CATÓLICA LISBON

SCHOOL OF BUSINESS & ECONOMICS

EQUITY RESEARCH

Cimpor

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ABSTRACT

One of the biggest challenges in Equity Research is to combine all the existent theory regarding valuation with practical knowledge and insight in order to achieve reliable and as accurate as possible results. Throughout this dissertation this challenge will be constantly present in the search for theoretically supported criteria that will be responsible for the main assumptions for the estimation of Cimpor's share value.

Moreover, a comparison with a valuation from BESI as well as a sensitivity analysis of Cimpor's share price to some of the key variables of the model will be performed in order to test the robustness of the estimates of this work.

Preface

I would like to express my gratitude to Professor José Carlos Tudela Martins for his constant availability and valuable contribution; to the Global Banking and Markets team of Santander, where I did my curricular internship, for the know how transmitted; to Mr. Francisco Simão from Cimpor for all the explanations and clarifications about the company; to the analysts João Mendes from BESI and João Mateus from Millennium for all the information provided; to my colleagues from the Dissertation Seminars for all the positive and productive discussions, and finally to my family for all the support given.

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1- LITERATURE REVIEW

1.1- Introduction to Valuation

Valuation can be a very interesting and useful exercise for "several areas of finance as corporate finance, mergers and acquisitions and portfolio management" (Damodaran 2002).
Fernandez (2007) considers valuation as a key element of corporate finance and presents the several purposes of it: valuation of listed companies, buying and selling operations, public offerings, compensation schemes based on value creation, identification of value drivers, strategic planning and strategic decisions on company's continued existence.
Valuation contributes significantly for the efficiency of the markets since it enables the market for corporate control that will act as an "external mechanism to discipline managers when internal control fails to do so" (Sinha 2004).
Throughout the years valuation has been useful for several purposes as mentioned above. However, although estimated through quantitative methods one should bare in mind that valuation will always be subjective since it depends largely on the specific assumptions made by each analyst. Consequently, different results for the valuation of the same company should be expected as reflecting the different assumptions made during the process.

In the last decades several methods have been developed to determine the value of a company, each one of them focusing in clarifying some particular aspects of the valuation which according to Holt, Nokhasteh, Sullivan & Young (1999) are all, or at least the most important ones, mathematically equivalent, when calculated with the same underlying assumptions. That would imply consistency, comparison and uniqueness among the diverse valuations for the same company.

Even though new methods appear almost every year, it is possible to agglomerate them in four distinct groups: the Discounted Cash Flow (DCF); relative valuation, usually referred as multiples; contingent valuation or option theory; and asset-based valuation (Damodaran 2006). Asset based valuation methodologies as book value or liquidation value calculate the value of the company assets from a static perspective, not incorporating their "potential evolution, meaning that the value of the company lies in the balance sheet" (Fernandez 2007). This kind of approaches will not be studied in this work.

1.2- Discounted Cash Flow Approaches

The reasoning underlying DCF approaches is the same that is used to investment calculations regarding Net Present Value (Vernimmen 2005) with the difference that, instead of calculating the NPV of a project, we calculate the present value of a company. By discounting all its future cash flows at a “discount rate that incorporates the riskiness of the company we are able to determine the present value of the company” (Damodaran 2006).

In order to determine the present value, one needs to divide the forecasting period in two different stages (Ohlson and Zhan 1999): the first one with detailed forecasts about the upcoming years which is called the explicit period; and the second one, the terminal value that is derived from a perpetuity based in the assumption of a steady state from them onwards.

One of the key components in the calculation of the terminal value is the growth rate assumed. Slightly variations in this rate will affect substantially the value of the company since it usually represents more than 75% of the firm value. In the valuation of Cimpor the risk of over value or under value the company due to the assumption of the perpetual growth rate will be mitigated will the computation of an explicit period of 40 years.

Moreover, because DCF approaches rely on flows of cash instead of accounting-based earnings (Koller and Goedhart 2005) and because they allow us to analyse where the value is being created and where it is being destroyed, they have been widely used either among academics or practitioners.

