2 Real Sector

2.1 Overview

Available economic indicators suggest that macroeconomic adjustments have started moderating aggregate demand in the country. The slowdown has been driven largely by consumer durables and construction allied industries. Consequently, large scale manufacturing (LSM) has contracted by 1.5 percent during H1-FY19 compared to YoY growth of 6.6 percent in H1-FY18. Furthermore, the contraction is more pronounced in Q2-FY19 (2.4 percent) as compared to Q1-FY19 (0.6 percent).The agriculture sector continued to face issues regarding shortage of water, higher fertilizer prices and decline in output of major *kharif* crops. These developments in the industrial and agriculture sectors are impacting the services sector as well; however, the actual position would be available towards the end of FY19 as relevant data becomes available.

Several factors contributed to the slowdown in LSM during H1-FY19. Last year, (i) CPEC related activities, (ii) higher PSDP expenditure, (iii) private sector construction activities and (iv) consumer spending had strengthened the industrial performance. However, during H1-FY19, a contraction in the former two and slowdown in the latter two resulted in lower output.[1] This was more noticeable in case of construction-allied industries. Demand for housing moderated as the price of building materials and cost of financing increased. Moreover, additional tax measures further constricted the real estate market.

Certain sector-specific issues also contributed to the decline in LSM. Automobile prices witnessed multiple upward revisions during H1-FY19 due to PKR depreciation. As the induced economic slowdown to curtail domestic demand started to take effect, price-sensitive potential buyers refrained from making purchases, especially those of durables. In addition, certain restrictions on income tax non-filers with respect to purchase of cars further dampened the automobile demand. Pharmaceuticals is another industry that suffered due to a considerable lag in regulatory adjustments in prices. This pricing issue was in addition to weakening of the local currency, which added to the distress of an import dependent sector (see **Box 2.2**). Similarly, lower sugarcane production and previous year's inventories dampened the prospects of the sugar industry.

[1] PSDP, an important indicator of construction activities, dipped sharply to Rs 328.2 billion in H1-FY19 from Rs 519.8 billion in H1-FY18.

In the agriculture sector, the production of crops posted a decline during this *kharif* season. More specifically, compared to last year, there has been a reduction of 1.1 million bales for cotton, 13 million tons for sugarcane, and 0.3 million tons for rice respectively. While demand management policies affected manufacturing activities, agriculture was faced with sector specific issues. Scarcity of water remained the main challenge, resulting in decline in area under cultivation of major crops.[2] In addition to water shortages, higher fertilizer and other input prices further complicated the situation during Q2-FY19. As a result, the sowing of wheat (the only major crop of *rabi* season and the largest crop of the year) has been constrained.

The performance of livestock and minor crops will be critical in determining the overall growth in the agriculture sector for FY19. Historical data substantiates better growth in production of minor crops when major crops are in distress. If this holds true, minor crops, including fodder, are expected to perform better. This can be traced to availability of more vacant area for cultivation and the conducive nature of many minor crops to adapt well to water conservation practices. With anticipation of better fodder production, lagged impact of initiatives by the government[3] and good credit off-take during H1-FY19, livestock is expected to maintain its growth momentum during FY19.

Weak performance of commodity-producing sectors also tends to have a negative impact on the services sector. On this note, the performance of segments like wholesale and retail trade may suffer due to decline in production of *kharif* crops, and slowdown in imports. Moreover, flagging economic activity has adverse implications for segments like transport, storage and communication. During H1-FY19, lower demand for commercial vehicles and lower POL sales to the transport sector substantiates this case as well.

2.2 Agriculture

Second estimates of major *kharif* crops reinforce earlier assessment of lower production levels for all the three major *kharif* crops in FY19 compared to FY18; cotton declined by 9.2 percent, rice by 3.9 percent and sugarcane by 15.9 percent

[2] Canal water availability in the country during H1-FY19 remained lower by 2.3 percent compared to last year. The situation worsened during Q2 in particular, with a YoY decline of 6.3 percent.

[3] During FY18, the National Progressive Control of FMD, worth Rs. 726 million, was launched to control the Foot and Mouth Disease and improve animal health. The program is also aimed at strengthening diagnostic capabilities and curbing a major cattle disease in the country. The government and private firms also reached out to markets of China and Russia for future exports of meat and meat products. As regards to poultry, lifting of ban by the UAE on Pakistan's imports in FY18 is another opportunity worth exploiting.

respectively. While rice and sugarcane surpassed the targets set in Annual Plan FY19, the fall from last year's level will weigh heavily on growth of the crop sector in FY19.

Area under cultivation of wheat, the biggest crop of the year, has been estimated to fall by 2.9 percent. Most of this fall in area has been recorded in Sindh, which has the highest average yield among the provinces. The major reason for the slide is due to insufficient water availability as growers had to endure water stress conditions throughout the year.

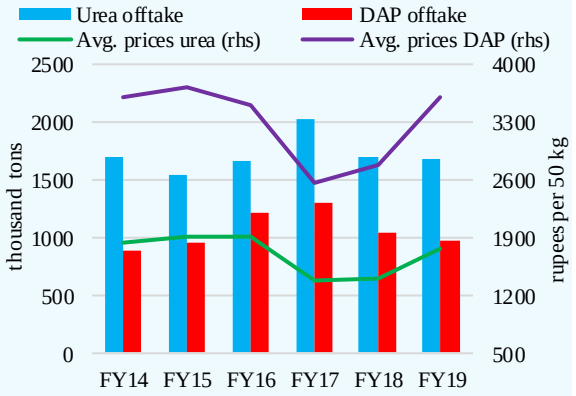
Rabi - Input Situation

After *kharif*, when farmers had to face water shortages, the situation became more acute during the initial months of the *rabi* season. In addition to water scarcity, fertilizer uptake declined and credit uptake decelerated during the wheat sowing months.

Challenges regarding canal water availability persisted in the sowing months of the *rabi* season as irrigation flows stood at 16 million acre feet (MAF) during Q2-FY19, not only 6.3 percent lower than the previous year but also lower than the Q2 average over the last 5 years.

