

SUGAR INDUSTRY

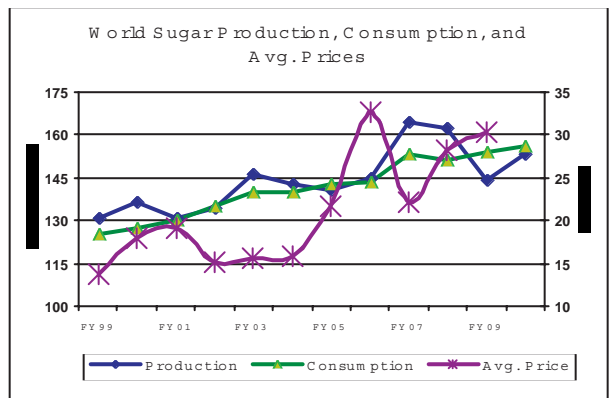
Sector Update - March 2010

Sugarcane is one of the most important cash crops and the industry is considered as the driving engine of the rural economy after agrarian economy in many countries. In several developing countries both the crop and industry is termed as a vehicle for rural uplift and development. The sugar industry is cyclical in nature. The harvesting of sugar cane is dependent on weather as well as the availability of adequate water. One kg of fertilizer nutrient produces about 114 kg of stripped sugarcane. The sugarcane yield and recovery rates are considered as the determinants of supply raw and refined sugar. With growing population across the globe and ever-increasing sugar based products, the demand for sugar is continuously increasing.

Sugarcane by-product includes molasses, soda and ethanol etc. The bagasse that remains after sugar cane crushing may be burned to provide both heat – used in the mills - and electricity. It may also, because of its high cellulose content, be used as raw material for paper, cardboard, and utensils.

Global Sugar Outlook

About 195 countries grow the crop to produce over 1.5 billion tons of sugarcane.



* Estimated; Source: World Bank, FAPRI (USA), JCR-VIS Research

The area harvested for sugar cane in the world increased from 19.68 million hectare in 2001 to 24.7 million hectare in 2009. The yield per hectare increased from 63.96MT per hectare in 2001 to 71.22MT per hectare in 2009. On an average, the recovery rate stood at around 9.9% during last ten years. The recovery rates during 2009 significantly declined below 9% (8.5%). Since FY2001-2009, the consumption of sugar in the world grew at a CAGR of 2.2%, while production grew at a CAGR of 1.3% during the said period. The growth in consumption is attributed to growing world popula-

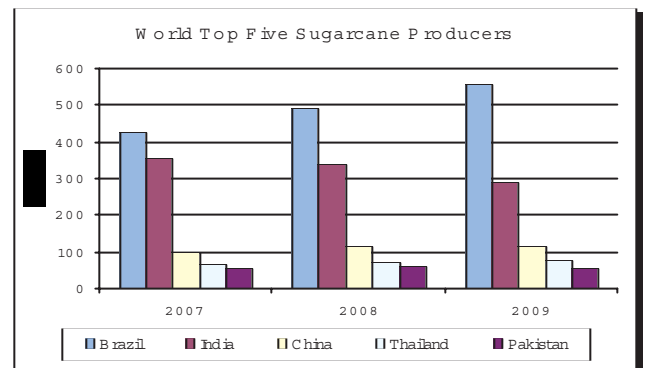
tion and increasing demand of sugar-based products. During 2009, the production stood at 144.1MMT as against the consumption of 154.2MMT. The estimated per capita consumption of sugar in the world during 2009 was about 22.7kg. An estimated increase in production during 2010 is approximately about 5.0% over the previous year while the growth in consumption is likely to increase by about 3.4%.

The net trade of sugar in the world increased from 29.18MMT in 2001 to 35.4MMT in 2009 on account of ever growing demand of commodity. During 2009, major net exporters include Brazil with 21.2MMT followed by Thailand with 5.5MMT and Australia and Guatemala 3.5MMT and 1.5MMT respectively. These major sugar exporting countries account for over 80% of world sugar trade in 2009. Russia and USA were the biggest net importer of sugar with approximately 2.6MMT each followed by Indonesia and Japan with 1.6MMT and 1.5MMT respectively. The major net importers over 1.0MMT include China, Malaysia, South Korea, Canada, Algeria and Egypt.

The sustained higher world price is the result of not only higher sugar imports in countries such as the EU and India but also increase in production of ethanol from sugarcane, particularly in Brazil.

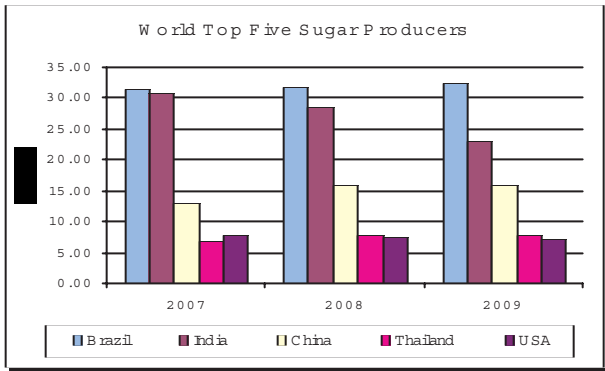
Major Sugar & Sugarcane Producers

The top five producers of sugarcane, on an average accounts for about 70% of the world's total production during the last three years. These include Brazil continuing with the record crop production in 2009, followed by India, China, Thailand, and Pakistan. Top five sugar producers both from sugarcane and sugar beet account for about 55% of world's total sugar production in 2009. Brazil leads with 20.46% followed by India and China by 14.42% and 9.95% respectively.



