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This case was developed as part of a scientific research project for educational purposes. The case is intended to be used as the basis for class discussion rather than to illustrate either effective or ineffective handling of a management situation.

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ISVI - Istituto per i Valori d'Impresa Via Appiani 12 - 2012 Milano Italy

Buzzi Unicem

It was by now the middle of the night but Sandro Buzzi continued revising his notes for the speech he was to deliver the following morning at the Buzzi Unicem shareholders' meeting. This was to be his last speech as Chairman of Buzzi Unicem; in a few hours, he would leave the position to his brother Enrico and would become Honorary Chairman.

Together with his father and brothers, he had transformed the small cement plant created by his grandfather into one of the largest groups in the industry with 39 cement plants in 11 countries and over 11,000 employees. Sandro and Enrico considered that the members of the fourth generation were now well integrated in the company as directors and managers and could proceed on their own, despite the fact that the times were not the best.

2013 was a difficult year for the company, which continued to suffer from the profound structural crisis that in 2009 struck the main European and American markets. In 2013, Buzzi Unicem recorded a slight decline in turnover, which stood at around 2.8 billion euro and although the debt had been reduced and the operating margin was relatively stable, the company closed with a net loss.

Despite the crisis, Buzzi Unicem, consistently with what had been done in the past, continued to grow and make international investments, creating the conditions to benefit from the recovery of investments in construction and the demand for cement that was discernable in some markets such as the North American.

Sandro and Enrico knew that the generational transition that had started with their brother Franco years ago was coming to an end in an unfavourable competitive environment. However, the Buzzi family was accustomed to challenges and in the past had been able to benefit from changes in the market due to the strategic vision, common objectives and the sense of unity among the family members.

Birth and industrial development

The origins of Buzzi Unicem date back to 1907 when Pietro and Antonio Buzzi opened a plant for the production of cement in Trino Vercellese to develop the family firm that ran a well-organized business, manufacturing cement products. At the time, cement was produced from marl, a mineral compound extracted underground and containing an optimal mix of clay and limestone that was calcined in vertical kilns.

In 1923, a plant in Casale was also opened near two marl deposits located in Priasca and Barbotta on the hills surrounding the town. At the time, the quality of cement depended not so much on production technology, but rather on the physical and chemical properties of the raw material. Casale had become a major centre of cement production in northern Italy, thanks to the availability of high-quality mineral that enabled producing cement that was particularly sought-after by the "solini", namely, the building contractors who made concrete floors and slabs. Giuseppe Cerrano of Casale, who founded the cement

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works of the same name in 1867, was considered the first Italian cement maker along with the Sosso brothers, members of a dynasty of lime and cement producers. Another important dynasty of cement entrepreneurs in Casale was that of the Marchino brothers who in 1872 founded Ditta Marchino, and after having taken over the Cerrano and Sosso cement works created Unione Cementi Marchino, destined to become a leading Italian cement manufacturer.

In 1940, after the death of Pietro Buzzi, his son Luigi took over the management of the company and immediately found himself having to deal with a major period of change. The marl deposits were being depleted and production gradually shifted towards artificial cement based on finely ground limestone and clay fed into the calcination kilns; new production technology was also adopted based on rotary kilns, which required huge investments to modernize the plants. In 1951, Antonio passed away and Luigi found himself alone at the helm. In subsequent years, four of his 11 children (nine boys and two girls) actively entered the company, each with their own specialization: Sandro, born in 1933, after studying engineering, dedicated himself mainly to planning and production matters; Franco, born in 1935, graduated in economics and was responsible for the company's management and strategic development; Enrico, born in 1938 and a civil engineer, coordinated plant management; finally, Pier Emanuele, born in 1940, after completing his legal studies and obtaining an MBA, dedicated himself mainly to the commercial aspects. "Grandfather Luigi attached great importance to education pointed out Veronica Buzzi, daughter of Franco and Vice President of the company - he had a degree in Economics and Law, and pushed the children to study and specialize, always with an eye on international openings and external experiences".

Entry of the family's third generation coincided with the beginning of an intense phase of the company's industrial development with the opening in the 60s of the first plant outside the territory of origin, in Robilante in the province of Cuneo. After a series of searches, major limestone and shale quarries were identified that could supply the cement works for years. The plant, where Sandro Buzzi dedicated himself to planning and Enrico Buzzi to its operation, was created with very innovative technologies that enabled significant cost reductions. In particular, adopting German technology for the first time in Italy based on a short kiln with a cyclone preheater; only four other plants had adopted similar technology in Europe at the time. The Robilante project was also notable for being the first cement plant in the world equipped with central command and the second with a control system of raw material upstream of calcination using an x-ray spectrograph. In 1964, the kilns of the production plant in Casale were closed down (retaining only the batching and distribution of cement) focusing on the development of the new production unit in Cuneo. In 1972, production capacity rose to 700,000 tons per year and a six-kilometre tunnel was constructed to connect the factory to the main Roaschia quarry with conveyor belts: it was one of the longest tunnels for industrial use operating in Europe at the time. In 1977, the third production line was inaugurated and that brought the total installed production capacity to two million tons per year.

"The quarry was plentiful and the raw material was of good quality - recalled Gigi Buzzi, son of Enrico and today Procurement Manager - this is why we decided to take the risk of focusing investments in a single plant. Unlike our competitors, we invested massively to triple production lines and exploit economies of scale. Today, the minimum sustainable size of a cement production plant is between 1 and 1.2 million tons a year. By the end of the '80s, we had a plant with higher volumes. We obtained positive margins and profits entirely that we reinvested into further expansion of the plants."

To stimulate cement consumption, Buzzi decided to integrate in the downstream production and distribution of concrete (of which cement is a raw material). By the end of the 60s, the company had put in place concrete batching plants near its own cement works and supplied construction firms through a distribution network with mixer trucks.

At the end of the 70s, the decline of the cement district in Casale Monferrato began with the gradual disappearance of marl pits. Many of the local producers closed down or turned into cement traders, not having made the industrial leap that the Buzzi family made with the Robilante plant. As part of this industry consolidation, Buzzi acquired some smaller Monferrato companies including Palli Caroni, Deaglio, Bargero, Gabba and Miglietta, gradually consolidating its market leadership in the northwest. "The choice to grow outside of the local market, which in the 60s was innovative, made a difference to our business – recalled Pietro Buzzi, son of Sandro and Chief Executive of Finance - while other companies were based on the local market in terms of procurement and sales, we went outside of our territory, we implemented a manufacturing structure based on new deposits, developing distribution and the business contacts. The end of the marl deposits also marked the end of those companies that were nested in the local market".

The cement and concrete industries

Cement, which is a fine powder, is one of the most common building materials known since the time of the ancient Romans who called it 'opus caementicium', a construction material that is very similar to that in use today. The first types of hydraulic cement, characterized by hardening as a result of hydration, were developed in the 1800's during the industrial revolution; the most common type today is called 'Portland'.