Lower availability of water resulted in shrinkage of area under the wheat crop. Crop yield per hectare may also suffer due to reduction in nutrient offtake by 6.8 percent during the first half (Q2) of the *rabi* season. The decline in fertilizer usage is more pronounced than the reduction

Figure 2.1: Fertilizer Offtake and Average Prices - Q2



Data source: National Fertilizer Development Center

Table 2.1: Agriculture Credit Disbursements (billion Rupees)

	Q1		Q2		H1	
	FY18	FY19	FY18	FY19	FY18	FY19
Farm sector						
A. Production	57.6	82.4	128.7	148.6	186.3	231.0
All crops	38.5	40.1	70.6	70.5	109.1	110.6
Corporate farming	2.6	26.7	37.2	49.2	39.8	75.9
B. Development	3.3	6.0	7.8	11.5	11.1	17.5
Tractor	1.1	1.0	1.5	1.2	2.6	2.2
C. Total farm sector (A+B)	60.9	88.4	136.5	160.1	197.4	248.5
Non-farm sector						
Livestock/dairy						
Working capital	34.6	56.7	66.8	75.9	101.4	132.6
Fixed investment	6.6	4.8	8.7	5.5	15.3	10.3
Poultry						
Working capital	24.3	25.9	29.9	35.6	54.2	61.5
Fixed investment	0.4	0.7	0.5	0.6	0.9	1.2
Other	29.1	35.7	33.6	37.5	62.7	73.2
D. Total non-farm sector	95.0	123.7	139.5	155.1	234.5	278.8
Total agriculture (C+D)	155.9	212.1	276.0	315.2	431.9	527.3

Data source: AC&MFD, State Bank of Pakistan

in area under wheat cultivation. It is mainly explained by an increase of 16.7 percent in fertilizer prices during the corresponding period. Furthermore, the fall in DAP offtake, the essential imported fertilizer used during sowing, was more pronounced as its price increase was due to a combination of increase in international price and PKR depreciation (**Figure 2.1**).[4]

In line with weak crop sector performance, agriculture-credit disbursements decelerated from 39.4 percent during Q2-FY18 to 14.2 percent in Q2-FY19. The breakdown reveals that disbursements for all crops in the quarter were at the same level despite higher input prices. Livestock disbursements, on the other hand, continued to show healthy growth, with major share attributed to working capital disbursements. Higher credit growth in livestock indicates positive interest in this sector even after increase in interest rates (**Table 2.1)**.

Wheat

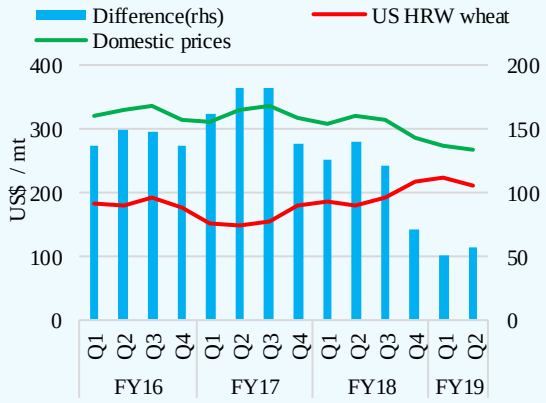
In the presence of significant carry-over stocks, the government had lowered the target for area sown under wheat. Latest estimates show that the sown area is lower than the target. The decline in area under wheat was more pronounced in Sindh where recent water shortages are felt more acutely compared to Punjab. While growers in Punjab can resort to underground water for irrigation, groundwater in Sindh is mostly saline and unsuitable for agricultural use (**Table 2.2**).

Table 2.2: Wheat Crop

	Area (000 hectares)			Production (000 tons)		
	FY18	**FY19T**	**FY19P**	**FY18**	**FY19T**	**3-year avg**
Punjab	6515	6515	6564	19607	19510	19867
Sindh	1170	1150	1046	3582	3800	3776
Balochistan	761	768	687	1383	1362	1383
KP	394	400	286	935	900	913
Pakistan	**8839**	**8833**	**8583**	**25507**	**25572**	**25938**

Data source: Ministry of National Food Security and Research

Figure 2.2: Wheat Domestic and Global Prices



Data source: Pakistan Bureau of Statistics and World Bank

Resultantly, the achievement of targeted wheat production would largely depend on the crop yield. To achieve the harvest of 25.6 million tons, productivity of 2,972 kg per hectare would be required, which entails a growth of 3.2 percent over last

[4] Domestic DAP prices rose by 29.7 percent in Q2-FY19 compared to same period last year.

year. Achieving such yield would be a challenge given delayed sowing of the crop due to late cane crushing and delayed rice harvesting in major *kharif* areas.

Given the existing carryover stocks, realization of the set target will result in another year of wheat accumulation. In the face of depressed international wheat prices, exports, yet again, may not be feasible without government support. The same is also evident from wheat export data, where depletion of stocks is slow as exports were lower in the second quarter. On the other hand, the excess wheat in the domestic market kept prices under check during H1-FY19 (**Figure 2.2**).

Minor crops

Anecdotal evidence suggests that minor crops perform better when production of major crops falls. The below par performance of the major crops in the ongoing year may revitalize the minor crops as reduced area may be substituted for minor crops. Lower prices of many perishable food items in the domestic markets during H1-FY19 lends weight to this hypothesis (**Table 2.3**).[5]

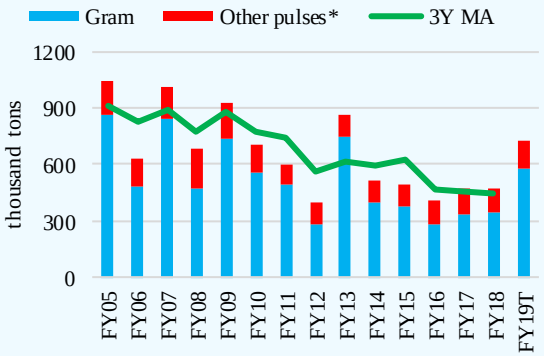
Table 2.3: CPI Prices for Minor Crops and Perishable Food Items (Rupees per kg)

	H1FY18	H1FY19	% Change
Gram	119	121	1.6
Lentil (masoor)	121	106	-12.6
Potatoes	40	31	-23.0
Onions	61	34	-43.5
Tomatoes	74	58	-21.9
Sunflower	45	48	6.9
Chilli	91	87	-4.8
Mash	181	146	-19.0
Moong	121	116	-4.5

Data source: Pakistan Bureau of Statistics

Production of gram, which fell short of its ambitious target in FY18, is expected to improve in FY19 due to the existing circumstances in agriculture. Production of pulses is expected to rise as higher prices and high import quantum reflects rising demand and hence higher profitability.[6] (**Figure 2.3**).