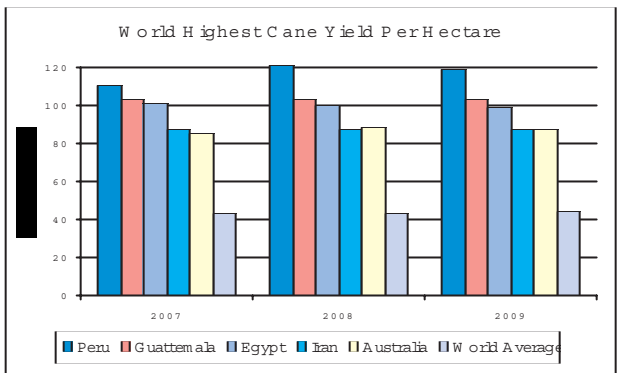
Source: FAPRI (USA), JCR-VIS Research

The three leaders accounts for almost 60% and 45% of the world's total sugarcane and sugar production respectively.



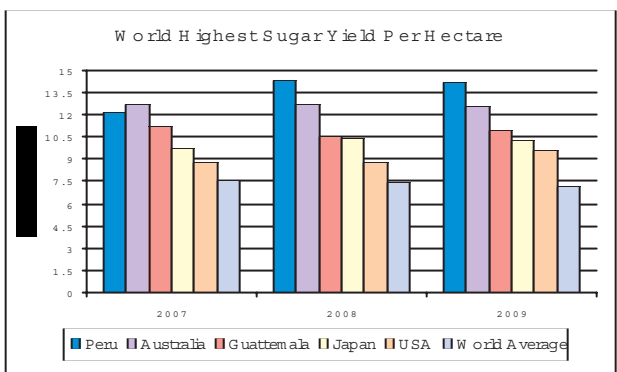
Source: FAPRI (USA), JCR-VIS Research

During 2009, the average sugarcane yield per hectare of the world is 44.25MT; Peru ranks highest in cane production per hectare at 118.57MT/hectare. The other high yield countries include Guatemala (102.93MT), Egypt (98.62MT), Iran (87.67MT) and Australia (87.18MT).



Source: FAPRI (USA), JCR-VIS Research

Peru leads with highest sugar yield per hectare at 14.21MT followed by Australia at 12.56MT. Guatemala and Japan also have high yield per hectare over 10MT at 10.8MT and 10.3MT respectively.

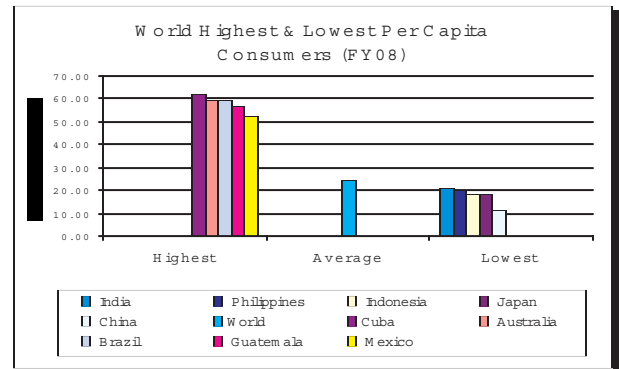


Source: FAPRI (USA), JCR-VIS Research

Major Consumers

Brazil, India and China account for almost 33% of the total world's consumption; guided by India with the highest consumption of 25MMT followed by China and Brazil at 16.35MMT and 11.9MMT respectively. The other major consumers include Mexico (5.78MMT), Russia (5.85MMT), Indonesia (4.5MMT) and Pakistan (4.3MMT).

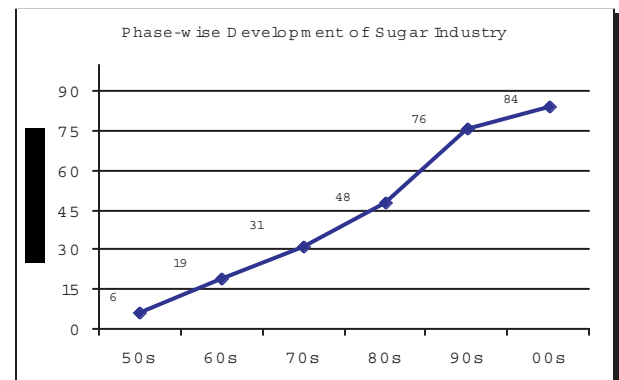
Average per capita consumption of world stood at 24.85kg during 2008. Top five per capita consumers include Cuba (62.15kg), Australia (59.5kg), Brazil (59.30kg), Guatemala (57.22kg) and Mexico (52.12kg). Whereas, the lowest five per capita consumers include China with the lowest and far below the average consumption in the world (11.17kg), Japan (17.97kg), Indonesia (18.10kg), Philippines (20.09kg) and India (21.34kg).