The main DCF approaches can be divided into Equity or Firm Valuation as well as in Absolute or Return Based Valuation.

1.2.1- Equity and Firm Perspective

There are two perspectives to value a company through a DCF approach: the Firm Perspective, where one values all the assets and the Equity Perspective where only the equity of the company is valued.

Regarding the Firm Perspective there are three main methods (Fernandez 2007) – Free Cash Flow to the Firm (FCFF), Capital Cash Flow (CCF) and the Adjusted Present Value (APV).

The FCFF discounts all the expected future free cash flows to the firm before any payment to bond or equity holders at a weighted average cost of capital (WACC). In order to get the Equity value, the Debt value should be subtracted from the Firm Value.

$$EV = \frac{FCFF_1}{1+r} + \frac{FCFF_2}{(\llbracket 1+r)\rrbracket^2} + \cdots + \frac{FCFF_n + TV_n}{(\llbracket 1+r)\rrbracket^n} \qquad RV_n = \frac{FCFF_n \times (1+g)}{r-g}$$

Where:
$FCFF_n$ = Free Cash flow to the firm in period n
RV_n = residual value of the company in year n
r = cost of capital
g = growth rate

The CCF is equivalent to the FCFF (Ruback 2002) with the difference that it uses the tax shields as free cash flow available to equity providers – contrary to FCFF- but to compensate those cash flows are discounted at a pre-tax WACC. The choice among CCF or FCFF depends largely on their ease of use as well as on the type of valuation. For example, if the target capital structure is not expected to change overtime, a simple WACC can be perfectly used.

The APV, was introduced by Myers (1974) but has its origins in the work of Modigliani and Miller (1958 and 1963) and it values the company in several parts. The method starts by valuing the company as if it had no debt- which can be done by discounting the expected FCFF's at the unlevered cost of equity- and adding the financial effects of leverage in the company value – more specifically the positive value of tax shields as well as the negative value related to the costs of financial distress.
Attention must be paid to this trade-off (between tax shields and costs of financial distress) because that will determine the choice of an optimal capital structure since a firm should only continue to take on debt as long as the present value of tax shields is higher than the present value of the expected bankruptcy costs. Further below I will return to this subject.

$$EV = PV\ of\ the\ unlevered\ firm + PV\ of\ tax\ benefit + PV\ of\ Expected\ Bankruptcy\ Costs$$

Equity perspectives are direct valuation approaches since they compute directly the Equity Value instead of calculating the Firm Value and then subtract the market value of the debt. The two most popular Equity perspective methods are the Free Cash Flow to the Equity (FCFE) and the Dividend Discount Model (DDM) (Fernandez 2007).
FCFF might have advantage in dealing with the effects of financial structure because it is a pre-debt cash-flow. On the other hand, FCFE has to consider new debt issuances as well as debt repayments that can be much more difficult to predict then the optimal debt ratio, required for the WACC computation.

$$V_E = \frac{FCFE_1}{1+r_e} + \frac{FCFE_2}{([1+r_e)]^2} + \cdots + \frac{FCFE_n + RV_n}{([1+r_e)]^n} \qquad RV_n = \frac{FCFE_n \times (1+g)}{r_e - g}$$

Where:
$FCFE_n$ = Free Cash flow to equity in period n
RV_n = residual value of the company in year n
r_e = cost of equity
g = growth rate

Another popular method based on an Equity perspective is the DDM which has its origins in the studies of Durand (1957) who found a "link between stock prices and dividends stream present value".

However some studies do not support such link stating that the "stock price volatility is clearly superior to dividends volatility" (Shiller, 1981)

Moreover, the assumption that the pay-out ratios are stable is criticized by Damodaran (1994) who states that growing companies relatively to mature ones pay lower dividens since they have higher reinvestment needs, and require more financial flexibility.

1.2.2- Return Based Valuation

There are two main principles underlying the Economic Value Added: a company is only profitable if it earns a return on invested capital higher than the opportunity cost of capital and that wealth is being created when manager invest in positive NPV projects. (Cheremushkin, 2008).