Figure 2.3 Pulses Production

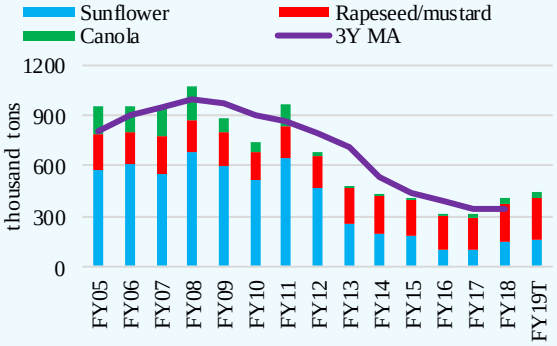


T: Target, *Other pulses: Mash, Mung & Masoor
Data source: Pakistan Bureau of Statistics and MNFSR.

[5] For details, see Chapter 3.
[6] Pulses imports registered a YoY growth of 48.8 percent in H1-FY19, accumulating to 0.51 million tons.

The rising trend in oilseeds (canola, sunflower and rapeseed/mustard) cultivation is expected to continue due to incentives and supportive schemes at the provincial level, especially in Punjab **(Figure 2.4)**.[7] More focus on these policies for oilseeds would also be helpful in relieving some import needs.

Figure 2.4: Oilseeds Production



T: Target
Data source: Pakistan Bureau of Statistics, Pakistan Oilseed Development Board, and MNFSR.

Furthermore, effective and long-term policy measures are needed to incentivize cultivation of pulses and oilseeds and enhance their production. Provision of good quality, high yielding seeds[8] is very important in order to ensure targeted production. Nonetheless, improved agronomic practices are needed to enhance yields of the crops as Pakistan is faced with rising threat of climate change (**Box 2.1**).

Box 2.1: Smarter Agriculture for Adapting to Climate Change

Pakistan is ranked among the top ten most climate vulnerable countries according to the Long Term Climate Risk Index[1]. The agriculture sector is effected by the short-term variability and longer-term climate changes. Rapid population growth will lead to higher caloric demand and at the same time will be accompanied by rapid urbanization. In such situations, adaptation to climate change is needed and for agriculture it means focusing on farm management practices, proper fertilizer usage and adoption of heat/drought resistant varieties. Climate Smart Agriculture is an approach used worldwide focusing on enhancing agriculture productivity and incomes while simultaneously building resilience to climate vulnerability and changes.

Manifestations of climate change: Climate change has led to long term reduction in rainfall in semi-arid regions of the country. In November 2018, the Pakistan Meteorological Department issued a drought warning for Sindh and Balochistan due to below normal rainfall. This was the second warning of the year. Irrigation water flows for Oct-Jan FY19 have been 20 percent lower than the 5-year average. Shortages and erratic nature of water has already been stressed upon in previous SBP reports. Mean temperature of the country has increased by 0.5 degree Celsius in previous 30 years. By 2060, Pakistan's mean temperature is expected to rise by 1.4 degree Celsius to 3.7 degree Celsius, higher than the world average[2]. The manifestations of climate changes and

[7] In 2017-18 *rabi* season, canola and oilseed area under crop enhanced, particularly in Punjab as cash incentives per acre were promised to farmers before the season.
[8] Gram seed requirement for *rabi* 2018-19 was 39,892 metric tons while the total availability stood at 324 metric tons, hence meeting only 0.81 percent of the total needs.

variability are currently witnessed in the erratic nature of rains, higher temperature and reduced water availability.

Economic Risks: The FAO's International Model for Policy Analysis of Agriculture Commodities and Trade (IMPACT) calculates the percentage difference between climate change occurring scenario with and without climate change over the period 2020-2050 on trade, yields, cultivated area and livestock in Pakistan[3]. The crops at risk are wheat, maize, sugarcane and gram with the most negative impact, where yields of all crop are expected to decline. The 2050 wheat projected area is expected to decline by 2.5 percent lower under climate change as compared to no climate change. Furthermore, through crop models predictions it is concluded that yields will reduce due to high temperature in arid, semi-arid and humid zones.[4] The temperature changes have already effected wheat-sowing season, resulting in crop sowing delays.[5]

Climate smart agriculture practices and impediments: To tackle climate change threats and enhance yields, climate smart agriculture requires adoption of a wide array of techniques for all crops, from water saving and pest management to adoption of heat/drought resistant varieties of seed. Several practices such as alternative wet and drying (AWD) of paddies helps save up to three irrigations as compared to continuous flooding, no-till rice and wheat systems are in practice where wheat is sown without tilling the land after rice.

The FAO study for Pakistan highlights the main impediments to accepting the Climate Smart Agriculture practices which need to be addressed:

- Adoption of several climate smart and yield increasing practices is low due to lack of knowledge and awareness. Extension services by the agriculture departments are still weak as many of the farmers are unaware of modern agro-chemical, crop seed varieties and adequate fertilizer use. Only 27 percent of total households surveyed in Punjab in 2014 had interacted previously with an extension agent.[6]

- Lack of financing tools and credit disbursements for smart technology such as drip irrigation and high yielding seeds is low, resulting in disappointing uptake of several techniques and adequate quality seeds even when available.

