Cement industry of pakistan

Contents

EXECUTIVE SUMMARY

In Pakistan, there are more than 25 small and large cement manufacturers operating within the country producing ordinary grey Portland, white, slag and sulphate resistant varieties of cements. This industry has an oligopolistic structure because the product is homogenous. There is a cartel in the cement sector and that regulate the production of cement in the country.

The cartel restricts the quota of each manufacturer to sell in the domestic market based on its market share, which in turn is derived from the available installed capacity. After analyzing the industry it is found that no manufacturers commanding a market share over 10%. Some manufacturer are enjoying the brand equity and charging higher prices over other manufacturers. Pakistan currently has a per capita consumption of 120kg of cement, which is comparable to that for India at 135kg per capita but substantially below the World Average 270kg and the regional average of over 400kg for peers in Asia and over 600kg in the Middle East.

Over the years a number of tax policy and administrative measures have been introduced to attract investment and facilitate growth of the cement industry. The Government has reduced central excise duty (CED) on cement in the budget for 2007-08 in order to boost construction activity. In Pakistan APCMA plays a significant role in projecting the cement industry to the Government and coordinating various activities in respect of formulation of Government policies for the cement industry. Cement demand is significantly

affected by the Public Sector Development Program (PSDP), construction of dams, elevated and concrete roadways, residential construction as well as exports. As far as exports are concerned majority of or export heading for Afghanistan (about 95%) and the remainder towards Iraq and UAE. Deregulation after accession of Pakistan to WTO is expected to open the window of competition from cheaper markets.

There may be no tariff after this deregulation on import of cement allowing its entry into Pakistan from cheaper market at lower rate. Cement from cheaper markets may also block Pakistan’s export of cement to its neighboring countries. To sum up, cement industry is among the most advanced industries in Pakistan and has integrated production facilities based on locally available raw materials. It has done continuous technological up-gradation, having acquired modern dry process technology.

It has installed latest equipment for dust collection and is relatively environmental-friendly. It has recently converted furnace-oil firing to coal firing system, resulting in substantially reduced production cost.

INTRODUCTION TO CEMENT INDUSTRY INTRODUCTION

Cement industry is a major indicator of economic growth and revival of any country. This industry gives the growth and improvement of infrastructure of a country. In Pakistan, positive macro economic indicators and governments intention of spending more on social and infrastructure development has increased the demand for cement many folds.

The cement industry people say that the current domestic demand leaves a surplus of 15 million tons of cement, and the country has an estimated

export potential of 1. 2 million tons of bulk cement per annum, as well as 600, 000 tons of bagged cement and 1. 2 million tons of clinker per annum. New plants are coming up in various countries and will start production in the next two to three years. Pakistan can make efforts to export three million tons per annum during the next two to three years. The cement industry, however, ruled out any dent in the domestic prices in case cement exports are enhanced in the future, executive director Lucky Cement, Abdul Razzak Thaplawala said.

He added that the industry people had discussed the issue of export of cement at length with the industries secretary in the second week of January. He said that Pakistan’s cement industry is again in a state of recession as the annual production capacity has increased to over 35 million tons and will further go up to 39 million tons as compared to the installed capacity of 17 million tons in 2005. The local demand is increasing, but has not kept pace with production and is likely to increase to a maximum of 22 to 23 million tons per annum, he added. The present FOB rates for export of cement and clinker to compete with India, Indonesia and China are $47-48 per ton FOB Karachi for bulk cement, $36-37 per ton for clinker and $48-53 per ton for bagged cement.

These rates are very low and it will be possible only to compete with these countries, if the government gives incentives,” he said, adding “ without incentives the industry is quoting $53 per ton which is very high and does not compel industry people to enter export market with significant quantities. The industry exports clinker at $37. 5 per ton. Razzak said by exporting only 20 per cent of the surplus capacity, Pakistan may well be in a

position to earn $125-150 million per annum by exporting three million tons at an average rate of $45 per ton. However, the government needs to address some of the problems of the industry so that the producers could fetch good results on the export front.

He said port costs in Pakistan are very high as compared to India, China and Indonesia. Wharf age cost charged by the KPT is Rs40 per ton for cement and clinker export which is over 1. 75 per cent of the export value while most of the cargoes attract wharf age of less than 0. 25 per cent of the export value. KPT wharf age charges need to be rationalized to the level of Port Qasim of Rs22 per ton. The port costs ie port dues average about $0.

0 per ton at KPT or Port Qasim versus 0. 50 per ton in India, Indonesia and China. He said there is no clinker or cement export terminal while in other countries it is available. At present a token rebate of Rs25. 08 per ton is allowed on cement export and there is no rebate on clinker export.

DEMANDS GROWTH VS GDP GROWTH: GDP

Growth is used as yardstick for measuring demand growth of cement. In its simplest form, the theory suggests, a strong positive correlation between GDP growth rate and Cement demand growth. High GDP growth leads to high cement consumption. The reverse is true when GDP growth declines.

It is believed that cement consumption increases along with the rise in per capita income. Cement consumption is also reflective of the economic development achieved by a country. Developments in the sector: Expansion of existing capacities is in the shape of plant up gradation or setting up new production lines, is talk of the town these days. With its roots fixed on the

ground of prospective demand growth in the years to come, expansion is what almost all cement manufacturers are pursuing. Annual production capacity has reached 25 million tons by June 2006 against capacity of 18.

6m tons per annum in June 2005. If all the expansion plans are materializes, capacity is likely to touch 28m tons by the June 2007 & subsequently it would reach 35. 7m tons in 2008. Most of the new projects or expansions are concentrated in northern region, which already captures around 77% capacity in total industry. Against 14. 3m tons per annum current capacity out of total capacity, northern region’s capacity may jump sharply to 20.

7m tons per annum by 2006. While, capacity of south region is expected to reach 7. 0 tons per annum against current capacity which is 4. 25m tons per annum. The bothersome fact lies on the other side of coin, that is, demand.

A Big question that kills all the joy of expansion is “ Will there be enough demand in the country to absorb the excess supply? ” or putting it in other words “ Will the recent spurt in cement demand will be sustained over the period of time? ” Current stance of the cement sector: After completion of major expansion plans in Pakistan in 2007, there would be a surplus to export in regional markets particularly to China, India and Afghanistan, however in the same period Iran would also be able to approach vigorously these markets as its most of the cement plant will start to come online. Iran would get benefit in terms of price as cement prices in Iran is among the cheapest in the world as the price of cement in Iran remained in range of $20-$25 per ton. On the other hand it is expected that being the US ally, Pakistan would get most of the favor in order to keep its market share in

these markets given the fact that all the construction activities in Iraq and Afghanistan would be taken by US.