Cement production has the following characteristics:

- It requires a great deal of energy because the kilns used to produce the cement must reach temperatures in excess of 1.400 °C. Profitability therefore depends in large part on the availability of energy at a contained price.
- It is strongly influenced by the supply of raw materials: since cement is bulky and has a relatively low price in relation to its weight, production must be located close to the quarries and to customers.

The main cost item in cement production is energy, although larger plants and new technologies enable achieving economies of scale and a significant reduction in the average cost of production. A new plant with a production capacity of 1 million tons per year (plants with a lower capacity are not cost effective) today has a cost of around 200-300 million euro depending on the requisite infrastructure. The cement market tends to have a local connotation as the high transport costs mean that cement is rarely transported by road for distances greater than 300km. Less than 5% of cement produced is traded outside of the country of origin and mainly between coastal countries, because unlike road transport, maritime transport is sustainable over long distances. On average, 95% of cement produced in a country is destined for domestic consumption.

Although there are various types of cement, each with different properties, the offer of individual companies is generally all-encompassing and meets every possible need. In addition, cement is a commodity; it is therefore difficult to differentiate the product and competition tends to be mainly on price.

The dynamics of cement consumption are similar to most other commodities commonly traded on international markets. Demand for cement is related to economic growth: emerging countries, which are undergoing urbanization and industrialization, consume around 90% of world production, while demand in advanced countries has a relatively stable or negative trend.

The major players therefore implemented an aggressive expansion policy in emerging markets, achieved through the acquisition of local companies: 70% of Holcim's turnover, second group in the world by quantity produced, was generated in countries in the developing world. However, due to these factors (dependence on raw materials, size of plants and transport costs), the expansion did not generate economies of scale. On the contrary, competition for the best facilities led to acquisitions at high prices. In addition, the cost of energy, increasing all over the world, and the lower demand in developed countries, created difficulties for many companies in the industry.

In 2013, the aggregate turnover of cement producers can be estimated around US\$ 260 billion and recorded a positive trend with respect to the previous year. The decline in demand in western countries was offset by increased demand in the Asia-Pacific region and particularly in China. Globally, estimates indicate growth in aggregate demand with an average increase in consumption from 539 kg/person in 2012 to 645 kg/person in 2017. Growth is also sustained by the decrease in coal prices, which results in lower production costs. The market and price trends vary greatly depending on the country and in general relate to the rate of growth of local economies and investments in infrastructures.

Companies with different business models compete in the industry:

- Global and multiregional players: companies that pursue an aggressive expansion policy in external markets and operate in different countries. Some operate on a global scale such as Lafarge, Holcim, Heidelberg Cement, Cemex, others focus on 3-4 regions and are thus classified as multiregional, this is the case of Italcemeti, Votorantim, Buzzi Unicem and Vicat.
- *National players:* larger companies located mostly in emerging markets (especially China and India), operating mainly or exclusively in domestic markets.
- Local players: companies that have from one to five plants, often dated and with production capacity below the minimum efficient scale. Most of these companies compete with strategies focused on local or regional markets, some offer quality products and a good level of customer service.

Concrete is a compound resulting from mixing cement with other materials including sand, gravel, water and chemical additives. Cement is a binder, hardening as a result of hydration. Batching takes place at the construction site and/or in designated concrete mixing plants (premixed concrete) using mixers with variable flow rates from 3 to 10 cubic meters of concrete.

The "concrete" mix is also sold in the dry state in bags for small businesses through specialized distribution. In the case of large and medium-sized constructions, cement is supplied "loose" to the worksite silos and then transformed into liquid concrete for formwork casting. In large constructions, producers of premixed concrete directly manage production onsite.

Concrete can be premixed and produced by specialized manufacturers - at times integrated upstream in the production of cement - in large concrete batching plants generally located in the vicinity of cement or aggregates quarries and then delivered

ready for use in mixers (in this case called 'ready-mix', while 'concrete' refers to the material when it has hardened). The high cost of transport of fresh concrete means that it is distributed on average within a distance of around 50 km of the production site.

From the production process perspective, concrete production has lower entry barriers than cement. The sites for the preparation of concrete are relatively simple from a technical standpoint and require lower investments (in the U.S., the average cost of a plant is 2.2 million dollars); the efficient scale of production is significantly lower than that required for a cement production plant and small production sites are therefore widespread (there are plants run by slightly over 10 employees), which makes the sector highly fragmented. Finally, logistics play a crucial role for companies that produce ready-mix concrete as they have to deliver a perishable product (while cement, if protected from the elements, lasts a long time), often at short notice and with lead times dictated by customer needs.

Concrete is more differentiable than cement as the mix of aggregates and the use of chemical additives allows obtaining products with specific and clearly identifiable performance and a wide range of applications. Over the years, different players have emerged that are not direct cement manufacturers but specialized in the production of mixes in powder intended for mortar with physical and mechanical properties for specific uses. These manufacturers work on the quality of mixes and chemical additives and distribute the product in bags or in powder form.

The beginning of international expansion

At the end of the 70s, Buzzi Unicem was one of the leading Italian cement manufacturers with a strong competitive position and resources to invest to give further impetus to growth. Benedetta Buzzi, daughter of Franco and working for the Corporate Finance department of the company, indicated that a debate had developed in the company between the children and their father on actions to be taken, "Luigi was very oriented towards internal growth and strengthening our presence in existing markets, while the children wanted to enter new markets through acquisitions".

The progressive deterioration of the economic and social situation in Italy, characterized by the terrorism phenomenon and the spread of a general climate of hostility towards entrepreneurs and business activities, led Buzzi to intensify the search for development opportunities in the international market. Buzzi focused on the North American market, which it believed had good potential and, in 1979, after several months of negotiations, took over Alamo Cement in San Antonio, Texas, in collaboration with a Swiss cement producer. Pietro Buzzi recalled, "The factory was owned by a trust, it was relatively outdated and was passively managed, lacking innovation and investments in the modernization of the plant. The company had obtained permission to build a new plant, but the owners did not pursue it. Franco and Sandro Buzzi immediately understood the potential for improving the production processes and developing trade".

Shortly after the acquisition, a greenfield plant was designed and endowed with the latest technology. Production and installation were directly supervised by Buzzi and in 1982 reached a capacity of 1.2 million tons of cement per year. The commercial network was also strengthened through the development of a series of plants for the production and distribution of concrete to stimulate consumption in the area. For commercial development, Buzzi decided to leverage on the local management who understood the

dynamics of the market, "The operating system was essentially left to local managers - noted Gigi Buzzi - with whom we developed a relationship of mutual trust, it was no coincidence that over the years three plant manager were interchanged, all selected internally. However, investment planning and technical development were directly undertaken by Franco and Sandro Buzzi".

In the mid-'80s, to consolidate its presence in the local market, Buzzi decided to acquire a competitor - Longhorn Cement - that had good plants and competed on price. After the acquisition, the production capacity of the two companies was consolidated, which allowed Alamo Cement to establish its leadership in the area.

