2 Aggregate Supply

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

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

2.1 Overview

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

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

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

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

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

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

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

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

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

2.2 Agriculture

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

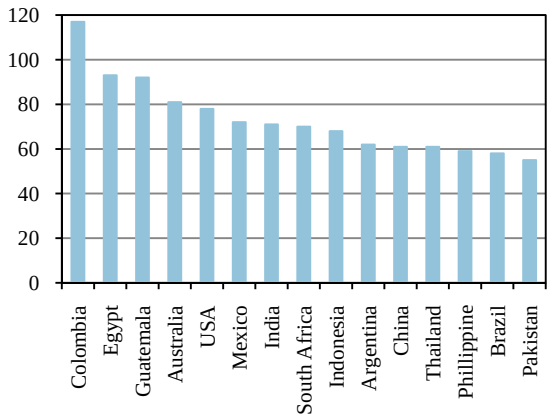
A higher price for the previous sugarcane crop, favorable weather conditions and timely availability of inputs, helped enhance sugarcane production to 55.3 million tons – a growth of 12 percent over the 2010 crop size. Encouragingly, the crop yield increased to a record level of 56 tons per hectare.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

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

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

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

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



Source: Annual Report 2010, Pakistan Sugar Mill Association

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

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

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

Table 2.2: Performance of Major Crops

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

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

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

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

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

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

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

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

Sharp rise in input prices

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

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

Recurrence of floods

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

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

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

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

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

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

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

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

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

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

Box 2.1: Bt Cotton in Pakistan

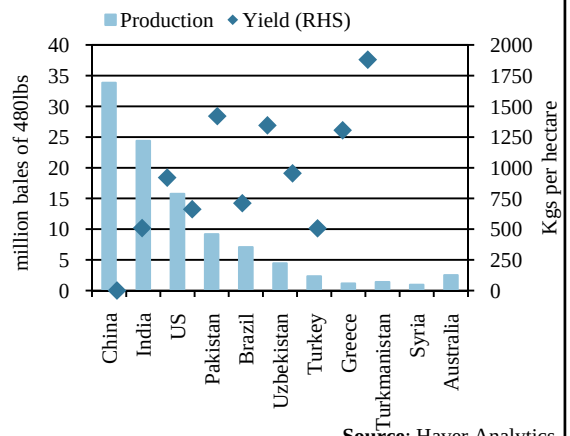
Bt cotton has been developed through the transfer of a gene, *Bacillus thuringiensis*, from a soil bacterium.[15] This gene enhances crop resistance against three bollworms: spotted, pink, and American bollworm.[16]

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

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

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

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



Source: Haver Analytics

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

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

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

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

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

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Salam, A. 2008. Production, Prices and Emerging Challenges in the Pakistan Cotton Sector. In Cororaton, Caesar B. et al. ed.) Cotton-Textile-Apparel Sectors of Pakistan: Situation and Challenges Faced. IFPRI Discussion Paper 00800. Washington, D.C.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Source: Pakistan Agriculture Statistics, 2009-10

Reference:

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Government of Pakistan (2011). Pakistan Annual Plan 2011-12, Planning Commission, Islamabad.

Collapse of cotton prices

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

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

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

2.3 Large-Scale Manufacturing

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

Table 2.4: Capacity Utilization in Selected Industries (percent)

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

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

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

Some industries are growing stronger

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

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

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

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

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

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

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

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

Source: Federal Bureau of Statistics

Others are suffering due to loss of competitiveness

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

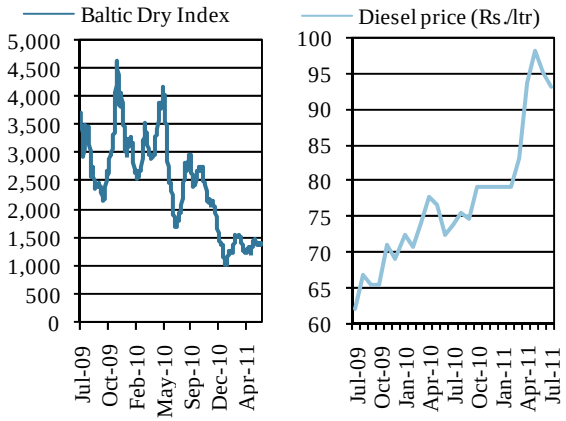
[31] Textile manufacturers were able to meet the higher demand despite a decline in cotton production this year and no significant increase in imports. This was made possible due to available cotton inventories and decline in yarn exports (see **Chapter 9** for more on textiles).