In return based valuation methods, cash flows can be considered either normal or excessive. (Damodaran, 2010). Normal cash flows are the ones that earn the risk adjusted required return while excessive cash flows are those that earn returns higher or lower than the required return. This way they can be either positive or negative. Therefore, EVA measures the surplus of value created by one or more investments.

Although several times associated with earnings-based approaches, there are two main differences between return-based approaches and earnings-based. The differences are that the return of the investments is based on after-tax cash flows rather than on accounting earnings and that returns and cost of capital are presented in real terms instead of nominal.

The rationale underlying Dynamic ROE is very similar with that of EVA, the main difference is that it focuses in equity value, meaning the difference between the cost of equity and the return on equity.

Once again, if the manager is creating value to the shareholder, the difference between the return and the cost of equity will be positive, if he is not, it will be negative.

1.2.3- The Cost of Capital

In order to determine the cost of capital of a company, one needs to compute the cost of equity (Re), the cost of debt (Rd) and an estimate of the debt and equity weights in the capital structure, as well as the tax rate.

$$WACC = R_E \times \frac{E}{D+E} + R_D \times \frac{D}{D+E}(1-T)$$

However, the determination of the Re is not that simple. In fact, several problems arise when trying to determine the cost of equity (Re). The three big blocks of the Re are the risk free rate (Rf), the equity risk premium (ERP), and the beta, that in the Capital Asset Pricing Model (CAPM) developed by Sharpe (1964), based on the work of Markowitz (1959) measures the sensitivity of the security's return against those of a representative market index.

a) The Risk Free Rate

Damodaran (2008) states that, for an investment to be risk free, there can be no default risk associated with its cash flows and there can be no reinvestment risk in the investment.

It is commonly accepted the use of a long-term government bond rate as the risk free rate, although theoretically there should be a matching between the duration of the risk free asset and that of the cash flows. However, some problems arise regarding the determination of the risk free rate, either because there are no long-term government bonds or because they are not free of default risk. In the first situation one can do the valuation in a different currency – both the estimation of the discount rates and the conversion of the cash flows –, while in the second one the rate to be used has to be net of the default spread.

b) The Beta

As mentioned before, beta measures the sensitivity of the security's return against those of a representative market index, which is usually represented by the S&P 500 or another more appropriate representative index. However, it is argued by Macqueen (1980) that it might "not be a proxy of the efficient market portfolio since it contains diversifiable risk". Therefore, at least conceptually, the efficient market should be compounded by all the assets in the economy, in proportion to their value (Rosenberg and Rudd, 2002).

There are two popular and commonly used methods to determine the beta: the method of similars – where one uses an average of the betas of similar companies, which has the implied limitation of arbitrariness- and the Bayesian approach – that consists of a weighted average of the historical beta and a beta of 1.0, in order to reduce the historical dependence in the estimation of the beta.

Nevertheless, alternative approaches suggested by Rosenberg (1976, 1982) attempt to focus more on the specific characteristics of the firm, such as earnings, growth or size, and those of the specific industry.

c) The Equity Risk Premium

The ERP is the premium that investors demand for the average risk of stock investment instead of investing in risk-free assets (Damodaran 2008). The use of expected risk premiums (Fernandez 2008) or estimations from historical premiums and implied premiums (Damodaran 2008) varies among the academic community.

The ERP is a controversy subject since there is no agreement of whether it should be adjusted for country specific risk (can be political, social, or business related) or not. The biggest part of the analyst solves the country specific risk problem by adding a risk premium in the discount rate, which is not accepted for some academics. Academics' argument is that the specific risk of the country can be diversified away with globally diversified portfolios (Stulz, 1999) given that the risk is uncorrelated across markets and therefore the market should not reward that diversifiable risk. Those that reject the extra premium in the discount rate argue that the risk of the country should be reflected in the cash flow projections (James and Koller, 2000) – by computing different scenarios and allocating them specific probabilities.

Damoradan (2008) is very critical about this approach. He argues that country risks are correlated and consequently not diversifiable and therefore one should add a country premium in the discount rate. Besides, he states that creating different scenarios for the cash flows only generates an expected value, but that value will still be risky because of its volatility, concluding that such an approach would not solve the problem associated with investing in riskier markets.