A further boost was given to internationalization in 1981 with the acquisition of a minority stake in Corporacion Moctezuma - Mexico, which owned an old cement plant in the Cuernavaca region and a few concrete production plants in the vicinity of Mexico City. In this case, the investment was made by acquiring a minority stake, initially in collaboration with two Mexican partners and thereafter with two international partners, Ciment Francais (France) and Cementos Molins (Spain). Subsequently, with the exit of the French partner, Buzzi's shareholding increased to 50%, while in 1994, the important Mexican group CARSO also acquired a stake. "The investment in Mexico was Pier Emanuele's idea, who supported the operation despite the understandable caution of other members of the family - said Benedetta Buzzi - the acquisition of the minority interest was the best possible solution at the time also in view of the weakness in Texas in those years. Also on this occasion, we were able to offer added value from an industrial standpoint". The Buzzi brothers directly managed the modernization of the Mexican plant and the installation of the new production lines. Over the years, they built five new production lines in three plants becoming the fourth largest producer in the Mexican market, with a share of 14%.

The internationalization experience proved to be important training ground for the development of new technical and managerial skills, "The starting point of our internationalization process was based on the possibility of transferring our expertise in plants and production process management to other markets - noted Pietro Buzzi - The development of new plants abroad and the modernization of existing ones allowed us to develop new skills, acquire very thorough knowledge of new technologies and to forge long-term ties with strategic suppliers. The internationalization also helped us grow from a management perspective. We had to deal with new problems related to accounting and financial issues and had to relate with larger and more structured international partners. In those years, we began to change our mindset from a regional company to that of an international group and began to ask strategic type questions on the long-term development of the group".

The Buzzi brothers felt that there was an ongoing international growth trend of major European players such as Heidelberg and Holcim, which within a few years would turn domestic companies into multinationals. Although the supply and end market for cement production was essentially local (because of transport costs), significant benefits could be achieved from opening new competitive cement plants in other regions of the same country and in other countries. Growth for a cement manufacturer was constrained by access to a durable source of supply and quality that was often found only by moving into new markets where there was an abundance of natural resources and the possibility of exploiting these for industrial purposes. Furthermore, the development of new production sites abroad reduced dependence on the domestic market and thus enabled mediating the negative results of market downturns with positive performance obtained

in other markets, stabilizing sales at the group level. Finally, an important driver of growth and internationalization was the opportunity of transferring technological expertise to production process management: this allowed achieving economies of scale in production and economies of scope in research and development applied to industrial processes.

Pietro Buzzi highlighted, "Since the beginning, we have focused on the search for cement plants that had strong and preferably unexpressed production potential, thus taking our process expertise to improve the output quality while containing production costs". The ability to identify the right target for an acquisition is one of the core competencies of a cement manufacturer. The most desirable companies are those that have cement plants attached to a quarry able to provide quality material at low cost and that have a relatively close and accessible local market.

The acquisition of Unicem and the birth of Buzzi-Unicem

In the 90s, the Italian cement industry was in a process of supply concentration with various acquisitions and mergers, and the disappearance of many independent companies in the territory. Furthermore, some cement producers decided to invest in integrating downstream in the production and distribution of concrete. The Buzzi family evaluated some investment dossiers such as that relating to the disposal of the Calcestruzzi group following the crisis of the Ferruzzi group, but the turning point came in an unplanned way, when Gabriele Galateri di Genola, CEO of the IFIL group, began informally discussing a possible collaboration with Franco Buzzi to boost the Unicem subsidiary, active in the production of cement and concrete. Unicem was born in 1933 with the acquisition of Unione Italiana Cementi on the initiative of Senator Giovanni Agnelli. In 1969, the company took the name Unicem and in 1971 was listed on the stock exchange. The emergence of profitability issues, primarily due to a financial loss, led the IFIL administrators to consider the possibility of an industrial alliance. "In reality - recalled Pietro - the story told in the family is that the first conversation of an alliance between the two companies took place in the glorious municipal stadium in Turin during breaks in the Juventus matches, of which Galateri di Genola and my uncle Franco were huge fans".

The Buzzi brothers initially considered acquiring a minority stake because Unicem produced 12 million tons of cement per year against Buzzi's three million, it was publicly listed and owned other listed companies; moreover, following the relationship with Fiat, it had the typical management structure of a large group. In 1997, the agreement was formalized on the basis of which Buzzi undertook to gradually take over control of Unicem through the acquisition of shares held by IFIL. In 1999, the two groups merged and Buzzi Unicem was born, a listed group with 13 plants in Italy, 5 in the United States and 2 in Mexico, which produced 15 million tons of cement per year and 7 million cubic meters of concrete with the support of 4,000 employees. "This was a momentous leap for us – recalled Benedetta Buzzi – everyone in the family was highly motivated even if the financial commitment was remarkable. We had an industrial project and knew how to exploit the physical assets and the corporate know-how. In fact, a major investment bank supported the operation by approving what was then the largest loan ever granted to a privately owned company".

The two companies had substantial differences in their management and operational structures: Buzzi was a family business, with a management style oriented to the optimization of resources and a minimal management structure, thanks to the direct involvement of several members of the family. Unicem was a group with an articulated organizational model, a notable structure and considerable managerial competencies. "Unicem managers were competent - acknowledged Pietro Buzzi - but came from a different context with strong respect for rules and procedures; lacking, however, of attention to details, to the correct use of resources and ultimately to the company, which we instead had and considered an integral part of our lives".

From the industrial point of view, Buzzi and Unicem had considerable complementarities that could be enhanced through trade and manufacturing coordination. Following the acquisition, a partial rationalization of administrative structures was effected while maintaining the employment level substantially unchanged. At the same time, in the group's new structure, the specific technical and managerial skills of Unicem employees were exploited. Pietro Buzzi recalled, "Unicem had a strong presence in the U.S. where the plants were led by capable managers who understood the market logic and were confirmed in their roles, integrating themselves perfectly into the group's new reality". The company had a position of strength in the Italian concrete market through the UNICAL subsidiary, which had a distribution structure with widespread presence in the area also thanks to the acquisition of some of the Calcestruzzi SpA plants (formerly Gruppo Ferruzzi). The decision was therefore made to merge the distribution network of Buzzi concrete with that of UNICAL, adopting the latter as a single brand.

The integration of the two companies focused primarily on the production aspects, "In the acquisition, we decided to focus on production optimization - explained Michele Buzzi, brother of Pietro and Chief Executive of Operations - looking to optimally distribute production among the different plants. Despite the financial commitment to acquire Unicem, we never stopped investing in the modernization of plants to increase efficiency and maintain profitability. We brought new skills to Unicem in the management of production processes and in the development and improvement of existing facilities, at the same time trying to exploit the company's commercial resources leaving the managers of the individual cement plants an adequate level of autonomy". Investments in the Italian market since 2000 enabled the group to record good organic growth performance and benefit from the increase in domestic demand. In 2004, sales reached almost €3 billion and the growth prospects continued to be positive for the next two years due to the demand generated from public investments in infrastructure such as the Variante di Valico (a deviation of the Italian A1 motorway) and l'Alta Velocità Ferroviaria (high-speed rail).

