services in overall growth which already constitutes the largest share in GDP. The high growth in services sector was a combined output of completion of financial sector reforms, liberalization of telecommunication sector, expansion in commodity producing sector that translated into higher demand for wholesale and retail trade, and increased openness that boosted activities in transport sector.

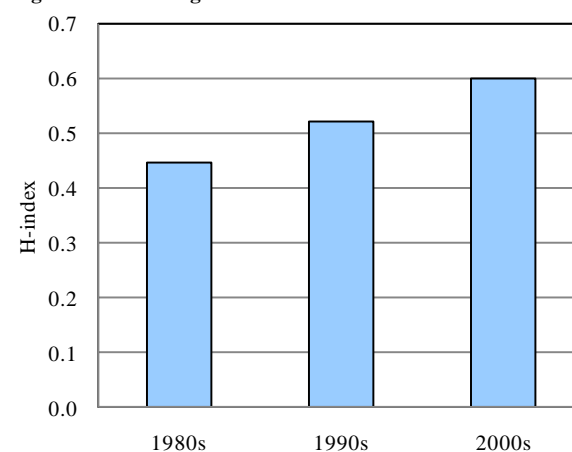
Interestingly, growth in services sector had been the highlight of a number of emerging Asian countries, including China, India, Sri Lanka, and Bangladesh (see **Figure 2.1.2**). However, the Indian and Sri Lankan economies are exceptions in that the share of the both industry and agriculture was being replaced by services by the decade-end. This has become possible partly because these economies are heavily inclined towards services exports.

#### *Economic growth in the 2000s was more volatile compared with the preceding two decades.*

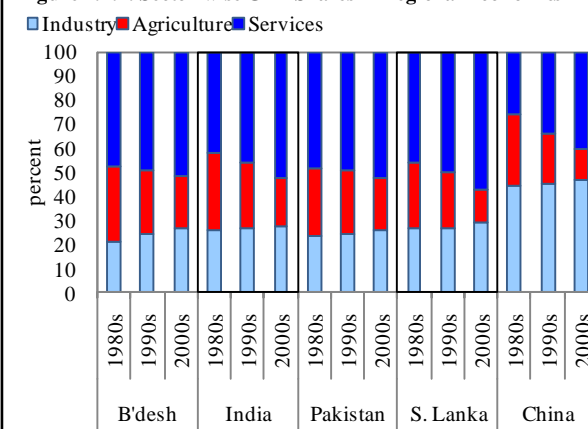
Specifically, the coefficient of variation (mean adjusted standard deviation) increased further in the 2000s that reflects widening variation in growth across years (see **Figure 2.1.3**). Although agriculture has generally been the most volatile component of the GDP, during the latter half of 2000s the rise in volatility emanated entirely from industrial sector as the growth in services and agriculture sector was rather stable over the recent years (see **Figure 2.1.4**). The increased fluctuation in industrial growth emanated from, (a) changes in regulatory regimes for textile exports; (b) wide variations in cotton production across years that translated into volatility in textile manufacturing; and (c) expansion in capacities that caused sharp increases in industrial production, e.g., cement, electronics, petroleum refining, fertilizers, etc.

*The investment to GDP ratio declined marginally with each successive decade* (see **Figure 2.1.5**). However, it is also true that the investment ratio rose to 22.2 percent during FY06-FY08, on average with the record high of 22.5 percent in FY08.