Source: FAPRI (USA), JCR-VIS Research

Sugar Industry in Pakistan

At the time of independence, there were only two sugar mills with a total crushing capacity of 1450 tonnes per day (TCD) and able to meet only 6% of total domestic demand in 1948-49. Pakistan Industrial Development Corporation (PIDC) has laid down the foundation of sugar industry in the country in early 50s to reduce the burden on balance of payment. This was the first step towards self sufficiency to meet the demand of sugar in the country. However, after several decades Pakistan has not been able to achieve sustained 100% self sufficiency mainly on account of poor agricultural policies.

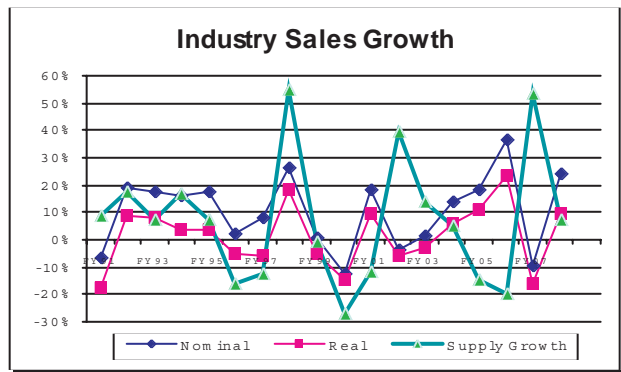


Most rapid growth in the industry was observed during the period of 90s mainly on account of liberalization, and easy credit policies translating into conditions conducive to private investment. The other factor responsible for growth in industry was domestic manufacturing of machinery and equipments. On account of increased units, the capacity continues to grow over the period since independence. More than 80 sugar factories had been established till 2008 and the industry had the capacity to produce almost 6 MMT of sugar per annum against the ever rising demand of about 4.3MMT, while the residual from domestic consumption reflect the export potential. The average recovery rate varies between 8.5% - 9.0% across the country. The total crushing capacity of industry is almost over 400,000MT per day and as per sugar industry rules 1972 (160 days of operation), the total crushing capacity of industry stood around 65MMT per annum.

Business Cycle

Sugar industry occupies an important place among organized industries in Pakistan. Being agro based, the industry has been instrumental in resource mobilization; employment and income generation; and creating social infrastructure in rural areas. Indeed the industry has facilitated and accelerated pace of rural industrialization.

Being a basic commodity, the demand for the product is inelastic, and carries through out business cycles. The demand is unlikely to decline in foreseeable future on account of correlation with the growth in population and non existence of proper substitute. However, due to backward input related seasonality effect the supply of the product indicates the high level of risk to sugar industry.



Source: Vista Plus (VIS), JCR-VIS Research

The above graph exemplifies the cyclical nature of sales growth in industry hampered mainly on account of domestic production and supply of sugar in the country. The expanding population and increased urbanization have also been accounted for the growth in the industry especially in the current millennium. The steady growth in demand will likely to continue on account of trends in population growth and urbanization in the country.

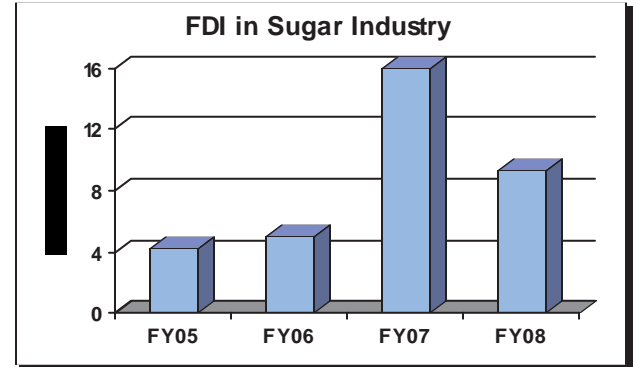
Several industries also use sugar as an input in production. Furthermore, the by-products of sugar industry molasses and bagasse are also used as inputs by some industries. These industries include Beverages; Paper and Board; Bakery products; Ice Cream Manufacturing; Sweet Manufacturing and distilleries etc. Growth and technological development in sugar industry can thus be seen to have a widespread impact on large-scale manufacturing activity.

Gur and Desi Cheni are close substitutes of sugar. However, the production of these commodities usually carries out within the household on a very restrictive scale in the rural areas only. In the last few years, the activity for producing Gur increased mainly in the province of NWFP and tribal areas, affecting the mills in the province. This is mainly due to demand of Gur by Central Asian Countries to produce alcohol. It is also used as a substitute in most part of the province and adjoining tribal areas. Thus, the problem of maintaining a smooth supply of sugar and its growth overtime gained strategic importance.

Investment Dynamics

The industry is moderately capital intensive with total assets on an average constituting 65% of fixed assets from 1990 to

2009. Of this, major share comprise of plant and machinery. At present the total investment in the industry is estimated over Rs. 100 billion. During last 5 years, capital expenditure increased significantly on account of expansion undertaken by some sugar mills as well as setting up of distillery divisions for diversification of business. On an average, the plant and machinery costs approximately Rs. 1.5b with a capacity of about 10,000TCD. During FY05-FY08 significant FDI was also observed, and increased with a CAGR of almost 30 per cent.