THE MANUFACTURING PROCESS OF CEMENT 1. PROCESSES USED FOR MANUFACTURE CEMENT:

Wet Process The wet process has many limitations like: Kiln dimension Large water requirementExtremely poor heat efficiency In view of these limitations the wet process has become outdated.

Semi-Wet Process The semi-wet process is another way of manufacturing cement used in Pakistan. This process is more suitable for materials with sufficiently high plasticity. Due to high fuel or energy consumption this process has also become obsolete. Dry Process Previously, the dry process was only used in situations where water and the raw materials were insufficient.

But now it is the most popular process in the cement industry due to its numerous advantages. The advantages are: The fuel requirement is about 800 Kcal per kg of clinker (which is about 40 percent less as compared to the wet process). ? This process enables the processing of a water range of raw and the maintenance is easier. ? The raw material is preheated and partially calcium resulting in higher kiln efficiency. ? The kiln being shorter in length requires less space in erection and easier to maintain.

THE PROCESS 3. MINING AND MILLING

The essential raw materials used for the manufacturing of cement are: Limestone, Shale and Sand. To acquire limestone several layers of rock are required to be detached. To sum it all, the quarry moves about seven million

tones of rock each year – two million tones of limestone, and the remaining five million tones of other material. This dig out is very different to the normal type of cement-linked quarry.

It usually extracts the rock from the side of a hill which poses a number of challenges in terms of getting to the limestone, transporting the other rock and then replacing the materials afterwards. To get to the limestone, various other types of rock have to be extracted and moved. Once the removal is done, the overburden is transferred behind the cut and stored. Once the limestone from the cut has been used up, the overburden is replaced to restore the stability of the land.

To extract limestone the rocks are detached by blasting. If any large rocks are left after the blast they are broken up by the drop ball. This simply involves dropping a large ball onto the rocks. The limestone is then transferred by either a 55 or an 80 tone truck to the crusher. After this, the limestone and shale are transported to the raw mill from the quarry by conveyor. At this stage the materials are in the form of small rocks, up to 150 mm in size.

The raw mill then condenses these materials in the form of a fine powder. Then, sand is added to the limestone and shale, in the correct proportions, to create the raw meal. The material is crushed by a pair of rollers which presses down onto a rotating table. The material is then caught up in a high velocity gas stream, which sweeps it upwards. The fine powder then exits the mill, while any oversized material falls back to the table for further grinding. The raw meal is then extracted from the gas flow by a large

electrostatic precipitator, and is then stored in silos before it enters the pre-heater stage.

PRE-HEATER AND PRE-CLAIMER:

The raw meal from the storage silos is fed into the pre-heater. Initially the raw meal is crushed by two large grinding wheels in the Raw Mill, and is then blown up the pre-heater where it is heated by hot exhaust gases from the kiln. The pre-heater is a large tower some 90 meters high, containing five vessels, or cyclones, through which the raw meal is passed. The raw meal enters the pre-heater at the top and descends through the cyclones, being heated by hot exhaust gasses from the kiln. Additional fuel is added at the base of the pre-heater.

At this stage, the raw meal is heated to 900oC, and the chemical reaction is initiated. This is known as the precalciner stage. About 60% of the total amount of fuel used in the process is burnt at this stage. The fuel is principally ground coal, but Blue Circle is experimenting with burning various recycled materials. The material then passes from the precalciner to the kiln.

THE KILN:

After the pre-heater stage, the material is moved into the kiln.

The raw meal enters the 60m long, 4m wide kiln tube, which is slightly inclined downwards. It rotates at 3. rpm, which assists in moving the raw meal through the kiln, towards the 20m long flame. Once inside the rotary kiln, the material is moved towards the coal flame, which heats itto1450oC, completing the chemical reaction. At this stage the material is known as clinker. The hot clinker is then rapidly cooled by blowing air over it.

A small quantity of gypsum is added to prevent the cement setting too quickly, finally prior to it being ground in ball mills to form a fine powder: cement. It is then transported to the next stage of the process; ready for the final milling operation. The cement is then stored prior to dispatch. The majority of the cement is dispatched in bulk by rail or road. The remaining cement enters the packing process, where it is placed into bags, which are packed onto pallets prior to road dispatch.

PACKAGING AND DISTRIBUTION

Once the cement has been manufactured, it is stored prior to dispatch in bulk or in bags. Bulk distribution is either by road or by rail. In both cases, the bulk tankers are placed under the storage silo, and are filled to predetermined levels by computer control. Bag distribution is performed by road.

The cement is transported from the silo into the bagging machine, which automatically picks up, opens and fills the bag with the correct quantity of cement. The bags are then sealed, marked with the production date, and transported to the palletizing machine. Prior to being packed onto a pallet, each bag is sprayed with an adhesive, which increases the stability of the pallet. The pallets are packed automatically on the palletizing machine, which rotates the pallet in order to improve the stability of the bags. The pallets are then stored, prior to road distribution.

TESTING TIMES FOR CEMENT INDUSTRY

During the early nineties there was an acute shortage of cement in the country, particularly in the north.

Demand could not keep pace with supply and Pakistan was forced to continue importing cement. Importing cement is an expensive affair. Since it is a heavy commodity, freight and transport charges are often exorbitant. Due to the shortage coupled with high cost of imports, cement prices in the early 90s were high.

But demand for cement was growing rapidly (at an average of 8% a year). The economy also looked as if it was heading towards a high growth phase. There was some foreign investment coming in, significant infrastructure development projects were predicted, many Independent Power Producers were cropping up and the population continued to grow unabated. The GDP growth rate was estimated at 6.

5% and population growth at 3. 2%. Therefore, it looked as though there would be an ever-increasing demand for cement. Because it was felt that the economy would grow significantly and there would be a high demand for cement, many of the existing plants — Cherat, D. G Khan, Maple Leaf, Pakland, Dadabhoy, AC Wah and Kohat — significantly expanded their capacities. Five new plants were also set up in the private sector during the mid-nineties to meet expected future demand: Pioneer (1994), Lucky (1996), Askari (1997), Fauji (1997) and Bestway (1998).