I will return to this subject when discussing cross-border valuation, particularly in emerging markets.

1.2.4- WACC and APV

As mentioned before, despite the most used DCF valuation is still FCFF - a WACC based approach- some considerable research has been done to develop a very interesting alternative method, the APV.

The reason why academics felt the need to develop the APV approach is not only because it provides transparent information to the manager, since he can see all the relevant components of value in the analysis but also because it "allways works when WACC does, and sometimes when WACC does not", since it requires fewer restrictive assumptions (Luehrman, 1997). The idea underlying APV is the same of the sum of the parts (SOTP) commonly used to value separately each country or region where the firm operates, even if the WACC is used in each one of them in the sense that it also values each component of the company separately.

Some academics argue that the WACC is suitable only for the "simplest and most static capital structures" (Luehrman, 1997), while the APV is easier to apply in a non-perpetuity situation because it "does not require the market debt ratio or the corporate tax rate to be constant", that are among the major assumptions of WACC (Sabal, 2007).

One of the main issues regarding APV has to do with the discount rate to be used in tax shields. "Academics agree that the rate to be used should reflect the riskiness of the tax shields, but they do not agree on how risky they are" (Luehrman, 1997). The most common approach is to use the Kd as the discount rate which implicitly assumes that they are as risky as interest and principal payments. However, this approach is not accepted by Luehrman who argues that there "might be situations where as company can meet its debt obligations but can not use tax shields" which means that the rate should be upwards adjusted to reflect this risk.

Nevertheless, WACC is still the most used method because of its simplicity and because of the fact that many firms have a target debt ratio which supports analysts' decision. Moreover, estimating the costs of financial distress necessary to the APV approach might not be a very objective and consensual exercise.

Although it is difficult to defend which one of these two approaches is the better, I would argue that the more appropriate to be used in each case depends largely on whether the firm has or not a target debt ratio.

1.3- Relative Valuation

Relative Valuation also known as multiples valuation is a method where the value of a company is computed from the value of some comparable companies and the use of a common variable as earnings or EBITDA, among others, depending on what is more relevant for each situation. "Relative valuation implicitly assumes that market prices companies efficiently" (Damodaran 2002).

When proceeding to a multiples valuation, by trying to understand why some multiples of one company are higher or lower than those of other companies, managers can have insights into the key factors that create value in a certain industry (Goedhart, 2005). Such an approach can also improve the forecasts to be used in a DCF valuation. Therefore, relative valuation can have a very important role to complement a fundamental valuation.

Moreover, one of the most important reasons why such valuations are so popular is because they are very "easy and simple to comprehend" (Liu, 2001).

The choice of the peer group is a critical factor to perform a good valuation. Besides the industry, business and countries where they operate, it is important to choose companies with "similar prospects for ROIC and growth" (Goedhart, 2005). The use of forward-looking multiples instead of historical figures will also contribute to a better valuation (Goedhart, 2005 and Liu, 2007).

Among the big number of multiples developed in the last decades, two of them are more commonly used than the other: PER (price to earnings) and EV (enterprise value) –based multiples.

<u>1.3.1- PER and EV based multiples</u>

The PER (price to earnings) is often criticized by academics because they argue that it is strongly affected by the capital structure and is too dependent on earnings, that might include non-operating items or extraordinary events. Therefore they prefer the Enterprise Value to EBITA because "one time events are not included and are harder to be influenced by the debt ratio" (Goedhart, 2005). Nevertheless EBITA still has some limitations as the fact that it does not consider working capital requirements changes or capital expenditures (except when equal to depreciation).

On the other hand, Liu (2002) found evidence that valuations based on earnings forecasts would be more accurate and accountable for lower price deviations than those based on EBITDA. Fernandez (2002) concluded that to some industries, different multiples would be more appropriate than to others.

There is no consensus regarding which is the best multiple to be used, and it would not make much sense since each one has its own advantages and limitations that depending on the company to be valued might reveal to be more or less appropriate.