Long term debt in the industry increased with the increase in capital expenditure during the period 1990-2009. Correlation between the two stood at about 0.83, and indicates that the capital expenditures has been undertaken using long term financing. While short term debt indicates the financing of stock in trade in the industry, the correlation between the two stood at about 0.97.

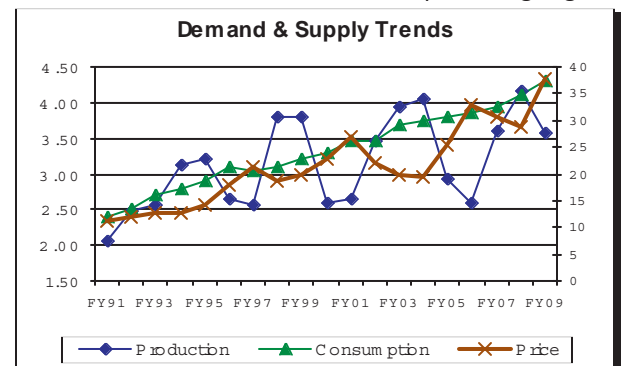
Technology

The industry has constantly tried to take advantage of better production technologies since the early stages of development of sugar industry. The process of production include cane grinding to extract juice, boiling to crystallize, spinning in centrifuge and finally crystallizing, drying and packing of the product. The refining process requires chemicals. The industry has capital intensive characteristics with less labour requirement. However, the technology used requires low maintenance and repair cost. Some technological advancement has also been observed in some mills in terms of cane juice extraction and processing.

Technological progress over time in the industry has been very slow, mainly attributed to fluctuations in sugar production, under utilization of capacity and stagnant recovery rates.

Demand and Supply Trends

Before 1990, sugar production in Pakistan was insufficient to meet even household consumption demand. But since then Pakistan has become self sufficient in producing sugar and is



now capable of producing a surplus. Domestic demand for sugar can be primarily classified as demand from final consumers (households). Sugar is regarded by consumers as an essential and basic commodity. The shortage or sudden price increase in the past have provoked strong consumer reaction. The industry also has important linkages with other sectors of the economy.

The distinctive excess and shortage in domestic production over consumption have significant and direct impact on sugar and associated economy. The considerable steady growth in consumption and cyclicity in production is also putting pressure on maintaining stock ratios over the period, thus affecting the export availability. The desired carry over stocks in view of increasing demand is over 1.0 MMT to mitigate the risk of cyclicity and is considered sufficient buffer stock for the period prior to start of the new crushing season.

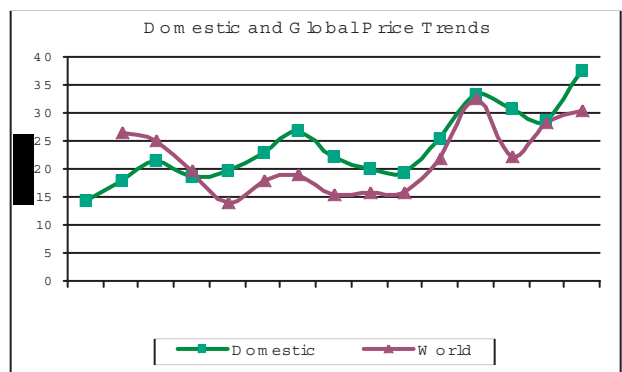
Historically, instability in production has caused fluctuations in the price of sugar in the open market. This has also forced government to intervene for stabilization of prices through import and other means of controls. As exemplified, on an average, the cycle either for good harvest or bad covers the period of about 2 years.

Sugarcane yield and recovery rates are also direct determinants of supply of sugar. There has been virtually no significant improvement in yield and recoveries over the last two decades. Lower sugar recoveries are largely attributed to the poor quality of the cane produced rather than the inefficiency of the processing sector.

On account of inelastic demand and being a mass consumption product, the slight fluctuation in demand does not affect overall demand dynamics. Thus, demand trends are likely to be stable and predictable in the foreseeable future. Currently the per capita consumption of sugar in Pakistan is about 25-26kg which is slightly higher than world average of 24.5kg.

Price Trends

The domestic sugar prices are not only linked with the supply of sugar but also have strong relation with the global demand and supply dynamics and the resulting international prices. The correlation between the two since 2000 is about 0.89.



Despite economic and financial recession and decrease in major commodity prices across the globe in mid of FY2009, the prices of sugar has shown increasing trend reflecting the linkage with supply and demand dynamics.

Recent increase in domestic prices of sugar are attributed to two main reasons; a) currency devaluation followed by a rise in international prices; and b) production shortfall.