Because demand was higher in the north, these five new cement plants were all set up in what the All Pakistan Cement Manufacturers Association (APCMA) calls the ‘ North Zone’. Pakistan’s cement sector was; therefore, ready to supply the demand that was predicted. At the time of independence

in 1947, only one or two units were producing grey cement in the country. During the decade of 1948-58, the number of cement units increased to six.

During the Ayub era the economy started to grow and the construction activities underwent a boom. To meet the growing demand of cement new units were set up. During the decade of 1958-68, the number of cement units increased from 6 to 9. During the following period of Zulfiqar Ali Bhutto all the industrial units, including cement industry, were nationalised, therefore, no new unit was set up during 1971-77.

During the period of General Zia-ul-Haq, 1977-88, denationalization of industrial units boosted the investments. Housing and construction industries picked up and the demand for cement increased. Thus, the number of cement units increased from 9 to 23 and finally 24.? Percentage growth of cement industry Year Percentage 1990-91 3. 66 1999-00 – 3.

33 2000-01 1. 40 2001-02 1. 61 2002-03 12. 11 2003-04 15.

0 Presently, a number of factors are attributed to this tremendous growth represented by various indicators. Cement exports, mainly to Afghanistan doubled during the three-quarter period of the current year, attaining a level of 0. 78 million tons, but that accounts for only 8 percent of the total production. Cement is one of the basic ingredients for development of a country. Its per capita consumption is an indicator of economic activity in the country.

Unfortunately, Pakistan is trailing behind all other developing countries in the region with lowest per capita consumption of cement. The per capita

consumption of cement in Pakistan was as low as 43 kg per head per annum in year 1977-78, as compared to world average of 245 kg. Pakistan currently has a per capita consumption of 120kg of cement, which is comparable to that for India at 135kg per capita but substantially below the World Average 270 kg, and the regional average of over 400kg for peers in Asia and over 600kg in the Middle East. ? CountryPer Capita Consumption (Kg) Taiwan1004 kg Malaysia 870 kg Thailand 600 kg Turkey512 kg China 410 kg Syria 369 kg Iran 274 kg Mexico 251 kg Philippines 220 kg Vietnam 126 kg Turkmenistan 159 kg Indonesia 139 kg Sri Lanka 106 kg India 89 kg Pakistan72 kg ?

OVERVIEW OF THE CEMENT INDUSTRY ? OVERVIEW

Pakistan is fortunately rich in the deposits of limestone, clay and gypsum, which constitute basic raw materials for manufacturing of cement. In spite of having abundant raw materials and rising growth in demand of cement, only five cement factories were established during the initial thirty years of independence, with aggregate capacity of 3. 2 million tones.

Consequently, Pakistan had to import cement for a long period, which reached to a level of 1. 3 million tones in the year 1981-82. Import of cement continued from 1971 to 1985. Its scarcity also hampered the development process in the country. There are more than 25 small and large cement manufacturers operating within the country producing ordinary grey Portland, white, slag and sulphate resistant varieties of cements.

There are 29 cement production units in the country. Up to May 2007, the total installed cement production capacity is 36. 841 million tones. By the

end of June 2011, the installed cement production capacity will touch to the level of 49.

579 million tons. An analysis of the competitive environment reveals the fragmented nature of the industry with no manufacturer commanding a market share over 10% (DG Khan). Nonetheless, some manufacturers, on the back of powerful brand equity are able to command a relatively higher price, for e. g. , Cherat Cement due to its niche over exports and Attock Cement over the ‘ Falcon’ brand in the southern domestic region. The competitive environment, however, is bound to change as companies prepare to boost capacity on anticipation of greater future demand.

The cement cartel is associated with the interests of all the cement manufacturing companies in the country and regulates the production available for the domestic market. The cartel restricts the quota of each manufacturer to sell in the domestic market based on its market share, which in turn is derived from the available installed capacity. With the current expansion levels prevailing in the industry, the market share for each company is bound to get revised. Big players like DG Khan, Lucky and Bestway would be at an advantage as their higher capacities would result in increased market share (stable at minimum), hence a greater quota to sell in the local market.

However, companies, which do not wish to expand, will be forced to do so to at least maintain market shares at current levels. Cement exports constitute an integral part of the supply and demand dynamics, with the majority of exports heading for Afghanistan (about 95%) and the remainder towards Iraq

and UAE. Major expansions under the next expansion phase in the cement sector started coming online late FY06 onwards, due to which installed capacity increased to 30mpta by Jan’07. As a result more than proportionate capacity expansions, the cement sector experienced acceleration in price competition despite the 32% demand growth in FY07 to date. Pakistan currently has a per capita consumption of 120kg of cement, which is comparable to that for India at 135kg per capita but substantially below the World Average 270kg and the regional average of over 400kg for peers in Asia and over 600kg in the Middle East.

Presently, the cement industry of Pakistan is heavily burdened due to levy of Federal Excise Duty @ Rs. 50 per ton and General Sales Tax @ 15% on duty paid value. In addition to Federal Excise Duty and General Sales Tax, cement industry is also paying the provincial Levies (Royalty and Excise Duty) on acquiring of raw material for production of cement i. e. lime stone and shall clay. Per ton cost impact of these taxes in four provinces of Pakistan is as follows: Raw materialPunjabNWFPSindhBaluchistan Lime Stone24211765 Shall/Clay34311 A comparison of taxation and retail prices with other regional countries revealed that taxation in Pakistan is highest while cement retail prices are lowest.

Housing sector has been looked upon as stimulator of economic growth since there is a large estimated gap of 5. 38 million housing units against annual addition of 300, 000 units in the country, many tax exemption and incentives are provided to encourage new construction. In short, cement industry is among the most advanced industries in Pakistan and has integrated production facilities based on locally available raw materials. It has done

continuous technological up-gradation, having acquired modern dry process technology. It has installed latest equipment for dust collection and is relatively environmental-friendly. It has recently converted furnace-oil firing to coal firing system, resulting in substantially reduced production cost.

Cement binding material used in construction and engineering, often called hydraulic cement, typically made by heating a mixture of limestone and clay until it almost fuses and then grinding it to a fine powder. When mixed with water, the silicates and aluminates in the cement undergo a chemical reaction; the resulting hardened mass is then impervious to water. It may also be mixed with water and aggregates (crushed stone, sand, and gravel) to form concrete . Cement made by grinding together lime and a volcanic product found at Pozzuoli on the Bay of Naples (hence called pozzuolana) was used in ancient Roman construction works, notably the Pantheon.