The acquisition of Dyckerhoff and international development

Progress in the Unicem integration process and good competitive and economic performance led the Buzzi family to give further impetus to external growth, "We take an industrial and not a financial approach to growth - explained Veronica Buzzi - for us the industrial project comes before corporate control and the financial architecture. We have always followed this principle both in international development and in the acquisition of Unicem. In this spirit, we began to consider the possibility of an acquisition as fundamental as that of Dyckerhoff".

Dyckerhoff, a German company founded in 1864, in part wrote the history of concrete. It was, amongst other things, the provider of 8,000 barrels of Portland cement with which the base of the Statue of Liberty in Manhattan was built. The company was controlled by a large family, with about 350 members, in partnership with two financial investors and was managed by a non-family management team. Internal relations between family members and with shareholders were good, although some expressed the desire to increase their participation. Contacts were therefore initiated with potential industrial partners to explore the possibilities of disposal. Dyckerhoff was a very attractive industrial target due to its technical expertise, especially in the research field, and its long tradition in product innovation. It owned the Wilhelm Dyckerhoff Institute, formed in 1988 as a development of its own research laboratory, considered one of the leading centres of expertise in the field of concrete. In addition to its strong presence in the American market, Dyckerhoff also operated in Eastern Europe and Russia where the construction of new infrastructures and the growth of metropolitan cities fuelled demand for cement and concrete. "This involved the acquisition of a much larger company recalled Pietro Buzzi – also, we were not the only possible ally because there were other suitors. The fact that both were family businesses helped us a lot because some members of the families already knew each other by way of meetings between competitors in the same market. This acquaintance fostered a relationship of mutual trust, so it was easier to concur on the contents of the agreement and on the forms of collaboration".

The agreement, signed in 2001 by Buzzi with Dyckerhoff family members and institutional investors, foresaw a process of gradual acquisition to dilute the Italian company's financial commitment over time. In January 2004, after acquiring a number of blocks of shares, Buzzi Unicem obtained absolute majority of the company, creating one of the largest groups in the industry in nine countries, with 41 cement plants and a production capacity of 38 million tons of cement, 15 million cubic meters of concrete and approximately 11,800 employees.

The integration process began immediately after obtaining the majority shareholding with the fusion of concrete activities in the United States and the creation of Buzzi Unicem USA, which enabled the new company to become one of the largest producers of cement operating in the U.S. market.

As Gigi Buzzi recalled, the integration process was implemented "trying to exploit the complementarities of the two companies, Dyckerhoff had strong skills in product innovation and plants located in strategic areas, we intervened to optimize the combined capacity of the two companies and to achieve commercial synergies in specific markets and for certain products".

To concentrate resources in the integration of the new company, Buzzi Unicem rationalized its presence in the expanded clay aggregate market conferring its activities to a joint venture with Laterlite, in which it retained a minority holding: this was a disengagement designed to free up resources to devote to the core business and to develop the external growth strategy. In 2004, it acquired Cementi Riva and increased its holding in Cementi Moccia. In 2005, it launched a strategic investment of approximately 262 million dollars in the U.S. plant Selma, aiming to bring production capacity from 1.3 million tons per year to 2.3 million tons within three years through the installation of a new five-stage 7000 tons/day kiln. The company continued to strengthen its position in the U.S. market, inaugurating in Houston in 2006 the largest American cement-handling terminal, with a production capacity of three million tons: the plant was a joint venture with two important local players, Ash Grove and the Texas Lehigh. In mid-2007, the

construction of a greenfield plant began in the state of Veracruz in Mexico with a production capacity of 1.3 million tons.

In 2006, the company entered the North African market through the acquisition of a minority stake in two cement plants sold by the Algerian State as part of the privatization and modernization of the national economy.

In 2007-2008, significant investments were made in the Russian market to expand production capacity and modernize existing facilities. On the border with Kazakhstan, construction was started of a greenfield plant with the latest technology and a production capacity of 2 million tons per year. Construction began in the Suchòi Log plant (Ekaterinburg) of a 3000 tonne/day dry production line in support of the 4 existing wet production lines.

As Gigi Buzzi recalled, "Investments in eastern Europe allowed us to dramatically improve our productivity and, thanks to the favourable trend in demand, we were able to achieve a good margin. Our growth strategy is based on the expansion of existing plants always with particular attention to improving productivity. At the same time, we have never relinquished external growth through acquisitions, even of individual units".

Strategic positioning in the major markets

Buzzi Unicem's growth strategy is based on entry into foreign markets in which, through acquisitions or investments in plants, it can obtain a significant market share (roughly between 8% and 10%), making it possible to develop adequate sized production facilities to achieve economies of scale. In terms of net revenues, the first market for the company is the U.S., where it has a market share of 9% and is the fourth largest domestic producer, thanks to a turnover of 730 million euro. In Germany, Buzzi Unicem is the second largest producer (after the Holcim-Lafarge mega merger) with a market share of 13% and around 600 million euro in revenues. In Italy, it has a market share of 15% and is the second player in the cement industry with approximately 430 million euro in revenues. In Mexico, where the company has an established presence, it is the fourth largest domestic producer with a market share of 13% and around 230 million euro in revenues. Russia has become the fourth largest market of reference for the company with around 250 million euro in sales and positive growth in volume and turnover, but for the time being, the market share of 4% falls below its business growth objectives.

In the various markets where Buzzi Unicem operates, competition in the cement and ready-mix concrete sectors differs in relation to trends in demand and the supply structure.

Italy - Since 2009, the Italian market has been characterized by a decrease in sales volumes of approximately 40% due to the crisis in the construction industry. Demand was so low that the capacity utilization of cement plants of major players was between 50% and 55%, with a consequent drop in prices that lasted for about three years and a sharp decline in the profitability of the sector. Buzzi Unicem sales were down from 707 million euro in 2009 to 479 million in 2012, cement sales decreased from over 7 million in 2009 to 4.6 million in 2012.

Around 20% of sales are through building material retail channels that market pure cement or premixed bags; the bags are sold as a commodity where competition is on price.

In the concrete sector, the market structure is characterized by the high fragmentation of supply that has intensified the market downturn. In Italy, around 35% of cement producers also produce concrete, this is a low percentage compared to countries such as France where about two thirds of the ready-mix concrete market is controlled by cement manufacturers. Andrea Bolondi, a manager with over thirty years industry experience accrued at UNCEM and now COO of UNICAL's concrete division, painted a not very reassuring picture of the Italian market, "In Italy there are about 2,000 concrete plants owned by 800 businesses, many of which are mono plants. A process of supply concentration is underway that is leading to a reduction in production capacity and the disappearance of many small operators, but prices continue to fall and undermine the more structured companies, which may also undertake research and development and want to remain in the market in the long term".