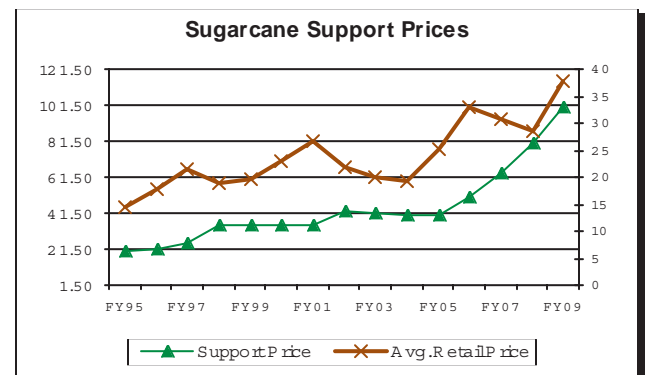
Retail sugar prices both in the country and across the globe are expected to rise in the medium term on account of shortfall in world and domestic production in ongoing year and expected in upcoming year also.

Thus, stability of local domestic prices depends on timely imports and prevailing prices in international market.

Sector Policies and Regulations

Pakistan sugar industry has attained its current importance in agriculture and agribusiness from a relatively small base. However, the policy measures taken by the Government has been seriously lacking a long-term perspective. Much of the problems of sugar industry are the result of the government's inappropriate policies and ad-hoc decisions. Government intervention is limited to setting both support prices and market prices but is unable to implement policy measures for increasing yield and recovery rate. This reflects the weakness of existing policies and regulations.

Government of Pakistan is involved since very beginning especially for regulating the industry, and controlling the trade and prices in the country. The government intervenes by issuing export permits to mills, importing sugar on public account. The farmers' crop decisions are also influenced by the policy measures taken by the government in several ways. The main objective as regulator is to protect the national interest of all stake holders.



One of the significant regulatory controls is setting of the sugarcane support prices. The minimum procurement prices are set by the provincial governments which are calculated on the basis of cost of production and expected sugar prices in the domestic market till the start of next season. The respective provincial departments consult all stake holders before setting up minimum procurement prices. The prices are likely to be announced before the start of the cultivation to achieve the objective of influencing farmers' decision. However, this practice has not been observed in the past, thus usually does not affect the production in the year the announcement has been made.

The government was also controlling retail distribution below the market price through utility stores. The Trade Corporation of Pakistan (TCP) is responsible for control of sugar supply and to stabilize the prices in the domestic market. The corporation purchased excess sugar during the time of supply glut and keeps as a buffer stocks. The stocks are then released in different time periods where there is shortage of supply and ease the pressure prices. It is also responsible to import the sugar to overcome the shortage.

The government is also responsible for controlling the international trade of the commodity. However, Pakistan has been importing and exporting the commodity in the past irrespective of status of local production and domestic requirements. The unstable and inconsistent policies have resulted in import of sugar in the past irrespective of any assessment of local production and demand requirements. The policy should have been to import sugar on the basis of deficit between the local production and domestic requirements, and sufficient stock to meet the shortages during poor production years. It is observed that the sector is highly influenced by the country's politicians, and the policy makers were virtually importing and exporting sugar in most years at the same time under the pressure of politically influential sugar mill owners.

Imposition of taxes is another major area where the government plays an important role. Different taxation system has been levied on the industry in the past. Sugarcane farming and sugar manufacturing contribute significantly to the national exchequer in the form of various taxes and levies. Apart from the excise duty, the commodity has been subject to an effective sales tax of 16%, both are recovered from the industry. In addition to sales tax, import of raw sugar is subject to a 25% import duty, a 10% regulatory duty, 2% withholding tax and 1% central excise duty, thus a total of 54% tax is imposed, which is not feasible for the industry. On the other hand, import of refined sugar depends on government's ad-hoc policies and may enter duty free list (on import), although it will remain subject to a total tax rate of 29% and comprising regulatory duty, excise duty and sales tax.

Within domestic sales, sugar is one of the prime tax contributors contributing Rs. 15.4b to the national exchequer in the form of different taxes during 2008. Its share in value added agriculture and GDP is over 4.0 percent and approximately 0.9 percent, respectively.

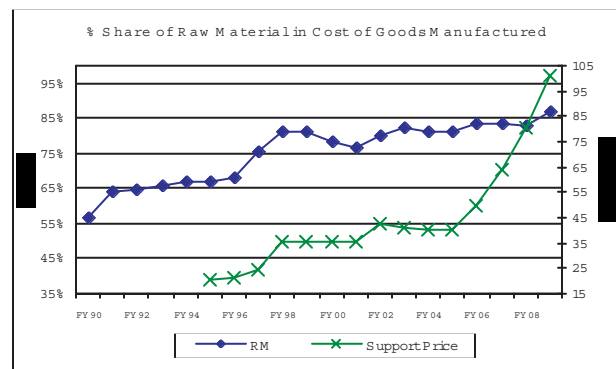
Backward Linkage

Sugarcane is one of the most important and biggest cash crops of the country. Pakistan is the fifth largest producer of sugarcane crop among the sugarcane growing countries. However, in terms of sugarcane and sugar yield per hectare, it ranked 21st and 20th among the countries with high yields. During FY09, the cane yield per hectare account for 51.2MT, resulting in a lower sugar production per hectare yield of below 3.5MT.

Despite the instability and inconsistency in policies by the government, both area and production of sugarcane have increased considerably over the past three decades. Sugar cane has been grown over 1 million hectares in FY2008 and slightly lower at 0.94 million hectares in FY2009. Pakistan sugar industry has been facing raw material, and resources as well as infrastructural problems. Globalization has brought a number of opportunities but at the same time posed certain challenges before sugar industry. Sugar industry in Pakistan is characterized by high production costs.