During the Middle Ages the secret of cement was lost. In the 18th century, John Smeaton, an English engineer, rediscovered the correct proportions when he made up a batch of cement using clayey limestone while rebuilding the Eddystone lighthouse off the coast of Cornwall, England. In the United States, production of cement at first relied on processing cement rock from various deposits, such as those found in Rosendale, N. Y. In 1824, Joseph Aspdin, an English bricklayer, patented a process for making what he called Portland cement, with properties superior to its predecessors; this is the cement used in most modern construction. Modern Portland cement is made by mixing substances containing lime, silica, alumina, and iron oxide and then heating the mixture until it almost fuses.

During the heating process dicalcium and tricalcium silicate, tricalcium aluminate, and a solid solution containing iron are formed. Gypsum is later added to these products during a grinding process. Natural cement, although slower-setting and weaker than Portland cement, is still employed to some extent and is occasionally blended with Portland cement. Cement with high aluminates content is used for fireproofing, because it is quick-setting and resistant to high temperatures; cement with high sulfate content is used in complex castings, because it expands upon hardening, filling small spaces.

HISTORY

In 1921 the first plant was established in Pakistan at Wah. In 1947, there were only five cement plants in Pakistan with an installed capacity of half a million and aggregate demand of 1mpt.

These units were located at Karachi, Rohri, Dandot and Wah. In 1956 Pakistan Industrial Development Corporation (PIDC) established two plants at Daudkel and Hyderabad and subsequently more plants were established in the private sector. In 1947, there were only five cement plants (four in West Pakistan and another in the then East Pakistan). The cumulative capacity of all these units was about half a million tons per annum as compared to its demand of over a million tons at that time. At present there are twenty-seven cement manufacturing units (out of which 17 are listed in Karachi Stock exchange) with a total installed capacity of 15.

million tons per annum. In 1998-99, Pakistan produced 9. 32 million tons of cement i. e.

at 60 % of installed capacity due to low demand. Until 1970, the cement plants were installed on wet process or semi-dry technology while the plants installed after 1980s are based on dry process. The dry process is atleast 50% more energy efficient than the wet process. Presently, 85% of the installed capacity is based on the dry process.

At the time of independence in 1947, only one or two units were producing grey cement in the country. During the decade of 1948-58, the number of cement units increased to six. During the Ayub era the economy started to grow and the construction activities underwent a boom. To meet the growing demand of cement new units were set up. During the decade of 1958-68, the number of cement units increased from 6 to 9. During the following period of Zulfiqar Ali Bhutto all the industrial units, including cement industry, were nationalised, therefore, no new unit was set up during 1971-77.

During the period of General Zia-ul-Haq, 1977-88, denationalisation of industrial units boosted the investments. Housing and construction industries picked up and the demand for cement increased. Thus, the number of cement units increased from 9 to 23 and finally 24. Following this period, the government became complacent and the demand grew to the extent of outstripping supply.

The government reacted quickly by setting up the Gharibwal and Javedan Cement in 1964, followed by Mustehkam Cement in 1966. Following the Economic Reforms Order of 1972, the cement industry was nationalized and brought under the strict regulation and price setting regime of the State Cement Corporation of Pakistan (SCCP). As a result of nationalization, a total

of 10 cement units with an installed capacity of 2. million tons per annum were transferred to the SCCP. For the next 15 years, no new cement factory was established. As a result, the country had to face an acute shortage of cement in the 1970’s and early 1980’s.

The gap had to be filled by importing cement at a cost of scarce foreign exchange. Over the entire period of state control, SCCP established five new units with an installed capacity of 1. 8 million tons per annum. Between 1977-88, government policy shifted towards denationalization and emphasis on housing and construction.

To meet the demand, in the 80s, seven units with a total capacity of 2. 4m tons were allowed by the government to be set up in the private sector and four plants were Set up by the SCCP in the public sector. The private sector plants were Cherat (1985), Pakland (1985), Attock (1986), Dadabhoy (1988), Essa (1988), Anwarzeb White Cement (1988) and FECTO (1989). The public sector plants were Thatta (1983), Dandot (1983), Kohat (1983) and D. G.

Khan (1985). By the end of this period, there were a total of 24 cement plants in the country. But it was not an easy time for private sector plants. Their prices had to compete with prices fixed by the SCCP, which were on the lower side. In 1992, the State Cement Era came to an end with the privatizations of eight cement plants: Maple Leaf, Pak Cement, White Cement, DG Khan, Dandot, Gharibwal, Zeal Pak and Kohat. Other privatisations would follow between 1986-2000.

In 1985-86 the cement industry was deregulated giving the private sector the opportunity to establish new plants, although bulk of the capacity was

still controlled by the SCCP through the fixation of prices. Taking advantage of a severe shortage of cement and price deregulation, the private sector had set up 7 more plants by the time privatization commenced in 1991. During the regime of Nawaz Sharif the industry went through a major transformation. The government embarked upon an ambitious privatization programme and 8 units were privatised. Today, out of the 24 existing cement units, only two remain in the public sector – Mustekhum in the north and Javedan in the south.

Twenty-two are in the private sector and 21 are listed on the Karachi Stock Exchange. Thus by the end of 1990, the total capacity of the cement industry was enhance to 8. 5mtpa. in the first half of 90’s, Pakistan had to import cement which led to increase in cement prices resulting in high profitability for cement companies. This tempted some of the existing units like Cherat, Pakland, Dadabhoy, Ac Wah, D.

G. Khan, Maple Leaf and Kohat to go for expansion in their plants. Simultaneously, 5 more new projects with aggregated capacity of 5mpta tons came on the stream. As such, production capacity went up to 16mpta by the end of 2000. MAJOR PLAYERS IN THE INDUSTRY Major players are: ? Lucky Cement ? D. G Khan ? Maple Leaf ? Kohat cement LUCKY CEMENT PROFILE: Lucky is a part of Yunus Brothers Group, which is a renowned group with diverse interest in textiles, manufacturing and power.

Lucky Cement Limited is presently a 21, 000 Tons Per Day, dry process Cement Plant, located on main Indus Highway between D. I. Khan & Bannu in Pezu, Distt. Lakki Marwat, NWFP.