- Absence of heat and drought tolerant varieties of seed for most of the crops such as cotton, rice, maize etc. The timely sowing of such varieties could reduce yield loss by 90 percent.[7] At present, research funding only forms 0.2 percent of the agricultural GDP[8], hence lack of research focus in seed varieties is a significant impediment.

References:

[1] Source: https://germanwatch.org/en/16046.

[2] Climate Risks and Food Security Analysis: A Special Report for Pakistan (Islamabad, December 2018). WFP

[3] CIAT; World Bank. 2017.Climate-Smart Agriculture in Pakistan. Washington, D.C. 28 p

[4] Sultana, H. Ali, N. I. Mohsin, and A.M. Khan. 2009. Vulnerability and adaptability of wheat production in different climatic zones of Pakistan under climate change scenarios. Climatic Change, 94:123–142

[5 & 6] CIAT; FAO. 2018. Climate-Smart Agriculture in Punjab, Pakistan. Rome, 36 p

[7] Tesfaye et al. 2017. Climate change impacts and potential benefits of heat-tolerant maize in South Asia.

[8] Pakistan: Agricultural R&D indicators factsheet. 2015. http://ebrary.ifpri.org/

2.3 Large Scale Manufacturing (LSM)

Manufacturing activities continued to decline further, as evident from a contraction of 1.5 percent during H1-FY19, compared to 6.6 percent growth in H1-FY18. Fall in PSDP spending and sector-specific issues had a major impact on the industrial sector. Public development spending plays a significant role in supporting private investment; thus, the measures aimed at narrowing fiscal deficit weighed heavily on the industrial sector, especially construction-allied activities (**Table 2.4**).

Table 2.4: YoY Growth in LSM
percent

	wt.	H1		Q1		Q2	
		FY18	FY19	FY18	FY19	FY18	FY19
LSM	70.3	6.6	-1.5	9.8	-0.6	3.7	-2.4
Textile	20.9	0.7	-0.2	1.0	-0.2	0.5	-0.1
Cotton yarn	13	0.1	0	0.1	0.0	0.1	0.0
Cotton cloth	7.2	0	0.1	0.0	0.1	0.1	0.2
Jute goods	0.3	62.7	-8	98.1	-8.1	39.9	-8.0
Food	12.4	-0.4	-3.9	10.9	1.5	-8.1	-8.4
Sugar	3.5	-37.3	-37.2	NA	NA	-37.3	-37.2
Cigarettes	2.1	69.8	6.8	92.0	4.4	52.3	9.1
Vegetable ghee	1.1	8.2	0.7	11.5	2.6	5.3	-1.1
Cooking oil	2.2	5	-1.2	3.5	4.7	6.5	-6.5
Soft drinks	0.9	-2.6	-0.8	2.6	-5.7	-11.2	8.7
POL	5.5	8.1	-4.9	13.6	-5.4	2.8	-4.4
Steel	5.4	37.1	-7.6	47.0	-2.9	28.1	-12.4
Non-metallic minerals	5.4	10.2	-1.2	12.3	0.1	8.5	-2.4
Cement	5.3	10.3	-1.6	12.4	0.1	8.5	-3.1
Automobile	4.6	21.8	-3.6	29.1	-1.1	15.1	-6.2
Jeeps and cars	2.8	27	2.3	31.4	4.7	22.8	-0.2
Fertiliser	4.4	-9.8	6.5	-5.8	-4.8	-14.0	19.2
Pharmaceutical	3.6	5.1	-10	1.9	-4.8	8.1	-14.4
Paper	2.3	10.1	-2.1	9.6	3.9	10.5	-7.6
Electronics	2	92.9	29.4	76.7	16.5	101.0	40.1
Chemicals	1.7	1.5	-3.2	6.0	-7.5	-3.0	1.5
Caustic soda	0.4	16.6	5.3	18.1	17.2	15.2	-5.3
Leather products	0.9	-2	-2	-0.3	0.5	-3.6	-4.3

Data source: Pakistan Bureau of Statistics

The increase in interest rates has resulted in higher financial costs. Meanwhile, the loss of value of the local currency was a major setback for the import-reliant industrial sector, resulting in price hike for most of the locally manufactured industrial goods, notably autos. From the consumers' perspective, higher borrowing costs helped moderate the earlier level of high domestic consumption.

Cement

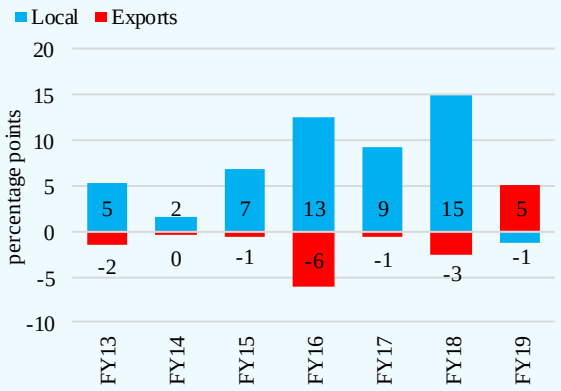
In line with other construction allied industries, cement production declined by 1.6 percent in H1-FY19, compared to an expansion of 10.3 percent during same period last year.

On the other hand, All Pakistan Cement Manufacturers Association (APCMA) data for H1-FY19 shows a growth of 3.9 percent in cement sales largely driven by exports of clinker.[9] Bifurcation of sales data suggests that exports led to growth in overall cement sales. As domestic circumstances were not favorable for the

[9] This also includes last years' inventory.

cement sector during H1-FY19, producers ventured into new export markets for their product, with encouraging results. Depreciation of the local currency also aided the recovery in exports by making cement exports more feasible (**Figure 2.5**).