<u>1.4- Option theory</u>

The contingency claim valuation is related to the topic of real option, which according to Vernimmen (2005) is a very important valuation method for firms whose value depends largely on investment flexibility and is particularly relevant to value individual projects or business. Luehrman (1997) states that this approach is particularly important for fast growing companies because opportunities are their most valuable asset.

To value those options the Black-Scholes and the Binomial model are the most popular methods. Nevertheless, different valuation methods for marketable and non-marketable options are used, as for example those given to managers. (Damodaran 2002)

Since this approach will not be used to value Cimpor, it will not be further developed in this work.

1.5- Cross border Valuation

The reasoning and principles underlying a cross-border valuation are exactly the same as those used to value a domestic business or company. Nevertheless, when performing such a valuation, there are some issues that deserve particular attention.

Whether to deal with the currency conversion by forecasting exchange rates, converting the cash-flows and discount them at the domestic discount rate or by incorporating the expected exchange rate in the rate that will be used to discount the foreign currency cash flows (Kester, 1997) might depend on how sensitive the business is to future exchange rates. If the business is particularly sensitive to changes in the exchange rate it might be better to forecast foreign currency cash flows and then convert them using a forecasted exchange rate.

Another relevant issue is how to adjust to the country specific risk. Most academics consider that incorporating the risks in the discount rate by adding a premium might lead to inaccurate valuations since the premium to be used is almost impossible to determine. Besides, diversifiable risk should not be rewarded by the market and it will be better handled in the expected cash flows with a weighted probability scenarios approach. This is a key point in the discussion as the main argument of those who defend a country risk premium is that emerging markets are not uncorrelated with each other, which means that the risk cannot be diversified away. Moreover, the cash-flow analysis can also have an advantage over the country risk premium approaches since they provide a more "analytical and robust perception of how to create value" (James and Koller, 2000).

Tax rate is another important subject. The way companies treat them can be classified in two ways: the use of a worldwide tax credit system (Kester, 1997), where the firm ends up paying the highest rate of the two countries; and the use of a territorial tax exemption system (Kester, 1997), where the foreign marginal corporate tax rate is the one to be used.

At last but not the least, the methodology to be used also gains an extra importance when dealing with cross-border valuations. Due to the complexity of all the financial arrangements implicit in those valuations, a simple WACC that fits all countries might be too simplistic. Probably a sum of the parts valuation is more adequate in these cases. (Kester, 1997).

1.6- Cyclical Companies

The cement industry is considerably exposed to the countries' GDP and because of that some extra care must be taken (Goedhart, 2005) in valuating companies in this industry. "Even the largest and mature firms' revenues are highly volatile and dependent on the economic cycle" (Damodaran 2009). Since these companies have considerable fixed costs (operating leverage) the volatility in the operating income will be higher than in revenues. Moreover, because the majority of those firms carry large amounts of debt in their capital structure, the volatility in net income will be even greater than in the operating income. (Damodaran 2009)

One common mistake when valuing cyclical companies is to take the current year as the base for all the valuation, ignoring the rest of the cycle, which will obviously lead to overvaluation if computed at the peak, and undervaluation when computed at the bottom of the cycle.

Another common error when performing the valuation of these companies is to normalize the earnings while ignoring the normalization of the capital expenditures, working capital or cost of financing. (Damodaran 2009)

One possible alternative to valuate these companies is to forecast the whole economic cycle. However, it might be a very subjective exercise with a very limited reliability.

To value Cimpor an explicit period of 40 years will be computed in order to avoid an excessive influence of the current economic cycle in the final value of the company. This will enable the model to mitigate over time the errors resultant from positive or negative deviations from forecasts due to the economic cycle.

2- COMPANY PRESENTATION

2.1- Cimpor Overview

Cimpor is a typical cement company that in spite of being based in Portugal has a great exposure to emerging economies. Nowadays the company operates in 12 different countries, 10 of them emerging ones.