Lucky Cement came into existence in 1996 with a daily production capacity of 4200 Tons par day, currently is an omnipotent cement plant of Pakistan, and rated amongst the few best Plants in Asia With production facilities in Pezu (Production capacity: 13, 000 Tons per day) as well as in Karachi (Production capacity: 8000 Tons per day) it has the tendency to become the hub of cement production in Asia. Lucky became the new market leader after four fold increase in capacity from 1. 5mtpa in FY 05 to 6. 6mtpa by FY07. Be sides gaining the advantage of being the early bird in the current expansion spree in the cement sector, another unique attribute of LUCK’s expansion project is that it became the only company to have a plant both in the Northern and southern region.

The company due to Chinese origin of its plant also enjoys the lowest expansion cost per ton, which should accelerate its project payback. After its success with its green field project in the south, the company plans to further expand capacity in south in order to benefit from the export potential as well as infrastructure development currently underway at Karachi and Gawadar. The company is a pure play for investors wishing to take exposure to the rapid economic growth and infrastructure development in the country. Currently the stock trading at FY07 EV/ EBITDA of 6. 2x, EV/ton of US $74 and offers a 36% upside to fair value of PkR89.

THE EXPANSION: Being the first mover in the current expansion spree and relatively higher increase in capacity, Lucky cement became the new market leader in the cement sector despite delays, which has been the case for most of the players. With the commissioning of the second plant in Karachi, Luck became the only company to have a plant both in the north and south,

due to aggressive expansion plan, the company has also been tapping new avenues for exports with the commencement of the export dispatches in bulk. The company has also acquired equipment for bulk transport/ loading and has received approval for setting up storage facilities at the sea port. Moreover Luck has also shown interest in bidding for a cement export terminal to be offered by the GOP in CY07 on BOT basis.

Even though Luck is trading relatively higher on P/B and EV/ ton vs. the sector, the company and the lowest expansion cost per ton. Due to multiple lines (4 lines) and the staggered commissioning schedule in its expansion plan, Luck was able to avoid significant delays in the overall schedule of the project. Now with plants in the north and south each, the company should enjoy freight synergies both in the domestic market as well as the export market. Moreover, commencement of the export dispatches in bulk should help to reduce cost and increase capacity utilization. The company has plans to undertake a further expansion of 5000tpd at its Karachi plant, which will increase its capacity to 26, 600tpd.

The existing capacity from 2 lines of 4200tpd each at the Karachi plant is catering to demand from Karachi and being utilized for exports to Middle East market. However in the wake of government plans to develop Gawadar port as well as growth in export potential both from Middle East and Africa, there is every possibility that the southern region might face capacity shortage in the next 2 years. Nevertheless with the government spare capacity in the sector, the management does not have any urgency on undertaking the proposed expansion. Moreover, the proposed project should help toward off threat of new entrants (players from the north as well as the

new entrants) in to the southern region. SWOT ANALYSIS STRENGTHS: First mover advantage has allowed the company to increase market share as well as pricing power. ? Unique North and South combination, providing the company with, market penetration and freight synergies.

? Lowest per ton expansion cost in the cement sector. WEAKNESSES: ? Aggressive capacity expansion has decreased the company’s utilization. ? Defending market share when expansion projects of remaining players come online. ? Higher maintenance cost in the long run due to Chinese origin of cement plant.

OPPORTUNITIES: Construction of mega dam projects as well as ongoing infrastructure development spending by GOP. Expansion or acquisition in the Southern region due to increasing potential (Karachi, Gawadar). ? Can export to the Middle-East on large scale through Karachi sea port, post construction of cement export terminal, expected to be offered on BOT by GOP (Luck is one of the interested parties for the project). THREATS: ? Being a pure commodity business, the company is prone to cynical nature of demand of cement. ? Delay in construction of major dam projects due to shortage of funds as well as political obstacles will dent cement demand in the short run. Ongoing tussle between the cement manufacturers and monopoly control authority (which is being given increased regulatory power).

D. G. KHAN CEMENT PROFILE: D. G.

Khan Cement Company Limited (DGKCC), a unit of Nishat group, is the largest cement-manufacturing unit in Pakistan with a production capacity of 5, 500 tons clinker per day. It has a countrywide distribution network and its

products are preferred on projects of national repute both locally and internationally due to the unparallel and consistent quality. It is list on all the Stock Exchanges of Pakistan. DGKCC was established under the management control of State Cement Corporation of Pakistan Limited (SCCP) in 1978. DGKCC started its commercial production in April 1986 with 2000 tons per day (TPD) clinker based on dry process technology.

Plant & Machinery was supplied by UBE Industries of Japan. Nishat Group acquired DGKCC in 1992 under the privatization initiative of the government. Starting from the privatization, the focus of the management has been on increasing capacity as well as utilization level of the plant. The company undertook the optimization by raising the capacity immediately after the privatization by 200tpd to 2200tpd in 1993.

CAPACITY ADDITION: To meet the increasing demand and to capitalize on its geographic location, the management further expanded the capacity by adding another production line with a capacity of 3, 300 tons per day in year 1998. Design of the new plant is based on latest dry process technology, energy efficient and environmental protection from particulate pollution according to the international standards. The plant and machinery was supplied by M/s F. L.

Smidth of Denmark. As a result, DGKCC emerged as the largest cement production plant in Pakistan with annual production capacity of 1, 650, 000 M tons of clinker (1, 732, 000 M. Tons Cement) constituting about 10% share of the total cement production capacity of the country. The optimization plan is

still underway to increase the total capacity of the two units to 6700 TPD by mid of 2005 from 5500 TPD at present.

EXPANSION: Furthermore, the Group is also setting up a new cement production line of 6, 700 TPD clinker near Kalar Kahar, Distt and Chakwal, the single largest production line in the country. First of its kind in cement industry of Pakistan, the new plant will have two strings of pre-heater towers, the advantage of twin strings lies in the operational flexibility whereby production may be adjusted according to market conditions. The project will be equipped with two vertical cement grinding mills. The cement grinding mills are first vertical Mills in Pakistan. The new plant would not only increase the capacity but would also provide proximity to the untapped market of Northern Punjab and NWFP besides making it more convenient to export to Afghanistan from northern borders.

DEMAND

Demand for cement is strong, but it is even stronger for quality cement. Although the industry is currently operating at a capacity utilization of 75%, DGKC’s capacity utilization is still at 112%. Producing higher quality cement at premium prices along with its FL Smidth plant, this is the most efficient in terms of fuel efficiency; DGKC boasts one of the highest gross margins in the industry. Although it has lost its market leader position to Lucky Cement, after the commissioning of its capacity expansion of 7000tpd in March ‘ 07, DGKC should be able to continue selling its cement like hot cakes. SWOT ANALYSIS STRENGTHS: ? High quality cements commanding premium prices. Fuel efficiency translating into better gross margins.