Sugarcane production in the country has augmented over the past two decades with an increase in cultivation area only; whereas no significant efforts were observed in the past to improve the productivity and yield. This entails considerable risk to industry on account of input dynamics. Furthermore, the ultimate output of the industry is dependent on the yield and recovery rates of the sugarcane which

traditionally, have been very low in Pakistan as compared to other major sugar producing countries. The primary reason for low yield in the industry have been unscientific/unsystematic agriculture practice, conventional planting methods, environmental resistance, cultivating defective varieties, low soil fertility and early/late harvesting. While the reason for low recovery has been short / prolonged duration, over capacity operation and shortage of inputs etc.



Source: Vista Plus (VIS), JCR-VIS Research

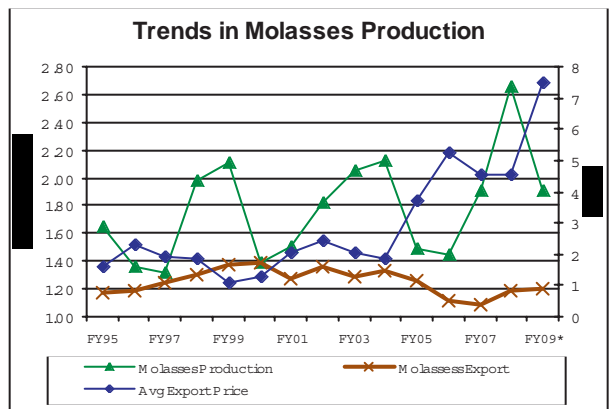
With increased procurement prices, the raw material cost which is major component of the total cost of goods manufactured, has also surged over the period. On an average the share of raw material cost is about 75% of the total manufacturing cost. The other major cost components are the fuel and power cost; and salaries and benefits, averaging around 3% and 6% respectively during 1990 to 2009. Fuel and power is no more a significant issue for the industry since mills use power generated through bagasse firing.

Forward Linkage & Diversification

The industry is not only the major supplier of by-products but also a supplier of final product to food and beverage industries of the country. In-fact it is one of the key inputs in industries like beverages, Ice Cream, Sweet manufacturing and Bakery products. The supply and price fluctuation in the industry significantly affect the production and prices of these industries. During 2008-09, the production of beverages declined by about 3.7% mainly attributed to the price hike of sugar during the period.

The by-products of the industry act as inputs such as Bagasse for power generations; paper and board industries and Molasses for production of alcohol and ethanol in distilleries etc. The sugar industry is capable of producing over 2.5MMT of molasses to convert into value added ethanol of almost half million tons (a ratio of 5:1). Over the last five years, the export of molasses is continuously declining on account of increased distilleries in the country for value addition to ethanol (hydrous plus fuel ethanol). Similarly, the export of ethanol increased significantly during the same period. Molasses are exported mainly to Netherland, Spain and United Kingdom, while the potential market for ethanol exist in Europe, Far East (Korea, Japan, Taiwan and the Philippines) and Middle East (Dubai and Saudi Arabia).

A growing number of countries across the globe are mandating ethanol inclusion in gasoline. High prospect of production and export are expected in ensuring years on account of increased demand of ethanol across the world.



At present, the use of ethanol blended fuel is not allowed in Pakistan. Nevertheless, the option for the use of ethanol being actively persuaded about 3-4 years ago and the industry responded positively by establishing distilleries. Since then there were no major steps taken for the development of the industry. However, in recent initiatives government is considering the option of ethanol blended fuel for up to 5% in initial years and may increase to 10% further to enhance the economic viability of ethanol producing units.

Under policy reforms 2002 for Independent Power Plants (IPPs), incentives were also available for the power cogeneration units including sugar mills. One of the advantages of bringing the industry for such diversification is that these mills are linked with the national grid and are located closer to point of electricity consumption. With the expansion in area planted, bagasse-based cogeneration technology presents a huge opportunity for sugar mills to generate additional revenue and helps the country to diversify its energy matrix also. On an average a mill can produce up to 40MW, and it is estimated that the industry can produce up to 3500MW of electricity during off season.

Diversified companies in the sector have advantage to improve the bottom line profitability and to soften the cyclicity impact as compared to a standalone sugar company. The company which is diversified in other products is viewed more favorably in assessing credit quality and in terms of exposure to different risk. There are about 21 distilleries in the country with a capacity of over half million tonnes of producing ethanol. Hence the main potential in diversification of Pakistan's sugar industry still remains untapped and needs to be promptly addressed to take advantage of the developments in the field where sugarcane is increasingly seen as a bio-fuel and energy crop.

Capacity Utilization, Competition and Substitute

Capacity utilization depends upon the duration of the season which further relies on the availability of sugar cane. Good sugarcane crop results in excess production of sugar and its by-products. On average the capacity utilization has varied from 45% to 80% during past decade. During the period, the minimum capacity utilization was 47% during FY2005, while the maximum ever utilization was about 80% in FY2008. Capacity utilization during FY2009 declined significantly to below 50% (49.1%) owing to considerable decline in sugarcane production in the country.