United States and Mexico - In the U.S., after the peak in cement consumption recorded in 2005 (122 million tons) demand fell to 68 million tons and only in 2011 rose slightly to 70 million tons. Production capacity utilization (market average) of the plants dropped to its lowest at 67% in 2011. Supply is concentrated and 40% of production is controlled by the so-called big four, namely, Lafarege, Cemex, Holcim and Heidelberg Cement (all foreign companies), the remaining part is generated by 8 smaller multinationals including Buzzi Unicem, Titan, Ash Grove Cement. Despite the complex market situation, Buzzi Unicem has been able to gain market share both in value and in volumes sold. Buzzi Unicem's strategy is based on optimizing production of the nine cement plants and the investments in logistics in terminals for the transport of raw material and cement. Finally, the company was able to leverage the 22 terminals distributed along the Mississippi River and the railway network as well as the 70 strategically located concrete production and distribution centres that have driven demand for cement, which gradually increased to 76 million tons in 2013 and is expected to reach nearly 80 million tons in 2014. However, in the medium term, demand is not expected to return to the 2005 level.

In Mexico, despite the presence of CEMEX, one of the major players in the world, Buzzi Unicem has a strong competitive position. In fact, it has the latest-generation plants - enabling very competitive operating costs - and relies on a widespread distribution network, which has allowed developing stable relationships with major players in the local construction industry.

Central Europe - Central European markets (France, Germany, Benelux, Switzerland) are characterized by stable demand and prices, the strong presence of the world's leading companies in the industry (Lafarge, Holcim, Heidelberg), less mobile market shares, while organic growth opportunities through the development of new plants are often limited due to political and environmental reasons. This led Buzzi Unicem to pursue external growth through the acquisition of Dyckerhoff, enabling it to consolidate its presence in the market.

Eastern Europe - The increased presence in central Europe serves as a bridge to developing the eastern European markets (Czech Republic, Poland, Ukraine, Russia) where the company in 2011-2012 invested around 90 million euro in the development of existing plants to adapt them to the productivity levels achieved in established markets such as Germany and Italy. Particularly positive results were reported in Russia thanks to demand from the construction of public infrastructures that has helped keep prices at high levels and thus ensure profitable growth.

Since the early 70s, Buzzi Unicem has pursued a strategy of downstream integration in the production and distribution of concrete to support cement consumption by selling a product with higher value added. Concrete production enables becoming a direct supplier of construction companies with which it can define purchasing contracts for high volumes of product. The company is thus able to optimize plant production capacity utilization and minimize the risks arising from cyclical fluctuations in the price of cement.

Buzzi Unicem sells ready-mix concrete produced in it own batching plants that are then delivered to customers operating in the area, it also installs and operates concrete plants dedicated to the implementation of specific large-scale contracts (for example, large-scale infrastructures) on behalf of construction companies. "In the construction of large-scale works - observed Andrea Bolondi - manufacturers tend to outsource the production of concrete and entrust it to specialized companies who have product and process know-how. Manufacturers save on plant construction costs and obtain a quality product made by specialists, and this can make a difference in the implementation of structural applications such as tunnels, bridges and buildings of great height".

Innovation policies

Since competition in cement is based on price, Buzzi Unicem has focused mainly on innovation in the production process in order to reduce operating costs on par with product quality. Industrial investments in the period 2006-2012 equalled on average 280 million per year with a peak of over 800 million in 2008, partly due to consolidating the equity values (completion of the Dyckerhoff acquisition). Veronica Buzzi underlined, "The industrial aspect has been part of the company's DNA since the early years. It is said that when the Buzzi brothers went to Germany immediately after the war to purchase a kiln for the cement plant in Trino, they decided to buy two as they glimpsed the possibility of economies of scale and thus to be more efficient than competitors. Their interest in the industrial dimension was such that they gave a name to the two horizontal kilns in Trino: one was called PAVO, which stands for patience and determination, the other FOCO, which stands for strength and courage".

Buzzi Unicem has a technical division that in collaboration with strategic suppliers deals with the planning and design of plants, which are implemented with a high level of customization. Gigi Buzzi observed in this respect, "Over the years we have developed specific know-how in the final design of the plant and in the selection of suppliers. At the international level, we have mainly worked on both the modernization and the construction of greenfield plants. This has allowed our engineers to gain specific knowledge not only in design but also in the management of the construction and installation of plants. A distinctive element of our management is the relationship we have established with strategic suppliers, with whom, in some cases, we have developed innovative technologies. About 25 years ago, we implemented with the French supplier Fives Cail Babcock (FCB) an innovative cement mill that allowed increasing productivity by around 25% compared to other systems and is still widely used in the sector".

Plant technology for cement production has undergone a significant evolution through the development of electronics and software. Control systems have been developed that monitor the mixing of materials during processing to optimize productivity and the quality of cement. In the last two years, new process technologies have been developed at the international level that enable more environmentally friendly cement production, reducing the use of clinker in favour of alternative combustibles resulting from the

recycling of municipal solid waste in place of petroleum coke. This made real-time monitoring of the production process even more important and targeting interventions to properly regulate the plants. Buzzi Unicem has developed a number of specialized competencies in production and combustion supervision and management, thanks to the experience gained by technicians in various production environments that required obtaining a good product starting from raw materials and combustibles that differ considerably. Some categories of customers, such as manufacturers of prefabricated components (for bridges, buildings, roofs), are very mindful of the chemical characteristics of the product, requiring high-quality products and, having found a supplier who offers these, are often unwilling to change.

Investments in product innovation are primarily aimed at developing cement mixes and concrete formulations for niche applications. Dyckerhoff distinguishes itself in this sector, a world leader in cement for oil wells, the so-called 'oil well cement', which is injected into the soil while the well is being built and which will then form the walls. The German company has a plant dedicated to this product - characterized by high unitary value and high margins - which it exports all over the world.

There are also niche products in the field of special ready-mix cements that have high technical applications such as Solidur, a cement mix with special hardening properties that is mainly used in hydraulic engineering and in the construction of impermeable subsurface barriers and for special foundations.

In the concrete field, product research is an important differentiating factor. Buzzi Unicem develops custom mixes for specific uses according to customer needs, which have an incidence of 10-15% on revenues.

Governance

Buzzi Unicem is a family firm listed on the Milan Stock Exchange with large capitalization equity securities, the so-called "blue chip" stocks. The Buzzi family owns around 47% of all shares and around 56% of ordinary voting shares. The Board of Directors is currently composed of five executive members and eight non-executive directors, including five independent directors. The Dyckerhoff family have a representative on the board (until the 2014 shareholders' meeting there were two) and has always been involved in major strategic decisions. Pietro Buzzi underlined the strategic importance of good governance: "We viewed the IPO, which took place with the merger with Unicem, as an opportunity for management growth for the entire company. We pay great attention to the disclosure of financial information and the quality of this information. We have published sustainability reports for 12 years, which has become a communication tool that is highly appreciated by customers and the financial community. We wanted a large board of directors that includes truly independent directors who could help us make the right decisions, the board comprises entrepreneurs at the head of large international companies, academics and high profile professionals. They also have a role in evaluating and guiding the executive directors who are members of the family".