WEAKNESSES: Confined to the Northern region only. ? Highest expansion cost per ton in the sector. ? Loss of market leader position to weaken pricing power. OPPORTUNITIES: Construction of mega dam projects as well as ongoing infrastructure development spending by GOP.

Can benefit from further economies of scale post-expansion. ? Expansion or acquisition in the Southern region due to increasing potential (Karachi, Gwadar). Can export to the Middle-East on large scale through Karachi sea port, post construction of cement export terminal, expected to be offered on BOT by GoP (DGKC is one of the interested parties for the project). THREATS: ? Majority of the cement capacity expansions have been infrastructure development spending by GOP. Delay in construction of major dam projects due to shortage of funds as well as political obstacles will dent cement demand in the short run. ? Ongoing tussle between the cement manufacturers and Monopoly Control Authority (which is being given increased regulatory powers).

ANOTHER EXPANSION:

The company has also announced a further expansion of 10-12ktpd and has shown interest in acquiring another cement plant in the South, in order to tap the potential in the Southern region as well as the Middle East market for exports. However, this announced expansion is more of a pre-emptive action taken by the company and with the overall capacity additions in the cement sector; we do not think market dynamics would make it feasible. Nevertheless, the company’s interest in acquiring a cement plant in the South seems more beneficial in terms of market presence and freight synergies; we feel the company will take the latter route. ANALYTICAL

APPROACH TO FURTHER EXPANSION: The company has also announced a 10-12k tpd expansion under which it has placed an order for a 5000tpd grinding mill. The grinding mill is expected to be installed in FY09. However, this announced expansion is more of a pre-emptive action taken by the company.

The company has a shortage of grinding capacity and sells its excess clinker production to other cement manufacturers. Therefore, with the addition of the mentioned grinding mill, DGKC will not only be able to convert its excess clinker production to cement for sale but should also have spare grinding capacity. Furthermore, if market dynamics make it feasible, then it would add an additional 5000tpd line to complete the 10k tpd expansion. However, with the overall capacity additions in the cement sector, we do not think it would be feasible to do so. Rather than undertaking further capacity expansions in the current scenario, we think it would be beneficial for the bigger cement manufacturers to acquire existing cement plants which can be strategic fits for them in terms of location.

MAPLE LEAF PROFILE: Maple Leaf Cement is a part of MLCF is the part of Kohinoor Maple Leaf Group. The group comprises of companies, which are ranked amongst the top companies in cement and textile sector. Maple Leaf Cement Factory is one of the pioneers of cement industry in Pakistan. Maple Leaf owns and operates four production lines for grey and two production lines for white cement. The plants are located at Dandkhel District Mianwali. Total annual clinker capacity of Grey Cement is 1.

4 million tons while capacity of white cement is 30, 000 tons. Maple Leaf has developed a niche market for specialized cement such as SRC (Sulphate Resistant Cement), Low Alkali Cement and Oil Well Cement. Maple Leaf is the only local Cement manufacturer producing Oil Well Cement. CAPACITY: At the time of privatization in 1992, the capacity of Maple Leaf to produce Ordinary Portland Cement (OPC) was 1000 tonnes per day (tpd).

A second plant of 4000 tpd was commissioned in 1998 and a third plant of 6700 tpd will be online in 2006. This will increase the total capacity to 11, 700 tpd. The capacity of White Cement has also increased from 100 tpd to 500tpd with the addition of a new plant. This plant also has provisions for doubling the capacity to 1000tpd.

Presently Maple Leaf cement has 9% of the market share of OPC and is a leading brand in Pakistan with a diverse customer base. It is also the largest producer of White Cement in the country. EXPANSION PROJECT: MLCF has been quite inactive due to lack of developments in the company. The company is operating close to full capacity and has been for the past two years.

It hasn’t entered into the export market as all of its current production is absorbed in the domestic market. However, with 7000tpd expansion coming online in March 07, the growth should start to unfold. The company should also be entering the export market then and the back to number 3 cement manufacturers should start to get noticed. Currently the company is operating at close to full capacity with 1HF07 capacity utilization standing at 90% while FY06 capacity utilization stood at 93%.

Despite being a sizable player in the cement sector the company has not yet ventured into the export market. Although currently the company’s capacity is fully utilized catering to the domestic demand with the coming online of the capacity expansion, the company plans to enter the export market to maintain market share and capacity utilization levels. Moreover since exports are not included in the marketing arrangement, companies with a share in the export market can increase the capacity utilization and as a result reduce per unit fixed costs, leading to improvement as margins. The entry in other markets would also provide diversification to the company’s customer base and make it less prone to demand changes in any one particular market. MLCF has different types of cement in its product portfolio.

Early in March 06 the company completed its four fold expansion in white cement, taking its white cement capacity to 150ktpa. MLCF is one of the two manufacturers of white cement in the country. With the current expansion the company has been able to totally substitute the import of white cement and is currently test marketing in the export market. With cement due to its (neutral) white color and malleable properties, is used for decorative and masonry purposes. Although demand for white cement grows relatively slower as compared to grey cement, it is a premium product and commands high margins. Besides, white cement, the company also plans to launch a new type of cement in the local market, i.

e. oil well cement. As the name denotes, the cement is used for maintaining oil wells. In FY04 47 oil and gas wells were drilled in the country, while by FY06 the figure had increased to 64.

Going forward, usage of this type of cement should grow with the increase in oil and gas exploration activity in the country. Wells drilled are expected to increase to 110 in FY 08. At FY 06 end share of white cement in total cement dispatches of MLCF was around 2-3% which should rise to 5-6% in FY 07. Going forward with the launch of oil-well cement, share of premium products in MLCF's total dispatches should rise further. SWOT ANALYSIS STRENGTHS: ? High quality cements commanding premium prices.

? Operating margins should improve with the commissioning of the expansion project due to better fuel efficiency relative to outdated technology of some of the existing lines. ? Should benefit from further economies of scale post-expansion. ? Focusing on fast growing niche market segments. WEAKNESSES: ? Currently catering to the domestic market and should face competition in the exports markets.

? Highest expansion cost per ton in the sector due to delays leading to cost over turn. Highly leveraged balance sheet. OPPORTUNITIES: ? Construction of mega dam projects as well as ongoing infrastructure development spending by GOP. ? Expansion or Acquisition in the Southern region due to increasing potential.