**Figure 2.1.1: Average Herfindahl Index of GDP Growth**

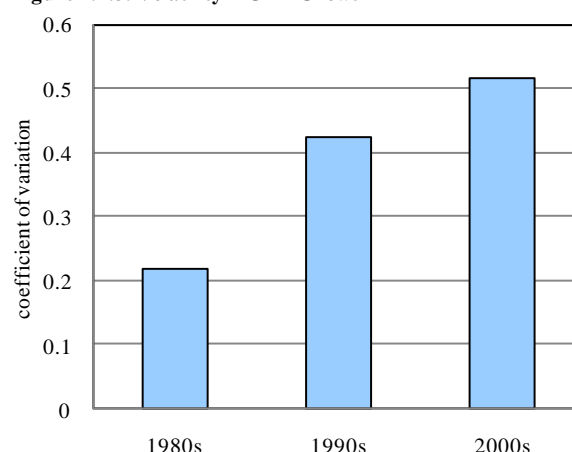


**Figure 2.1.2: Sector-wise GDP Shares in Regional Economies**



Source: World Bank online database

**Figure 2.1.3: Volatility in GDP Growth**



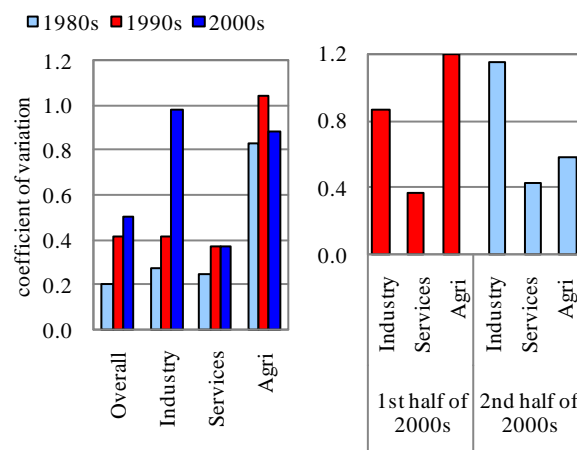
It implies that investment ratio was significantly lower in the remaining years. The contribution came from investments from both domestic and foreign sources. The share of public sector investment has gradually declined in sectors where the private entrepreneurs, particularly foreign investors, have taken over. Such participation has been especially strong in services, including, transport, communication, wholesale & retail trade, and finance & insurance.

However, both the private and public investment in manufacturing and energy sectors was less forthcoming than in the previous decade. The decline in public sector investment mainly stemmed from increased divergence of public funds towards higher defense and general government spending, including higher investment by the general government. Private investment remained low during this decade because the rapid industrial investment during the past two decades, (in steel, sugar, edible oil and ghee, textiles, etc.) had covered the need for new capital in these sectors, at least during the first half of the 2000s decade. The 2000s decade therefore saw a diversion of industrial investment towards other sectors, particularly consumer durables and construction. A notable increase was also seen in the overall investment in agriculture, which led to higher agriculture productivity. ***Despite more trade opportunities arising after liberalization under the WTO regime, Pakistan's trade of goods and services declined as a proportion of GDP.*** This decline was caused by decreasing shares of both imports and exports. This is in contrast with the rising trade-to-GDP ratio in other economies, particularly, India, Bangladesh, and China. It is also interesting to note that while Pakistan's trade-to-GDP ratio was the highest among these three economies during the 80s and 90s, this ratio is now the lowest (see **Figure 2.1.6**)

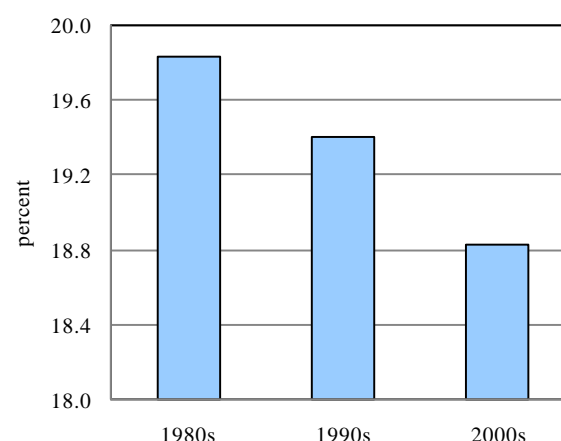
While overall trade has declined, terms of trade have improved. Raw material imports have significantly risen from 49.2 percent of total imports in the 90s to 57.5 percent during the current decade. This was due to import substitution in consumer durable markets, mainly electronics and automobiles. At the same time, share of manufactured goods in total exports has risen to 76.2 percent in the 2000s from 63.8 percent in the last decade.