Despite the presence of independent directors and professional management, the company retains a distinctive family-firm structure: "We are a family business, and I think that this family structure has helped make a difference compared to other companies - highlighted Benedetta Buzzi - the relationship between family and business was very clear to us from the beginning. In decisions, the good of the company comes

always before that of individual shareholders. We have learned that you can work for the company if the company needs you, not vice versa. Another feature of our family management model is the pursuit of consensus and harmony that derives from the fact that we were born and grew up in large families. In large families, the children are accustomed to getting along in the search of a harmonious balance in everyday life, which they maintain when working together".

There are currently four Buzzi family members on the Board of Directors. After the deaths of Pier Emanuele in 1992 and Franco in 2011, and Sandro's exit from the Board of Directors in the Spring of 2014, the third generation is today represented by Enrico as Chairman of the group who is also directly involved in technological development and in industrial investments. The fourth generation is represented by Pietro and Michele, sons of Sandro and Executive Directors since January 2006, and Veronica, daughter of Franco, who is non-executive Vice Chairman, as she has no operational responsibilities in the company.

"Participation in the governance of the company is viewed in the service perspective and in terms of opportunities for personal and professional growth - observed Veronica Buzzi - we do not have family pacts and do not have a formalized pathway that regulates entry of family members into the company. It is up to the directors in office and the older members of the family to determine whether a member of the younger generation is suitable for working in the company and in what role."

The Buzzi family share a moderate lifestyle, as Luigi wanted and followed himself for many years; they are rarely seen in the media and maintain extreme confidentiality in the private sphere. Attachment to the company is shared by all the family and has deep roots: "Our father always spoke of the company with his family, taking care to leave out the concerns. My sister Benedetta and I since childhood always visited the company, maybe on a Saturday afternoon playing in his office, and this has helped to create a natural feeling of attachment to Buzzi - said Veronica - I try to do the same with my children, maybe they will not be working here, but I want them to be in contact with the company, to feel part of this enterprise and to cultivate in them the desire to help maintain and develop it".

The family's commitment to their territory of origin, Casale Monferrato, is tangible and constant. Luigi first and then his children have a direct and continuous relationship with local institutions, support many activities of social interest and have always weighted investment decisions and the rationalization of production capacity so as not to penalize the employment levels of the territory, where still today the company is the largest employer. "After the acquisition of Dyckerhoff, we had the possibility of transferring the headquarters to Germany - recalled Pietro Buzzi - where we would have benefited from a more competitive tax regime than the Italian, but the option was discarded because it would have penalized the territory of Casale".

Casale Monferrato has become internationally known because of the spread of malignant pleural mesothelioma, a particularly aggressive form of cancer that is caused by exposure to asbestos fibres. It is estimated that from the 70's to today, mesothelioma has affected over 1,200 people in Casale, this phenomenon is related to the presence of a company that owned a roofing factory using asbestos located in the Piedmont town. The Buzzi family decided to support the local community, deeply affected by this epidemic, through the establishment of the Buzzi Unicem Foundation, which funds scientific research in the field of mesothelioma with the aim of contributing to the development of new scientific knowledge and thus new therapies. The Foundation, chaired by Maria Consolata Buzzi,

eldest daughter of Sandro, has in the last decade sustained research activities for over 3 million euro enabling researchers to develop several important insights into the disease.

The link with the local community and the principle of 'giving back to the community' has been gradually implemented in the company's major operations. For example, a portion of land on which the old Alamo Cement plant stood has become a 'special' playground where children with disabilities can freely play. In Mexico, wells for water extraction were built that the local community uses to irrigate the land. Even in the most complex and most recently acquired contexts, tangible initiatives have been taken to improve the quality of life of workers and the community: near the Ukraine plant, for example, a nursery was created to enable young women to continue working and contribute to their family's income.

"We are convinced that there is a virtuous relationship between social performance and financial performance - stressed Veronica Buzzi - it is important to create a social reputation for the company that is recognized not only by the local community but also by those who work for you and have business relationships with you. If you are a responsible company, you can attract competent people more easily because they consider you a more credible partner that invests in people and helps them grow."

Competitive challenges

2013 was a watershed year for the company, which brought to the surface all the effects of the crisis that began in 2009. According to Michele Buzzi, "It was virtually impossible to imagine that the American and European markets, which together accounted for over 50% of group revenues, would simultaneously collapse. We thought that the efforts made to grow and become international would have shielded us from the crises of individual markets. But it was not so". Falling demand impelled the company to drastically reduce capacity utilization and absorb a significant reduction in operating margins while it was engaging in the integration with the Dyckerhoff group. Veronica Buzzi recalled, "We buffered the loss in profitability due to the good results obtained in the Russian and Mexican markets. Internationalization is one of the best defences against the cyclical nature of the industry". Expansion is a strategic option that is always on the family's agenda. Pietro has no doubts, "We need to continue growing, keeping in mind the aspects of solidity and caution that set us apart, but growth is vital for our group because it allows us to transfer our technical and commercial know-how and enables us to develop new competencies". On the other hand, the cement industry, as often happens in postcrisis periods, is witnessing stirrings of change: new players from emerging markets, such as China, may seek areas of development outside their domestic borders, while pressure is rising for the consolidation of companies operating in mature markets. An important signal in this sense emerged in April 2014 with the announcement of the merger between the top global players in the sector, Lafarge and Holcim, two familyfirms that will create a group with over 40 billion dollars in revenues and 120,000 employees.

The birth of a new industry leader opens up a series of new scenarios and competitive issues, as pointed out by a manager working in an international asset management company, "The industry could enter into a "hot" phase characterized by key players making significant acquisitions to strengthen themselves against the new industry leader. We are in a phase of moderate recovery after about four years of recession and

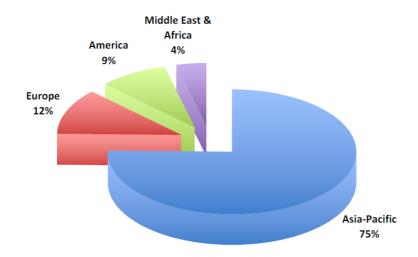
companies that have survived the crisis could therefore be an attractive proposition in terms of price for investors interested in extraordinary operations." Not all analysts agree with this view, as is clear from the words of the managing partner of a major investment bank, "An increase in size does not always lead to greater competitiveness as good quality targets are few and not for sale. The top players in the sector could effectively respond to the concentration of supply with organic growth based on the development of new products and investments in process innovation to achieve significant improvements in productivity".