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

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

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

Figure 2.3: Shipping and Inland Freight Cost Trends



Source: Bloomberg

Table 2.6: Import Competing Industries (percent)

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

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

Source: Federal Bureau of Statistics

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

Table 2.7: Import Competition Heating up for Electric Fans

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

Source: Federal Bureau of Statistics

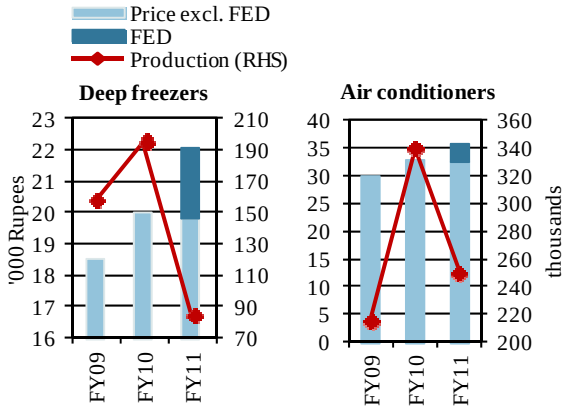
Some industries are facing a more uneven playing field

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

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

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

Figure 2.4: Impact of FED on Home Electronics



Source: Federal Bureau of Statistics

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

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

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

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

2.4 Services

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

Table 2.8: Contribution in Services Sector Growth
percent

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

T: Target

Source: Federal Bureau of Statistics

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

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

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

P: Provisional

Source: Ministry of Railways

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

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

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

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

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

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

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

Table 2.10: Sectoral Composition in GDP (percent)

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

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

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

Sources: OECD, RBI, FBS

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

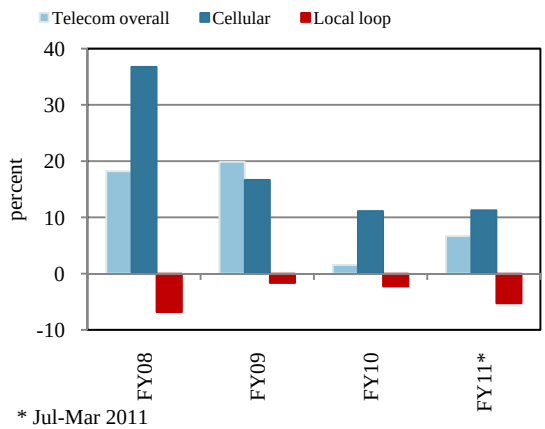
Similarly PIA is also adding to the fiscal burden, having incurred significant losses for the last several years. The company's operating performance is disappointing. Operational efficiency as measured by revenue earned per aircraft, available seat kilometers[37] per aircraft and passenger capacity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