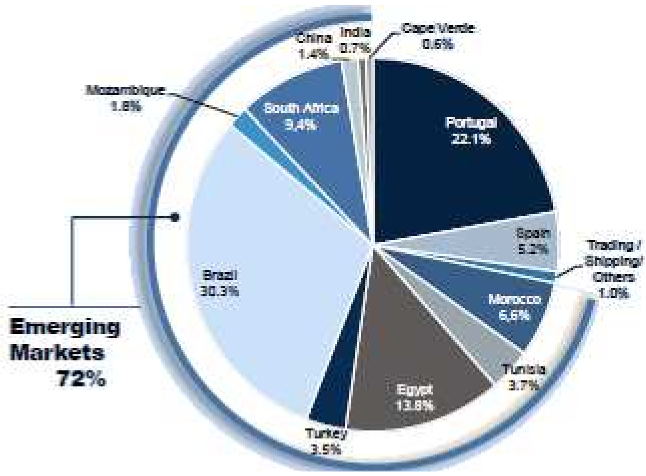
Source: Company report

Cimpor – Cimentos de Portugal, SGPS, SA was founded in 1976 resulting from the merger of six companies and it was initially owned by the Portuguese Government. Then, by 1996, the company was converted into a holding company.

The Group is organized by business areas – each one corresponding to one of the countries where the firm operates- and then agglomerated by five different regions: Brazil, Mediterranean Rim, Iberia, Southern Africa, and Asia.

While the holding company, Cimpor – Cimentos de Portugal, SGPS, SA is responsible for the strategic planning of the internationalization of the company as well as for the global management of the different areas of business, Cimpor - Portugal, SGPS, SA is responsible for the domestic operations and Cimpor – Inversiones, SA is a sub-holding that acts as a platform for the internationalization process of the company.

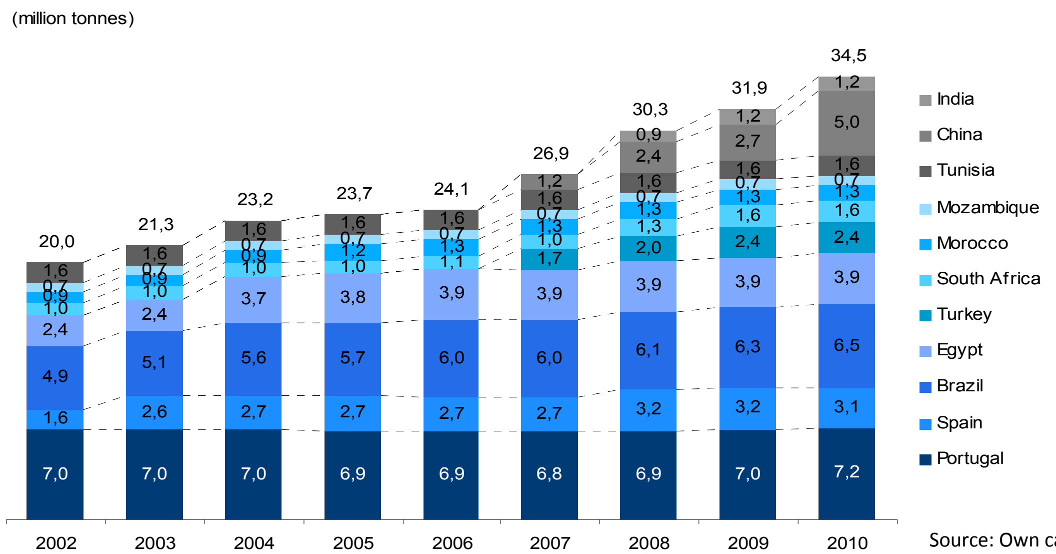
One of the key factors of the company's success has been its geographic diversification, particularly its great exposure to emerging markets that already accounts for 72% of the EBITDA.



Source: Company presentation

2.2- Capacity Evolution

In order to be increasingly exposed to emerging markets Cimpor has consistently augmented its cement production capacity. Since 1998 the company as gone from 12.6 to 35.4 million tones of capacity (cement with own clinker). The tendency is to keep capturing growth opportunities in emerging markets namely in Asia, in Southern American countries and in coastal African countries like Mozambique. The graphic below illustrates the concern of Cimpor of increasing its capacity to benefit from scale and new opportunities.