Annex 1. Cement production in major producing countries (Million tons)

	2008	2009	2010	2011	2012	2013p	CAGR (08-13)
China	1388,4	1644,0	1881,9	2063,2	2137,0	2359,0	11,18%
India	185,0	205,0	220,0	270,0	239,0	272,0	8,01%
EU	251,8	201,3	191,0	195,5	159,2	157,2	-8,99%
USA	86,3	63,9	65,2	68,6	74,0	77,0	-2,25%
Brazil	51,6	51,7	59,1	63,0	68,0	71,9	6,86%
Turkey	51,4	54,0	62,7	63,4	63,8	70,8	6,61%
Russian Federation	53,5	44,3	50,4	56,1	53,0	55,6	0,77%
Japan	63,0	54,9	51,7	51,5	59,2	61,7	-0,42%
Korea, Rep. of	51,7	50,1	47,4	48,2	46,9	47,3	-1,76%
Saudi Arabia	37,4	37,8	42,5	48,0	43,0	48,0	5,12%
Indonesia	38,5	36,9	39,5	45,2	53,5	47,0	4,07%
Mexico	37,1	35,1	34,5	35,4	36,2	37,0	-0,05%
Germany	33,6	30,4	32,3	33,5	32,4	31,5	-1,28%
Italy	43,3	36,4	34,4	33,1	26,2	23,1	-11,81%
France	21,2	18,1	18,0	19,4	18,0	17,5	-3,76%
Canada	13,7	11,0	12,4	12,0	12,5	12,1	-2,45%
Argentina	9,7	9,4	10,4	11,6	10,7	11,9	4,17%
South Africa	13,4	11,8	10,9	11,2	13,8	14,9	2,14%
Australia	9,4	9,2	8,3	8,6	9,8	10,5	2,24%
UK	10,5	7,8	7,9	8,5	7,9	8,2	-4,82%
Total	2450,5	2613,1	2880,5	3146,0	3164,1	3434,2	6,98%

Source: Cembureau, 2014.

Annex 2. Consumption of cement by region (% of total volumes, 2012)



Source: "Global Cement", Marketline, 2012.

Annex 3. Top players in the cement and concrete sector

	Company/Group	Country of origin	Installed capacity (million tons/year)	N ° of plants	Turnover (€ '000)	No. of employees
1	Lafarge	France	225	166	15,830,000	58,031
2	Holcim	Switzerland	217	149	17,992,958	78,103
3	CNBM	China	200	69	11,050,212	121,657
4	AnhuiConch	China	180	34	5,644,688	43,785
5	Heidelberg Cement	Germany	118	71	14,277,300	51,966
6	Tangshan Jidong	China	100	100	1,750,317	18,066
7	Cemex	Mexico	96	61	11,319,809	43,905
8	China Resources	China	89	16	2,513,935	23,296
9	China National Materials (Sinoma)	China	87	24	5,736,130	56,325
10	China Shanshui	China	84	13	1,978,689	21,576
11	Italcemetienti	Italy	74	55	4,637,983	18,886
12	Taiwan Cement	Taiwan	70	n/a	3,173,040	10,409
13	Votorantim	Brazil	57	37	3,296,978	6,700
14	CRH	Ireland	56	11	18,665,000	76,175
15	UltraTechCement	India	53	12	2,827,167	12,089
16	Huaxin	China	52	51	1,487,794	12,904
17	Buzzi	Italy	45	39	2,889,611	10,894
18	Eurocement	Russia	40	16	2,000,000	2,500
19	Tianrui	China	35	11	956,504	6,996
20	Jayprakash (Jaypee)	India	34	16	2,272,412	n/a

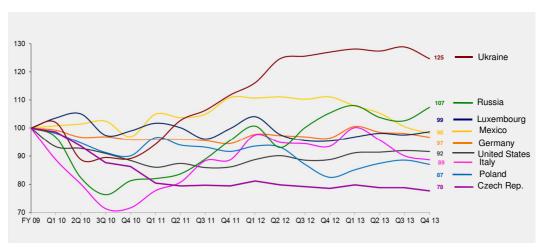
Data derived from the following sources: Global Cement (capacity, number of plants, 2011 data); Orbis and Bloomberg (turnover, number of employees, 2012 data).

Annex 4. Ready mix production (Million QM)

	2011	2012	2013
Austria	15,00	15,00	15,00
Belgium	19,00	23,70	22,50
Czech Republic	11,00	10,60	10,00
Denmark	4,10	4,00	4,20
Finland	4,60	4,10	3,90
France	59,00	55,00	54,00
Germany	71,30	67,90	67,20
Ireland (Rep. of)	2,80	2,80	2,80
Italy	75,10	58,70	46,60
Holland	16,60	14,20	11,80
Poland	43,10	34,80	32,10
Portugal	10,00	7,00	5,50
Slovakia	3,00	2,40	2,20
Spain	60,00	40,00	32,00
Sweden	5,00	5,00	0,00
UK	30,50	28,00	28,20
Total UE	430,10	373,20	338,00
Israel	12,00	13,00	14,50
Norway	4,90	5,10	5,00
Switzerland	12,10	12,10	0,00
Turkey	100,00	104,00	115,00
Total ERMCO	559,10	507,40	472,50
Russia	65,00	70,00	76,00
USA	270,00	310,00	330,00
Japan	123,00	128,00	138,00

Source: ERMCO, 2013

Annex 5. Trend in cement prices in the Buzzi Unicem markets of reference, base 100 (2009), changes recorded in local currencies.



Source: Buzzi Unicem

Annex 6. Comparison between Unicem and the Buzzi Cementi group in 1997

	Buzzi Cement (consolidated)	Unicem (consolidated)
Revenues (million €)	295.3	541.2
EBITDA	80.7	132.7
% EBITDA/revenues	27.3%	24.5%
Production facilities	5	13
Cement Capacity	4.2	9.7
Employees	1,584	2,579
NFP (millions of euro)	(59.3)	(131.2)
NFP (millions of euro)	(59.3)	(131.2

Annex 7. Comparison between Buzzi Unicem and Dyckerhoff in 2001

	Buzzi Unicem (consolidated)	Dyckerhoff (consolidated)
Revenues (million €)	1,446.5	2,443.0
EBITDA	447.3	446.4
% EBITDA/revenues	30.9%	18.3%
Production facilities	20	31
Cement Capacity	15.4	25.9
Employees	3,870	8,843

Annex 8. Revenues by geographic area

	2008	2009	2010	2011	2012
Italy	26%	26%	23%	20%	17%
Germany	19%	19%	20%	22%	21%
Luxembourg	3%	3%	3%	4%	4%
Netherlands	3%	3%	4%	4%	3%
Poland	5%	5%	5%	5%	4%
Czech Rep.	7%	7%	6%	6%	5%
Ukraine	3%	3%	3%	5%	5%
Russia	4%	4%	5%	6%	8%
USA	23%	23%	23%	20%	24%
Mexico	7%	7%	8%	8%	9%
Total	100%	100%	100%	100%	100%