(Karachi, Gwadar). ? Can export to the middle east on a large scale through Karachi Sea Port, post construction of cement export terminal, expected to be offered on BOT by GOP (MLCF is one of the interesting parties of the project). THREATS: ? Being a pure commodity business the company is prone to a cyclical nature of demand of cement. Delay in construction of major dam projects due to shortage of funds as well as political obstacles will dent

cement demand in the short run. ? Ongoing tussle between the cement manufacturers and Monopoly Control Authority (which is being given increased regulatory powers).

STORY OF EXPANSION

• Presently 24 cement units are operating in the country with aggregate installed capacity of 18.

57 million tons per annum. Sector is enjoying benefits of 80%- 85% capacity utilization, owing to extraordinary 18% growth in cement demand. Expansion of existing capacities, be in the shape of plant upgradation or setting up new production lines, is talk of the town these days. • Annual production capacity is likely to reach 25 million per by June, 2006. Capacity is likely to touch 28m tons by the June, 2007 & subsequently to 35. 7m tons in 2008.

• The question that kills the joy of expansion is “ Will there be enough demand in the country to absorb that excess supply? ” or “ Industry has to, again, face crises similar to mid 90s?? ”• GDP growth is used as yardstick for measuring demand growth of cement. High GDP growth leads to high cement consumption.• In the backdrop of positive economic growth in the region and in Pakistan, there must not be two opinions about growth in cement demand. However, pace of growth is yet dubious.• Cement demand is expected to grow at the annual rate of 12% in next 3-4 years. Cement demand is expected to reach around 21-22 million metric tons by 2007-2008 against current demand standing around 15 million metric tons.

• Housing sector will remain the major driver of demand, followed by infrastructure developments – construction of roads, dams, bridges etc.

Besides, realization of inevitability of canal lining to stop water losses is also envisaged to aid growth in the cement demand.• If demand grows in line with our expectations, we expect reduced profit margins for the sector beyond 2006 when sector, in general, will start payment of interest on loans taken for the purpose of expansion. Sector Developments Expansion of existing capacities, be in the shape of plant upgradation or setting up new production lines, is talk of the town these days.

With its roots fixed on the ground of prospective demand growth in the years to come, expansion is what almost all cement manufacturers are pursuing. Annual production capacity is likely to reach 25 million tons by June, 2006 against current capacity of 18. 6m tons per annum. If all the expansion plans materializes, capacity is likely to touch 28m tons by the June 2007 & subsequently it would reach 35. 7m tons in 2008. Most of the new projects or expansions are concentrated in northern region, which already captures around 77% capacity in total industry.

Against 14. 3m tons per annum current capacity out of total capacity, northern region’s capacity may jump sharply to 20. 7m tons per annum by 2006. While, capacity of south region is expected to reach 7.

tons per annum against current capacity of 4. 25m tons per annum. The bothersome fact lies on the other side of coin, that is, demand. A Big question that kills all the joy of expansion is “ Will there be enough demand in the country to absorb the excess supply? ” or putting it in other words “ Will the recent spurt in cement demand will be sustained over the period of time? ” Disaster of 90s – Is History repeating itself? In early 1990, cement

sector of Pakistan staged an “ Expansion Show” which, eventually turned into a tragedy for the whole sector. Under the expansion strategy, Cherat, D. G Khan, Maple Leaf, Pakland, Dadabhoy, AC Wah and Kohat expanded their capacities while five new plants were also set up.

The rationale behind the expansion was:• Cement demand was expected to escalate by more than 7%-8% per annum.• Optimistic expectations about GDP growth.• Expected increase in government spending on infrastructure. However, reality turned out to be much more merciless than it could have been imagined by cement manufacturers undergoing expansion. Hopes of growth in Cement Sector Neutral cement demand died when political turmoil of the country forced economy into ecession. Economic boom, which was the keystone of expected growth in cement demand, never occurred.

Decade of nineties brought all the bad-luck for the sector when the sector had capacity to produce 17m tons of cement per annum with virtually no demand. Plants were utilizing, on average, 50% of their capacities so as to avoid losses. However, to add to hardship, oil prices touched sky-high levels during the same era. consequently, fuel cost, which constitutes a major portion of cost of production of cement, climbed several folds. Result was, lower prices due to excess supply, higher cost and higher taxes, translated into losses for the whole sector.

Effects of those can be looked at even today on the balance sheets of various cement manufacturers in the shape of accumulated losses. GDP Growth – Demand Yardstick GDP growth is used as yardstick for measuring demand growth of cement. In its simplest form, the theory suggests, a

strong positive correlation between GDP growth rate and Cement demand growth (Our estimate is around 0. 99). High GDP growth leads to high cement consumption.

The reverse is true when GDP growth declines. It is believed that cement consumption increases along with the rise in per capita income. Cement consumption is also reflective of the economic development achieved by a country. One can put the argument of GDP growth forward as the driver of core cement demand in the local market, in particular, for the region in general Since 1990 South Asian region registered rapid GDP growth, average 5. 3% per annum. Moreover, Pakistan experienced average 4. 9% GDP growth since 1999-00. Witnessing vigorous economic activities turning around in the region and in the country, general stance on the expected GDP growth in the country is positive. In general, it is observed that demand for cement tends to remain on higher side in the emerging economies like Pakistan. Cement export in 2010 Pakistan cement exports are all set to touch one billion dollar mark by 2010 after establishing its position as an exporter of cement and clinker in the region as cement manufacturers enhanced their role among competitors. The export of cement and clinker is expected to earn $425 million of foreign exchange by the end of current fiscal year i. e. 2007-08, followed by further impressive growth during upcoming fiscal years. The industry projections suggest that the cement industry exports would reach to $735 million by the end of 2008-09 and it will touch to $1. 043 billion by the end of 2009-10, added the sources. Meanwhile, the cement export has shot up to $351. 717 million dollars in eleven months of current fiscal 2007-08 over $125. 427 million dollars of same period of last fiscal