***Monetary policy (with fiscal prudence) had a dominant role in economic growth.*** The monetary policy in Pakistan took a turn in year 2000 to ensure credit availability to non-traditional sectors. The SBP encouraged commercial banks to open up lending to consumers, SMEs and agriculture, in order to diversify banks' portfolios as well as to increase banking penetration in the economy. The liquidity inflow into the bank system emanating from post 9/11 developments, and fiscal discipline in FY02-FY05 period created incentives for banks to place funds in more profitable avenues. As a result, private sector credit to GDP ratio reached to an average of 23.6 percent in 2000s (see **Figure 2.1.7**.)

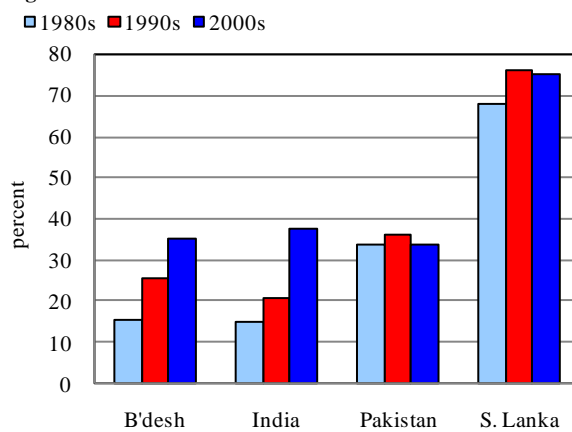
**Figure 2.1.4: Sector-wise Growth Volatility**



**Figure 2.1.5: Investment as percent of GDP**



**Figure 2.1.6: Trade Volumes as Percent of GDP**



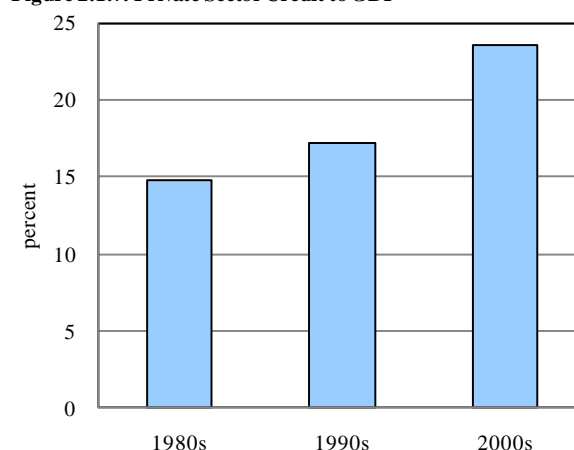
Source: IMF, International Financial Statistics

The lending to consumer sector was especially conducive for manufacturing sector as increased demand for automobiles, electronics, and construction based manufacturing products increased substantially. Investment increased in these sectors to expand capacities, and production followed. The growth in consumer-based industries then caused a second round effect on other intermediate goods industries, such as, metal, petroleum products.

**Employment intensity has increased** (see Figure 2.1.8).

The economic growth in 2000s was more employment intensive compared with 80s and 90s mainly because the growth in the last decade was driven by the services sector, which has higher employment intensity compared with commodity producing sectors. For instance, the financial sector growth that resulted in a number of bank branches all over the country and opening up of new banks was a major factor contributing in employment generation. Similarly, the onset of telecom revolution in Pakistan during the decade resulted in huge investments in cellular services industries. All of the major telecom companies opened up their offices and sales outlets across the country and generated substantial employment. From FY03 to FY07, the direct and indirect employment in telecom sector grew at an average rate of 41.0 percent. The 2000s decade has also been marked by closing gender gap in the labour force, female participation in the labour force increased from 11.4 percent in 1994-5 to 14.9 percent in 2008-09.

**Figure 2.1.7: Private Sector Credit to GDP**



**Figure 2.1.8: Employment Intensity of Economic Growth - Employment Growth / GDP Growth (compounded)**