Figure 2.5: Cement Sales Growth Contribution - H1



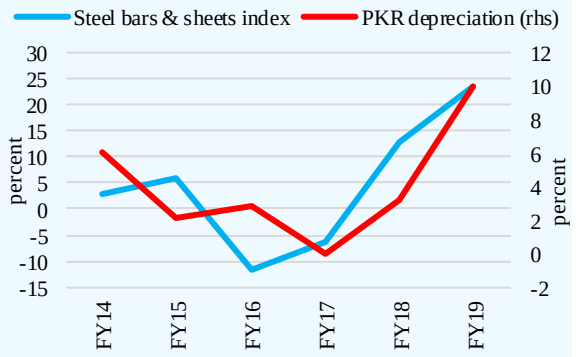
Data source: All Pakistan Cement Manufacturers Association

Steel

The production of steel shrank by 7.6 percent during H1-FY19 compared to impressive growth of 37.1 percent recorded during same period last year. Similar to other construction related industries, the performance can be traced back to aforementioned macroeconomic factors.

One additional factor that weighed on the steel industry during H1-FY19 was international price dynamics. The global economy is currently gripped by the US-China trade tensions, which had led to volatility in the global steel market.[10] Naturally, uncertainty in steel prices in international market has adverse implications for domestic steel industry.

Figure 2.6: Steel Price and Rupee Depreciation - H1



Data source: Pakistan Bureau of Statistics and State Bank of Pakistan

It is evident from import data that the price of imported scrap products, which the local industry utilizes for its production processes, increased by 8.9 percent during H1-FY19. In contrast, price of imported finished products rose marginally by 1.0 percent. In this scenario, it was hard for the local industry to compete with imported products that became relatively cheaper. The issue became severe as the prices of energy (a

[10] This seems to be temporary phenomenon as possible resolution of emerging trade war between the two nations will settle the market.

major input) surged as well. In this backdrop, the quantum of scrap products fell sharply compared to finished items (**Figure 2.6**).

Due to factors mentioned above, the WPI index for steel bars and sheets showed rapid growth of 23.4 percent in H1-FY19 compared to 12.9 percent last year. This has further dampened the private sector's demand for domestic steel. Meanwhile, the gross margins of the industry are also narrowing. After a favorable 2017, increased competition from abroad coupled with domestic economic slowdown, especially in the construction allied activities, is not a good omen.

Automobile

The contraction of 3.6 percent in H1-FY19 in the automobile production can be traced back to a multitude of factors. First, the increase in prices of vehicles due to currency depreciation, especially JPY-PKR, that in turn increased the cost of production. The automobile assemblers passed on the impact of depreciation to the customer. For instance, car prices jumped up 18.4 percent during CY18, compared to a marginal growth of 4.8 percent seen last year.

Table 2.5: Increase in Typical Car Financing

	H1-FY18	H1-FY19
Price of car (December)[1]	1,500,000	1,776,000
Down payment[2]	300,000	355,200
Finance amount	1,200,000	1,420,800
Interest rate (kibor+4)	10.3	14.4
Interest payment/month	10,280	17,076
Impact due to higher financial cost		6,796
Principal payment /month[3]	20,000	23,680
Impact due to car price escalation		3,680
Total impact/month		**10,476**

Assumptions:
[1] Price of a typical car. Price increase of 18.4 percent in 2018
[2] Down payment is 20 percent of vehicle price
[3] Payback period of 5 years
Data source: Author's calculations

Second, an increase in financing cost amid policy rate hikes also had a significant impact on vehicle demand. Car finance dipped by Rs 9 billion to Rs 11.7 billion during H1-FY19, showing a YoY decline of 43.5 percent. **Table 2.5** calculates the impact of price hike and interest rates for a typical customer. The financing cost per month for an average customer increased by Rs 10,476 per month, which proved to be high for the borderline consumers.

Third, the uncertainty regarding filer vs non-filer issue has unsettled the market. In the absence of hard data, there is no direct way to isolate the impact of ban on non-filers on car demand from price and interest rate hikes. However, there are some indicative developments. The market has witnessed a significant reduction in booking and delivery time lag. Moreover, rate premiums (*own money*) for immediate delivery in the grey market decreased considerably in line with

reduction in wait times. These two factors reveal, albeit indirectly, the effect of restricting non-filers from buying cars.[11]

The rural centric tractors and motorbikes segments showed decline in production by 20.4 and 2.8 percent during H1-FY19, compared to remarkable growth of 52.9 and 18.8 percent a year earlier (**Table 2.6**). The fall in these categories reflects the state of rural economy, which has been hurt by lower *kharif* production this year. Similar to cars and jeeps, increase in price also contained demand. While the bus segment recouped some of earlier losses in production level from the previous year, production of trucks and light commercial vehicles (LCVs) declined significantly.

Table 2.6: Automobile Sector Production during H1 (units)

					Growth (percent)	
	FY16	FY17	FY18	FY19	FY18	FY19
All Cars	72,847	79,803	96,284	103,883	20.7	7.9
Cars <800 cc	19,102	18,270	23,489	22,298	28.6	-5.1
Cars between 800-1000 cc	12,354	17,002	25,654	29,108	50.9	13.5
Cars >1000cc	41,391	44,531	47,141	52,477	5.9	11.3
Sports Utility Vehicles	454	221	7,034	3,926	3082.8	-44.2
Light Commercial Vehicles	41,090	22,967	26,404	22,198	15.0	-15.9
Trucks	2,326	3,806	4,514	3,751	18.6	-16.9
Buses	499	669	409	515	-38.9	25.9
Tractors	13,064	21,336	32,614	25,969	52.9	-20.4
Motorbikes	657,283	792,094	940,985	914,860	18.8	-2.8

Data source: PAMA

Electronics

The production of the electronics industry increased sharply by 29.4 percent in H1-FY19 in addition to growth of 92.9 percent during the same period last year. In the past two years, electric motors have remained the driving force behind this growth momentum.

Production of this sub-segment rose by 44.3 percent on top of 303.3 percent increase witnessed last year. A possible explanatory factor of surge in electric motor production could be its usage as input for a wide range of finished products, especially washing machines, refrigerators and air conditioners. With seasonal demand for these goods likely to rise at the start of the summer season,

[11] The government relaxed some restrictions on non-filers as this report went into print, while jacking up the levies. This measure is expected to revive the demand for automobile in H2-FY19, especially in the aftermath of government seriousness in implementing the vehicle import policy in letter and spirit.

manufacturers had been building up inventories of these motors. Improvement in electricity supplies also contributed to the performance of the subsector.