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

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

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

Figure 2.5: Growth in Telecom Revenues



* Jul-Mar 2011

Source: PTA

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

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

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

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

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

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

Figure 2.6: Rising Number of Traders And Hotels*

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

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

Box 2.4: A Comparison of Pakistan and Indian Railways

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

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

Figure 2.7A: Staff Benefits As % of Revenues

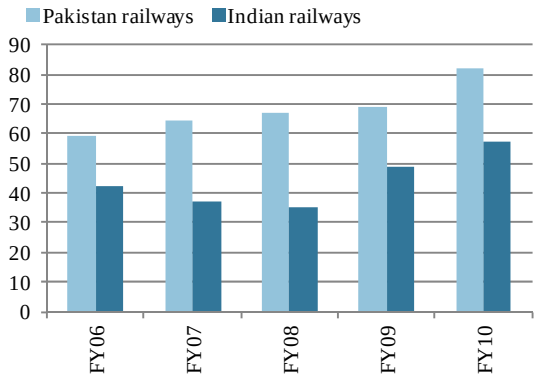
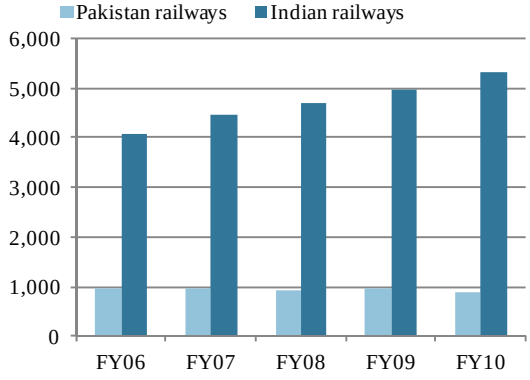


Figure 2.7 B: Number of Passengers handled per Employee



Source: Ministry of Railways, Indian Railways

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

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

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

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

Table 2.11: PR's Locomotives Strength (numbers)

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

Source: Pakistan Railways Headquarters

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

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

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

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

Box 2.5 Airline Industry

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

Table 2.12: PIA - Financial Summary

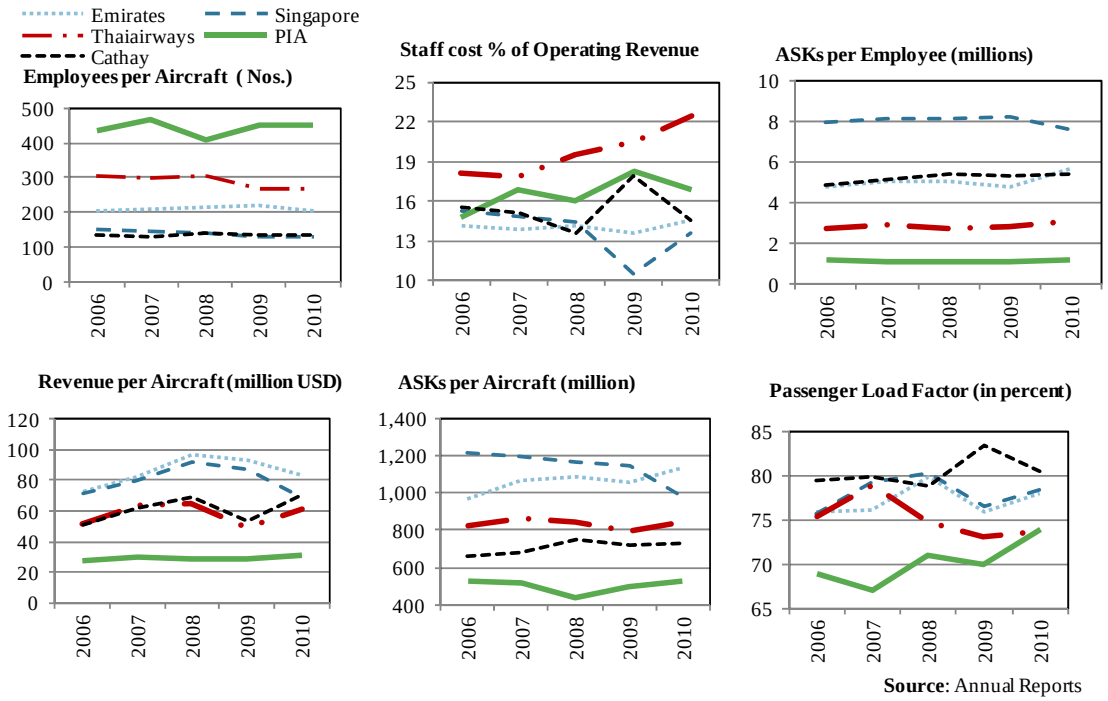
billion rupees; growth in percent

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

Source: PIA Annual reports

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

Figure 2.8: PIA vs International Airlines - Operating Statistics



Source: Annual Reports

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

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

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

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

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

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

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