Annex 9. EBITDA by geographic area (million €)

	2008	2009	2010	2011	2012
Italy	143.4	92.7	32.5	10.3	-5.9
Germany	102.7	116.3	76.3	90.3	72.2
Luxembourg	17.4	14.1	16.4	33.4	13.8
Netherlands	7.2	4.5	0.6	1.6	-5.5
Poland	70.0	31.2	33.4	36.9	21.8
Czech Rep.	73.2	44.2	32.8	35.2	25.4
Ukraine	49.9	-4.5	-10.5	6.9	15.8
Russia	173.2	42.1	39.7	65.7	96.1
USA	205.8	131.3	88.7	71.4	123.9
Mexico	79.9	69.9	77.2	82.6	97.5

Annex 10. Sales by product type

Sales by product, volumes	2008	2009	2010	2011	2012
Cement (thousand tons)	32,093	25,548	26,570	28,218	27,263
Concrete (cubic meters)	16,996	13,893	14,379	15,066	13,641
Aggregates (thousand tons)	12,280	10,031	10,651	9,708	8,642

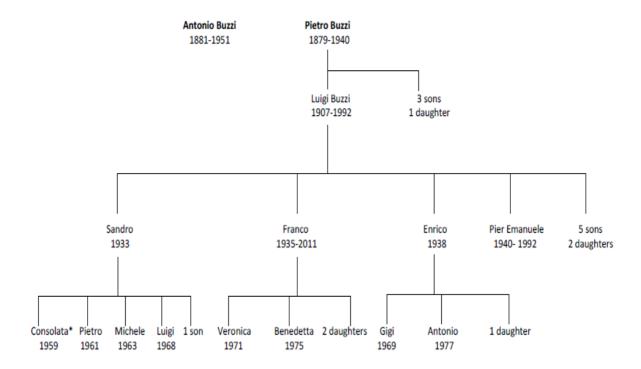
Annex 11. Consolidated Income Statement

(Amounts in thousand €)	2008	2009	2010	2011	2012	2013
Net Revenues	3,520,232	2,671,809	2,648,442	2,787,385	2,813,446	2,753,050
Change in inventories	18,934	779	-9,496	3,645	24,472	-4,905
Other operating income	97,799	137,841	108,091	100,305	76,165	107,405
Consumption of raw materials	-1,437,739	-1,105,156	-1,175,320	-1,246,303	-1,214,395	-1,137,536
Services	-761,305	-653,506	-669,596	-704,356	-706,712	-678,904
Personnel costs	-429,995	-420,828	-437,811	-427,313	-446,454	-466,695
Other operating costs	-85,251	-89,208	-77,286	-79,085	-91,451	-91,255
EBITDA	922,675	541,731	387,024	434,278	455,071	481,160
Depreciation and impairment	-225,003	-218,718	-386,706	-243,498	-258,027	-331,401
EBIT	697,672	323,013	318	190,780	197,044	149,759
Financial income	194,997	118,914	107,746	68,068	63,267	62,519
Borrowing Costs	-242,331	-206,750	-210,123	-173,487	-182,463	-162,022
PROFIT BEFORE TAXES	650,338	235,177	-102,059	85,361	77,848	50,256
Taxes	-179,557	-63,750	60,646	-30,532	-75,883	-79,233
OPERATING RESULTS	470,781	171,427	-41,413	54,829	1,965	-28,977

Annex 12. Consolidated Balance Sheet

						
(Amounts in thousand €)	2008	2009	2010	2011	2012	2013
Start	576,104	565,655	586,180	588,607	584,199	532,752
Tangible assets	3,237,587	3,426,008	3,496,805		3,228,005	
Intangible assets	15,130	14,113	11,282	10,245	12,425	14,129
Financial assets	393,746	315,318	293,659	275,184	206,457	177,006
Other activities	92,883	91,779	42,140	48,314	121,528	99,545
Total non-current assets	4,315,450	4,412,873	4,430,066	4,278,205	4,152,614	3,826,417
Inventories	382,623	387,061	394,760	404,480	437,565	408,378
Trade receivables	511,281	436,245	451,025	487,412	439,383	410,419
Financial assets	2,817	1,806	1,870	4,227	86,989	730
Cash and cash equivalents	578,694	696,965	396,459	592,028	556,193	554,745
Other	162,862	124,513	141,260	124,470	129,938	109,219
Total current assets	1,638,277	1,646,590	1,385,374	1,612,617	1,650,068	1,483,491
Total assets	5,953,727	6,059,463	5,815,440	5.890.822	5,802,682	5,309,908
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Share capital	123,637	123,637	123,637	123,637	123,637	123,637
Share premium	458,696	458,696	458,696	458,696	458,696	458,696
Other reserves	71,568	10,604	155,787	161,708	156,324	41,219
Retained earnings	1,847,756	1,910,690	1,782,407	1,824,264	1,694,273	1,642,079
Treasury shares	-8,286	-7,671	-6,986	-6,180	-4,768	-4,768
Minority interests	212,085	216,418	239,469	224,742	174,461	113,332
Shareholders' equity	2,705,456	2,712,374	2,753,010	2,786,867	2,602,623	2,374,195
			•			
Long-term loans	1,394,665	1,448,713	1,458,850	1,247,855	1,385,154	1,356,335
Derivative financial instruments	34,840	58,552	28,991	13,837	22,310	77,118
Employee Benefits	322,490	314,754	355,705	364,332	437,640	382,214
Other liabilities (provisions for risks and charges, deferred tax						
liabilities, other payables)	745,822	614,649	553,242	535,020	546,176	493,087
Total non-current liabilities	2,497,817	2,436,668	2,396,799	2,161,044	2,391,280	2,308,754
Current portion of non-current	<u> </u>	<u> </u>	<u> </u>			
liabilities	141,580	354,655	175,718	402,413	288,146	196,617
Short-term loans	10,039	7,789	2,198	78,560	70,685	-
Trade payables	310,429	265,667	278,576	263,597	244,713	230,333
Other liabilities (derivatives, treasury payables, provisions						
for other liabilities and charges, other payables)	288,406	282,310	209,150	198,341	205,235	200,009
Total current liabilities	750,454	910,421	665,642	942,911	808,779	626,959
Total liabilities	3,248,271	3,347,089	3,062,430	3 103 055	3,200,059	2 935 712
Total liabilities and	3,470,411	3,377,003	3,002,730	3,103,733	J,400,0J7	<u> </u>
shareholders' equity	5,953,727	6,059,463	5,815,440	5,890.822	5,802,682	5,309,908

Annex 13. Buzzi Family Tree



This chart names those family members who have worked or are working in the Buzzi Unicem group as employees and/or directors.

^{*} Consolata Buzzi chairs the Buzzi Unicem Charitable Foundation and is married to Giovanni Battista Auxilia who works in the company as part of the management team.

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