Fertilizer

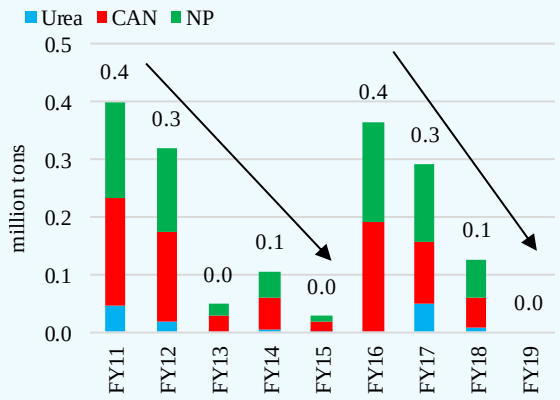
The restart of manufacturing activities at the smaller urea units remained the highlight of Q2-FY19. This helped the fertilizer sector to record a growth of 6.5 percent in H1-FY19, despite a lackluster Q1-FY19. This performance is opposite to 9.8 percent contraction last year, when smaller urea processing plants had ceased production.

Two out of the three small plants that were non-operational last year resumed production. The restart of processing activities was due to provision of subsidized RLNG. Hence, urea production of smaller units ballooned by 245.1 percent to 0.2 million tons. On the other hand, production activities at Pakarab Fertilizers came to a complete halt despite government incentives (**Figure 2.7**). It is pertinent to mention here that this plant not only produces urea but also significant quantities of other fertilizers. These commodities would now have to be imported to close the shortfall in the market.[12] Meanwhile, production of large-scale urea producers grew by 3.4 percent in H1-FY19 compared to 1.8 percent in the same period last year, contributing towards overall growth.

Food

The contraction of 3.9 percent in the food sector is majorly explained by the developments in the sugar subsector. During the last few years, sugar industry went through a phase of impressive growth on the back of high sugarcane production in the country. However, in FY19 the progress of the industry stalled in line with a reduction in the sugarcane crop production. Still, Pakistan is likely to produce around 6.5 million tons of sugar in FY19.[13] Beyond the current annual

Figure 2.7: Pakarab Fertilizers Production Trend - H1



Data source: National Fertilizer Development Center

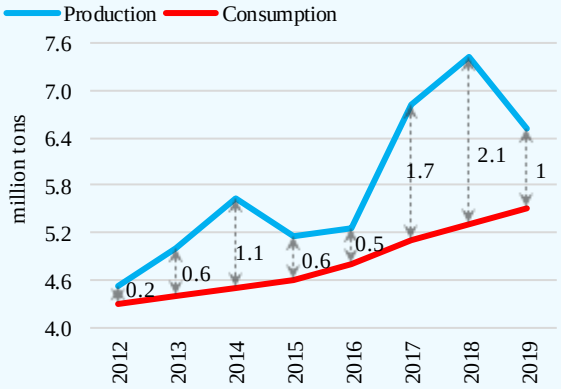
[12] Pakarab fertilizer plant, in addition to urea, produces sizeable quantities of CAN and NP products. Its operations on RLNG-CNG mix still remains infeasible under the government's announced formula of 60-40 percent respectively.

[13] Data source: USDA

consumption level, the country will add 1.0 million tons to the inventory. In the wake of depressed international price of sugar, the government would have to provide subsidies to make export of unsold stocks viable for the industry (**Figure 2.8**)

The country had unsold sugar stocks of 3 million tons before the start of the current crushing season. With government exercising some control over pricing of sugarcane, it somewhat restricted the ability of millers to procure all their raw material at lower prices. This has kept the domestic production cost higher in FY19 as well. The millers' inability to seek markets for exporting their excess stocks coupled with costly production makes the sugar glut situation unsustainable.

Figure 2.8: Sugar Surplus



Data source: United States Department of Agriculture

Meanwhile, the price setting mechanism remained a thorny issue between millers, farmers and provincial governments, and continued to hurt the parties involved in the current crushing season as well. The government of Punjab and Sindh fixed price of sugarcane at Rs 180 and Rs 182 per 40 kg, whereas the millers were vying for lower prices at par with international sugar prices. The advent of the much delayed crushing season along with unresolved issues mentioned above, the health of the sugar industry is not promising.[14]

Moreover, there is a need for product substitution from sugar to ethanol that can be blended with gasoline to boost octane ratings and reduce emissions. In that way, it has the potential to reduce the country's dependence on imported fossil fuels.

Textile

The performance of the textile sector remained subdued, as its production came down by 0.2 percent in H1-FY19. Last year, supported by relaxation of duties on exports, the textile sector had managed modest growth of 0.7 percent.

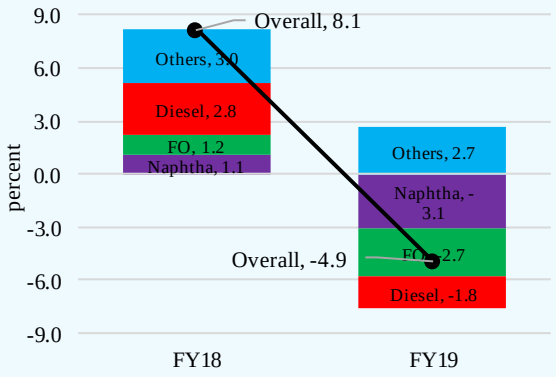
[14] See Box 2.3: Sugarcane - the Cost of Indicative Pricing in First Quarterly Report for FY19.

The export-oriented industry is facing challenges in the form of stiff competition from exporters like Cambodia and Bangladesh. Consequently, the increase in quantum for value added items like knitwear and readymade garments comes at lower export prices diluting the overall impact. The task to export more is challenging in the wake of significant shortfall in domestic cotton production. It has increased the cost of production, since global average price of cotton during H1-FY19 increased by 10.7 percent compared to H1-FY18.