Regional differences in capacity utilization can also be observed from the average length of the crushing period of the mills. The normal crushing period ranges between 120

days in low season to 160 days during bumper crop. Technological progress in the agriculture sector is also very slow that is attributed to fluctuation in yield and stagnant low recovery rates reflected in underutilization of capacity.

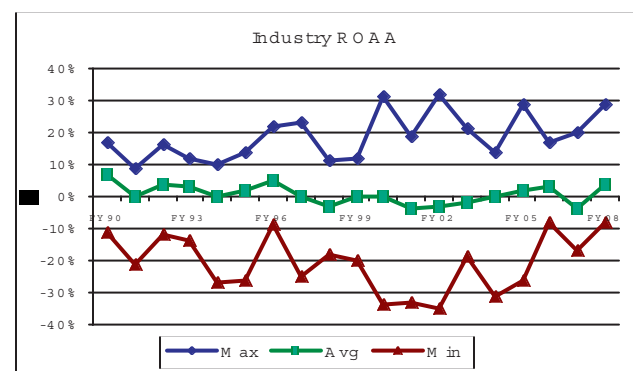
With gradual increase in number of mills during the last two decades, sugar industry has become more competitive and now cane growers are in better position than earlier. This has also affected the bargaining power of the mill owner which was quite strong prior to 90s. Delaying tactics were also used in the past in making payment to farmers, however, these trends have eased off now on account of increased competition. The establishment of a good relationship between mill owners and growers, ensure smooth future supply.

Other barriers to entry and exit faced by the industry are moderate. Capital outlay required in the installation of a sugar mill is not significant as compared to many other industries. Since sugar is also a moderately capital intensive industry, there are no significant recurring capital expenditure requirements which could serve as a potential barrier to entry. The low standard infrastructure currently makes the industry unattractive for new entrants. Inconsistent policies further increase the risk which serves as barrier for new players. Low level of capacity utilization also reflects high risk of dependency over agriculture sector, thus leaving little scope for economies of scale.

Gur, and artificial sweeteners are considered as close substitutes of sugar. The market for latter is quite small, while Gur is popular in rural areas only especially in the province of NWFP and adjoining tribal areas and does not pose any risk to the industry. Other natural sweeteners include honey but this also has a limited replacement value as far as sugar is concerned.

Industry Financials

Being an agro-based industry, the financials imitate the cyclical nature and face several seasonal fluctuations. Return on Average Assets (ROAA) for the sugar industry also reflects similar trends of cyclicity, however inclining trend can be observed over the past one decade.

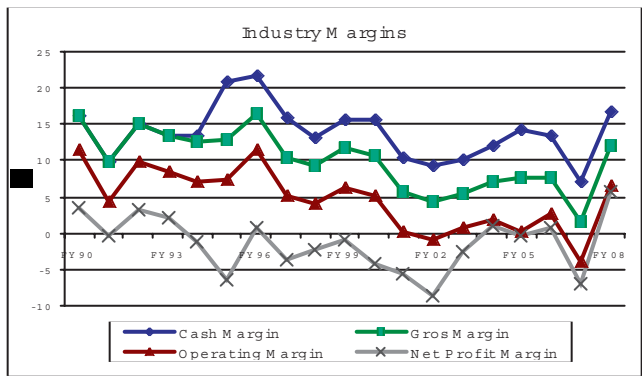


Source: Vista Plus (VIS), JCR-VIS Research

Industry's margins are also reflective of the cyclical nature with a peak after every 3 – 4 years. Furthermore, over the period of a decade, a distinct downward trend can also be observed in the following graph. A significant decline is observed in operating margins reflecting the growing inefficiencies in the industry. This is mainly on account of non-utilization of full capacity and rise in fixed costs. Gross margins are significantly affected over the last five years mainly on

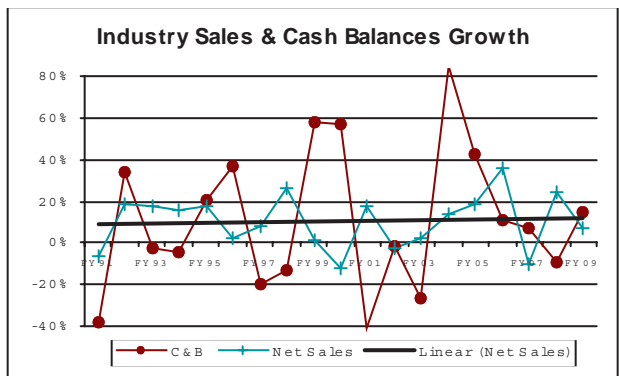
Sector Update - SUGAR INDUSTRY

account of consistent increase in support prices. Government intervention on market prices does not permit the industry to pass on the increased support prices to end consumers. Margins are unpredictable on account of cyclical nature and dependence on agriculture output. The depressed sugar prices during some periods have also troubled the industry margins.