2006-07. The robust growth had been witnessed both in value and quantity of export of cement during July 2007 to May 2008 and manufacturers earned billions of rupees just in eleven months of current fiscal. The official data showed that manufacturers had earned 180. 2 per cent more amount in eleven months as total export reached to $351. 717 million dollars in current fiscal over $125. 427 million dollars of corresponding period of last fiscal while in local currency, the total cement export amounting to Rs22. 018 billion over Rs7. 601 billion of last year’s export. Pakistan is exporting cement to Middle East, India, Afghanistan, Central Asian States, South Africa, Switzerland, Sudan, Egypt and Iraq at present. Some more destinations are likely to add up in next two years helping the cement industry to touch the level of one billion dollars accordingly. Over 145 percent growth registered in the quantity of export of cement in current fiscal as total 5. 908 million tons cement had been exported in eleven months of FY2007-08 against 2. 408 million tons of last FY2006-07. Attributing the overall shortage of the cement and high demand in Middle East and South African countries behind robust growth of cement, the analysts and manufacturers said the China, India and Egypt were the major exporters of cement but they restricted their export due to increasing demand of commodity in their own country. These three major exporters of cement are hardly meeting with the demand of commodity in local market, which create vacuum for Pakistani product in Middle-East, South African and other countries, analysts said. The cement manufacturers informed that Egypt and India had been banned the export of cement owing to meet increasing local demand which created shortage of commodity in the world. Even the Iran which was another major exporter, were importing the cement. Dealers accuse cement industry of

cartelisationKarachi Cement Dealers Action Committee has demanded punitive action against cement manufacturing companies who have raised prices despite high production and low demand. Wali Bhai Patel, the president of the committee, said prices of some other items were high in the country because they were linked with international prices. “ However, Pakistan is self-dependent in cement. In fact, the production of local companies is much higher than the local demand. The demand for cement has fallen in the country due to sluggish construction activity as a result of high prices of iron and steel. In this situation the prices should have fallen. Instead the cement companies have begun to raise prices every week. ” He said what could be the reason behind cement price hike while there was no shortage of cement in the country and the companies had substantial stocks. He appealed to the government to take notice of this practice, which hurts construction activity and leads to unemployment. The cement companies must be bound not to increase prices without a rationale, he said. He said that he hoped the government would take some action against the manufacturers. BUDGET 2008-09The FY09 budget is expected to have a neutral impact on the cement sector. The positives include a marginal increase of 5. 6% in PSDP allocation versus the previous year’s allocation and specific spending targets for road and dam developments. While negatives include an across the board increase in GST by 100bps and cement sector specific PKR150/tonne increase in FED which will subsequently lead to increased retail prices. Public Sector Development Program: Housing Scheme: The GoP has allocated PKR549bn for PSDP (5. 6% higher than last year’s original PSDP allocation of PKR520bn). Out of the total PSDP, PKR 75bn will be spent on dams and lining of canals while PKR37bn

will be spent on roads such as the Makran Coastal Highway, development of road infrastructure in Baluchistan and widening of the Karakoram Highway. The Ministry of Housing and Works has quoted a shortfall of 7. 5mn houses. The budget announcement included a plan to develop 1mn houses as part of a housing development scheme for the poor and government employees. The scheme would include a PKR2bn revolving fund which would see continuous additions to keep development ongoing. GST increased to 16%: General Sales Tax (GST) has increased across the board to 16%. While the cement manufacturers will not have to bear the cost and the increase in GST should not impact retention price it will lead to a minor increase in retail price. FED Increased to PKR 950/mt: An increase in Federal Excise Duty (FED) to PKR 900/mt (PKR 45. 0/bag) from PKR 750/mt (PKR 37. 5/bag) will not have an impact on retention price and will lead to an increase in retail price. OUTLOOK FOR THE YEAR 2009(E)Even though the government has increased GST and FED on cement, there will be no impact on cement manufacturers' profitability as the cost will be passed onto the consumer. The increase in PSDP allocation and planned expenditure on infrastructure development should bode well for local cement dispatches but it remains to be seen how much of the PSDP allocation is actually spent. The industry continues to face increasing costs of production as a result of cost push pressures. With a regional cement shortage and local manufacturers enjoying better margins from overseas sales, cement exports have increased by 142% YoY during 10MFY08. No changes were made on export taxes and going forward, we expect the focus on export sales to continue driving growth. Cement exports to rise as UAE removes duty Pakistani cement exports will be key beneficiaries as the demand for Pakistani cement in Gulf countries will now

further rise subsequently after United Arab Emirates (UAE) government has removed 5 percent custom duty on cement to help the fast moving construction sector in Dubai. This removal of import duty will decrease the cost of importing cement into UAE, in turn increasing the demand for imported cement. The increasing regional cement price is also benefiting Pakistani cement companies who are able to export cement at a price premium. Initially, cement was being exported to UAE at Freight on board price of $60 to $65 per tonne, which has now jumped to $70 to $75 per tonne. With the duty removal in UAE and consequently demand for Pakistani cement rising, local cement companies can further increase export prices. Already local cement companies have shifted their produce to exports as in the first 8 months (July-February of financial year 2008 have seen record high-level exports of 4. million tonnes. It is estimated that As per our estimates, we expect cement exports to reach 6. 6 million tonnes in financial year 2008, exporters informed. Cement demand, throughout the world, has been on a consistent rise as construction activities gain pace. This has led to a significant cement price hike especially in countries like India and UAE. Cement prices in UAE have jumped up by over 40 percent in only 2008, forcing UAE government to remove 5 percent custom duty on the import of cement. The prices of cement have touched record high levels in many countries across the globe. Only in 2008, cement prices in UAE first increased from $87 to $119 per tonne, and are currently standing at more than $136 per tonne. Price of even clinker has jumped to $70 to $80 per tonne in UAE. Similarly, prices in Russia have reached $280 per tonne while in neigbouring India they average around $118 per tonne.

POTENTIAL FOR ACQUISTIONS BY GLOBAL PLAYERS

Cheap valuations in Pakistan create good opportunities for multi- national cement players to acquire and cater to regional markets such as South Asia and the Middle East. The recent sell-offs in the cement sector were all to local investors, except for Pakistan Cement (PCCL), which was acquired by Egypt-, based Orascom Group. Out of multi-national cement players, CEMEX has intentions to enter the Pakistani market either through acquisition or a joint venture. Dewan Hattar Cement (formerly Saadi Cement), Javedan Cement and Dewan Cement (formerly Pakland Cement) were sold off at US$100, US$100, US$125 per ton, respectively while Pakistan Cement was sold for US$80/ton as the plant required further investment to bring it online. Pakistani cement is trading at FY08 EV/ ton of US $67, which makes the Pakistani cement sector, the best acquisition proposition in the region. C