POL

Apart from the slowdown in economic activity, the changing dynamics of domestic energy generation had adverse implications for the petroleum industry. As a result, the POL industry witnessed a contraction of 4.9 percent in H1-FY19. Broad-based contraction is evident from the fact that except for motor spirits, production of all the major products observed contraction (**Figure 2.9**).

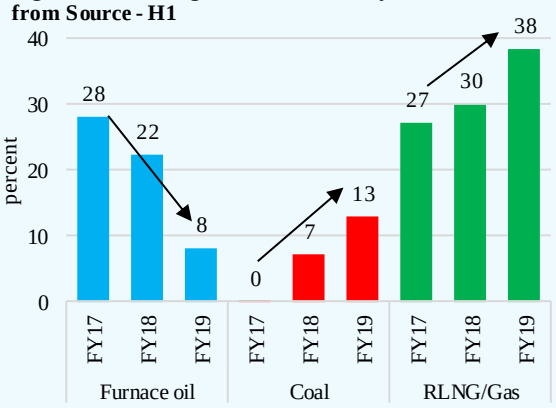
Figure 2.9: POL Product-wise Growth - H1



Data source: Pakistan Bureau of Statistics and SBP

The inclusion of new fuels, RLNG and coal, in the energy supply mix has altered the balance of the POL group. Whereas the overall contraction of POL industry is visible from domestic production, the significant increase in RLNG imports is filling in for other petroleum products, especially furnace oil. This is in line with government's last year initiative to shift away from costly furnace oil and towards cheaper gas for electricity production. As a result of decline in electricity

Figure 2.10: Average Share of Electricity Generation from Source - H1



Data source: National Electric Power Regulatory Authority

production from furnace oil based plants to the tune of 60.0 percent, production of furnace oil contracted by 2.7 percent. Meanwhile, imports of alternative fossil fuel rose sharply in H1-FY19. The decline of 14 percent in use of furnace oil for electricity generation has been fully compensated by the higher production from imported gas and coal (**Figure 2.10**).

Pharmaceuticals

A broad-based decline of 10.0 percent in pharmaceutical production was witnessed during H1-FY19 compared to 5.1 percent growth during the same period last year. Industry sources blame the sub-optimal drug pricing policy for this dismal performance, wherein producers have to face long delays for approval under the Drugs Act of 1976 (**Box 2.2**). The act necessitates the approval of federal cabinet for product registration, pricing, repricing and packaging.

In fact, the pharmaceutical industry is dependent on imported raw materials (about 95 percent), and amid frequent episodes of currency depreciation, the cost of their product has increased. The escalated costs made production of some products unfeasible at prevailing prices, and thus badly hit their production. Usually, the pricing approval process is lengthy; keeping in view the worrisome situation of availability of medicines, the regulator allowed some price adjustment.

Box 2.2: Drug Pricing Policy and the Pharmaceutical Sector

Drug Regulatory Authority of Pakistan (DRAP) is the implementing body of the Drugs Act of 1976, which was promulgated to ensure availability of medicines at affordable prices. DRAP exerts control over all the aspects of drugs market. While the current policy regime has kept prices mostly at par with inflation in the medium term, the pricing policy is the cause of disagreement between the private sector and the regulator.

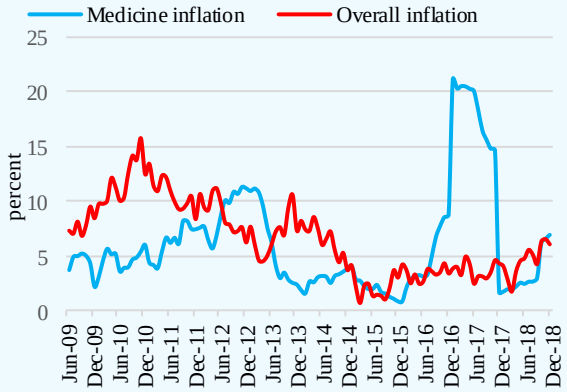
Extensive delay in adjustment of prices has made investors, both foreign and domestic, wary of investing in pharmaceutical sector.[15] The government fixes the maximum price of medicines based on the respective cost of production of each drug. A generic case involves a lengthy regulatory procedure (typically taking 1-2 years) to determine the prices of medicines. The process requires the eventual approval from the federal cabinet.

The industry has extensive exposure to exchange rate risk. Depreciation of the PKR has a direct impact on this industry. Its profitability gets squeezed, as producers are not allowed a timely and commensurable increase in the prices of their products. The dependence on imported materials is a critical factor in limiting the growth potential of the industry under lagged adjustment of prices.

[15] Johnson & Johnson, Bristol Myers Squibb and MSD have reportedly ceased their activities in Pakistan because of regulatory bottlenecks.

Retrospective analysis of prices reveals interesting insights to the patterns of price adjustments, i.e. prolonged periods of low medicinal inflation, followed by periods of significant adjustments. These price corrections have been more frequent in recent times (see **Figure 2.2.1**).

Figure 2.2.1: Medicinal Inflation vs Overall Inflation



Data source: Pakistan Bureau of Statistics

In this regard, DRAP issued a new drug pricing policy in 2018. To overcome the lag issues, domestic price of medicines were linked with *average price of the same dosage form and strength of the same brand in India and Bangladesh*.[16] Moreover, the policy also allowed annual price increments equal to *70 percent of the annual inflation rate with a cap of 7 percent*.

Whilst the latest policy has a more relaxed tone compared to the previous one, it still has some issues. First, it should be noted that compared to Pakistan, India has very different cost dynamics, as it is one of the largest producers and exporters of generic drugs and its raw material.[17] On the other hand, Pakistan's pharma industry is heavily reliant on raw material imports and its industry is inward looking.[18]

Second, the latest drug pricing policy does not say anything about the adjustment of prices under foreign currency movements. The policy becomes ineffective in mitigating the external risk, given the origin of imported raw material is mostly different from India and Bangladesh.