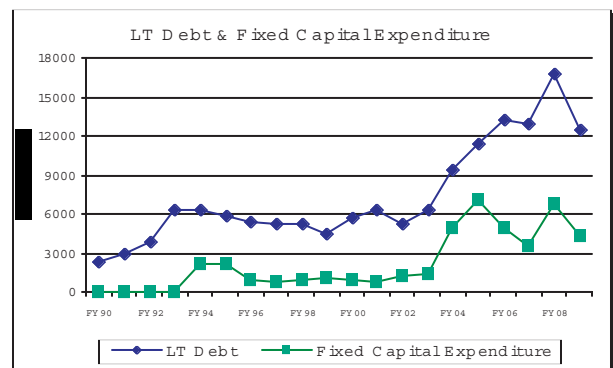
Source: Vista Plus (VIS), JCR-VIS Research

With increase in industry size, the sales are not growing and a level linear trend can be observed over the period. Cyclicity in sales is mainly supply driven and arises from the sugarcane production cycles as well as government intervention both in terms of support prices, and effect on market prices on account of import decisions. The cash growth trends are more unpredictable as compared to industry's sales growth. In fact year to year changes are large and significant. Margins are highly dependent on the production for the year and thus cash flows experience severe volatility on yearly basis.



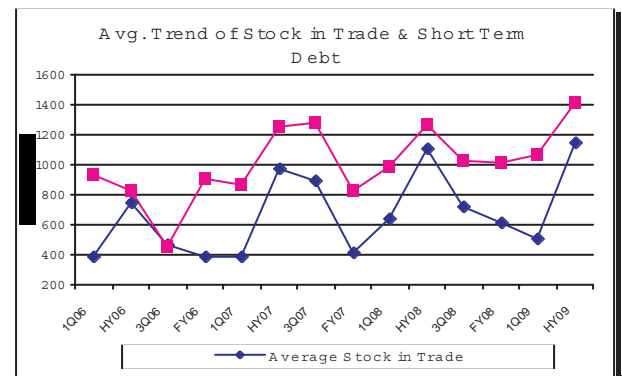
Source: Vista Plus (VIS), JCR-VIS Research

Over the period, long term debt of the industry increased with a steady pace, however, in the past 5 years, a significant increase can be observed on account of capacity expansion undertaken by some sugar mills as well as setting up of distillery divisions in order to diversify business. Significant FDI was also observed during the last three years



(2006-2008) reflecting confidence of foreign investors in the industry.

Sugarcane processing and sugar refining takes up to almost 1st quarter of industry's financials, and the company sales during the period comprise of previous year's ending stock levels. Inventory levels are at peak during the mid year by which time all the sugarcane has been processed and refined. These stocks are built-up mostly by short term running finances, showing the same pattern as stock in trade. Short term debt levels peak during the season and decline correspondingly with the sales in the second half of financial year.



Source: Vista Plus (VIS), JCR-VIS Research

Jahangir Kothari Parade (Lady Lloyd Pier)

Inspired by Her Excellency, The Honorable Lady Lloyd, this promenade pier and pavillion was constructed at a cost of 3 Lakhs and donated to the public of Karachi by Jahangir Kothari to whose genrosity and public spirit the gift is due. Foundation stone laid on January 5, 1920. Opened by Her Excellency, The Honorable Lady Lloyd on March 21, 1921.

Dome: A roof or vault, usually hemispherical in form. Until the 19th century, domes were constructed of masonry, of wood, or of combinations of the two, frequently reinforced with iron chains around the base to counteract the outward thrust of the structure.

Origins: The dome seems to have developed as roofing for circular mud-brick huts in ancient Mesopotamia about 6000 years ago. In the 14th century B.C. the Mycenaean Greeks built tombs roofed with steep corbeled domes in the shape of pointed beehives (tholos tombs).

Otherwise, the dome was not important in ancient Greek architecture. The Romans developed the masonry dome in its purest form, culminating in a temple built by the emperor Hadrian. Set on a massive circular drum the coffered dome forms a perfect hemisphere on the interior, with a large oculus (eye) in its center to admit light.



Jahangir Kothari
Parade

**National Excellence,
International Reach**

JCR-VIS Credit Rating Company Limited is committed to the protection of investors and offers a blend of local expertise and international experience to serve

the domestic financial markets. With its international reach, JCR-VIS is positioned to aim for an international mark. In this regard, the global experience of our principal, Japan Credit Rating Agency, Ltd. has been invaluable towards adding depth to our ongoing research endeavors, enriching us in ways, that enable us to deliver our responsibilities to the satisfaction of all investors.

The edifice of the Jahangir Kothari Parade has stood proudly through the years and is a symbol of our heritage. Its 'Dome' as the most stable of building structures, exemplifies architectural perfection. Committed to excellence, JCR-VIS continues its endeavor to remain an emblem of trust.

JCR-VIS Credit Rating Company Limited

Affiliate of Japan Credit Rating Agency, Ltd.
Founder Shareholder of Islamic International Rating Agency, Bahrain
JV Partner in CRISL, Bangladesh
Member Association of Credit Rating Agencies in Asia

KARACHI

VIS House - 128/C, 25th lane off Khayaban-e-Ittehad
D. H. A. Phase VII, Karachi - Pakistan

LAHORE

VIS House - 61-A/1, Street # 17
Cavalry Ground, Lahore - Pakistan

Tel: (92-21) 5311861-70 Fax: (92-21) 5311872-73
Website: www.jcrvis.com.pk