In addition to slow regulatory framework, another critical factor is the lack of government support for the industry, especially in R&D [19] required for obtaining international certification from the US Food and Drug Administration (FDA). This certification is a prerequisite for exporting medicines to developed countries where profit margins are higher. On the contrary, India has state of the art research labs. It gains significant advantages by fast-tracking its FDA approvals as soon as patents expire. As a result, India's pharmaceutical industry has not only attained economies of scale but helps in earning foreign exchange as well.

2.4 Services

Beyond its dominant contribution to Pakistan's GDP (60 percent), the services sector has also narrowed the gap with the agriculture sector in terms of providing employment, underscoring its growing importance for economic growth (**Figure**

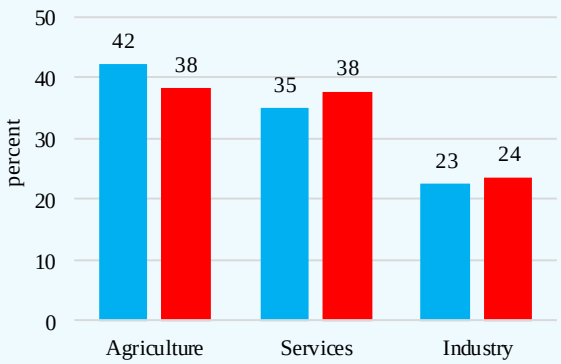
[16] Drug Pricing Policy 2018
[17] Source: http://www.worldstopexports.com/drugs-medicine-exports-country/
[18] Pakistan imported US$ 1.1 billion worth of pharmaceutical products.
[19] The government charges pharmaceutical firms a certain percentage of their profits in the name of R&D.

2.11). That said, proxy indicators continued to hint toward a moderation in service sector activities during H1-FY19 (**Table 2.7**).

With regard to the *wholesale and retail trade* segment, the decline in LSM continued during the second quarter, together with a slowdown in imports. In terms of credit, bank lending to wholesalers was higher during H1-FY19 compared to last year.[20] However, the borrowing activity of retail traders was relatively low during the first half compared to H1-FY18, reflecting a slowdown in retail activities.[21]

Moreover, for both wholesale and retail trade enterprises, borrowing was of a short term nature, with importers' credit needs in particular rising in response to a weaker PKR. By contrast, long-term borrowing by wholesale and retail traders for fixed investment purpose was lower during H1-FY19 compared to last year, which might carry implications for allied services for the full year.

Figure 2.11: Employment by Sector



Data source: Pakistan Labor Force Survey 2017-18

Table 2.7: Services Sector Indicators (H1)

	FY18	FY19
Wholesale and Retail Trade (34.4%)		
LSM (H1; YoY growth)	6.6	-1.5
Imports (billion US$)	28.7	28.0
Sub-sector credit offtake- flow (Rs bln)	43.9	54.5
Agriculture credit (disbursements, Rs bln)	431.9	527.3
Transport, Storage and Communication (20.0%)		
Commercial vehicle sales (units)	28,955	24,559
POL sales to transport sector- million MT	7.9	7.2
Subsector credit offtake - flow (Rs bln)	17.4	5.9
Cellular teledensity (%)	72.7	73.9
Broadband users (million)	50.5	63.8
Finance and Insurance (3.6%)		
Assets (Rs bln)*	18,341.5	19,682.1
Deposits (Rs bln)*	13,011.8	14,254.2
Profit after tax (Rs bln)	67.9	73.0
Net NPLs (Rs bln)*	75.6	110.1
General Government Services (14.2%)		
Expenses on general government and defense** (Rs bln)	1,526.7	1,809.5

Note: Values in brackets indicate sectoral shares within the services sector, as of FY18. The remainder consists of housing services (10.0 percent) & other private services (17.8 percent).
* Stocks, as of end-December 2017 and 2018 respectively
**Only Federal Government
Data source: SBP, PBS, OCAC, PAMA, PTA and MoF

[20] Specifically, firms engaged in wholesale and commission trade borrowed Rs 41.1 billion in H1-FY19, compared to Rs 29.6 billion in H1-FY18.
[21] Retail trade businesses borrowed Rs 13.4 billion during H1-FY19 from commercial banks, compared to Rs 14.3 billion during H1-FY18.

As for *transport, storage and communication*, the slowdown in commercial vehicle sales and POL sales to the transport sector, evident in the previous quarter, was extended. In fact, even credit offtake to this segment slowed down during Q2-FY19. This was primarily due to a decline in borrowing by the telecom sector; specifically, the net retirement of long-term, fixed investment loans.[22]

Meanwhile, the *finance and insurance* segment witnessed an uptick in bank profitability during H1-FY19 compared to last year. At the same time, there was also some deterioration in asset quality, as net NPLs had risen to Rs 110.1 billion by end-December 2018, compared to Rs 75.6 billion a year earlier; however, the deterioration was limited to only a couple of sectors. On the whole, the total infection ratio (i.e. NPLs as a proportion of advances) continued on the declining trend which has been observed for several years now. The notable exceptions were the sugar and agribusiness sectors, whose sectoral infection ratios worsened by December 2018 compared to a year earlier.[23] Also, while the infection ratio for the 'shoes and leather garments' sector was lower than last year, it still remained on the higher side.[24]

[22] In terms of bank credit to the telecom sector, there was a net retirement of Rs 5.8 billion in H1-FY19, compared to borrowing of Rs 8.7 billion in H1-FY18.
[23] The sectoral infection ratios for sugar and agribusiness sectors rose from 5.9 percent and 6.6 percent as of December 2017, to 17.2 percent and 8.3 percent as of end-December 2018 respectively. For a detailed discussion on the rise in sugar sector NPLs, refer to SBP's First Quarterly Report for FY19 (Chapter 3: Monetary Policy and Inflation).
[24] The infection ratio for the shoes and leather garments sector was 16.8 percent as of December 2018, compared to 18.7 percent in December 2017.