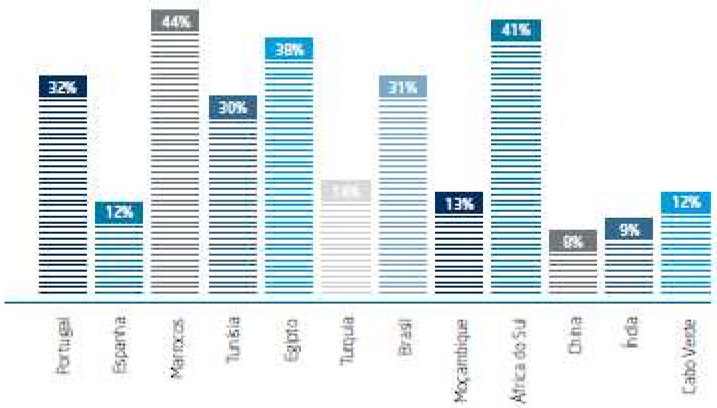


Source: Own calculations

2.3- EBITDA margin

Regarding EBITDA margins Cimpor is in the top of the industry with an impressive 28.1% while the rest of the global players are between 18% and 25%. There are some reasons that help to explain this phenomenon: the presence in profitable markets as well as the focus on cements production (which is by far the most profitable segment of the sector) instead of ready-mix concrete (not so profitable but usually with more weight in the total sales of the other players). The graphic below provides a clearer insight of the different contributions in terms of EBITDA margins of the countries where the company operates.

EBITDA Margins

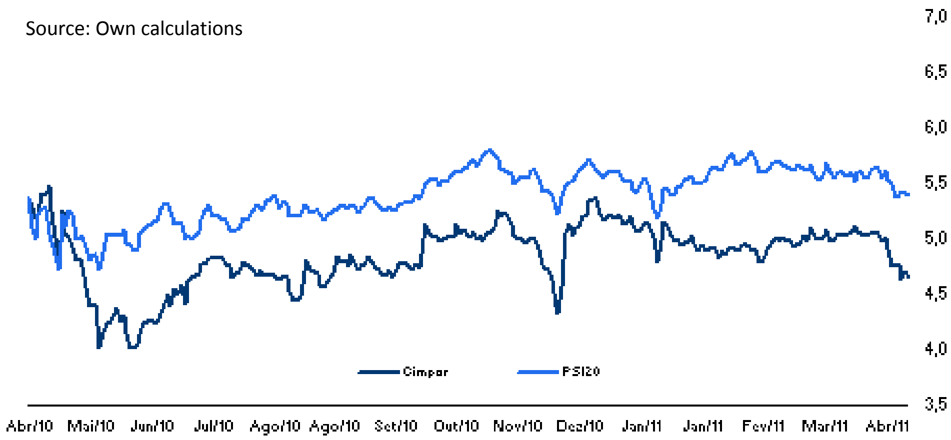


Source:
Company report

In terms of costs, the company is subject to fluctuations of both fuel and electricity costs, which in the year of 2010 have increased 35% and 20% respectively. In order to be less exposed to such fluctuations, Cimpor has been utilizing different types of alternative fuel even though they are still a small component of the total fuel used. From 2009 to 2010, the weight of these two costs in the total costs of the company increased from 23% to 27%.

2.4- Share Price Performance

Regarding Cimpor's share price performance in the last year, it can be noticed that it was highly correlated with the PSI20 with two main periods deserving a special attention: the first is the decline in April that started after the rejection of the acquisition offer by Companhia Siderúrgica Nacional and was reinforced after the 2009 results announcements and the second is the decline in November 2010 after the announcements of the 3Q results and consequent recovery after the presentation of the new growth strategy and investment decisions.



2.5- Shareholder Structure

The shareholder structure of Cimpor has been a target of a big transformation since December 2009, when CSN (Companhia Siderúrgica Nacional), a steelmaker Brazilian company made an offer to acquire Cimpor by the price of 5.75/share.

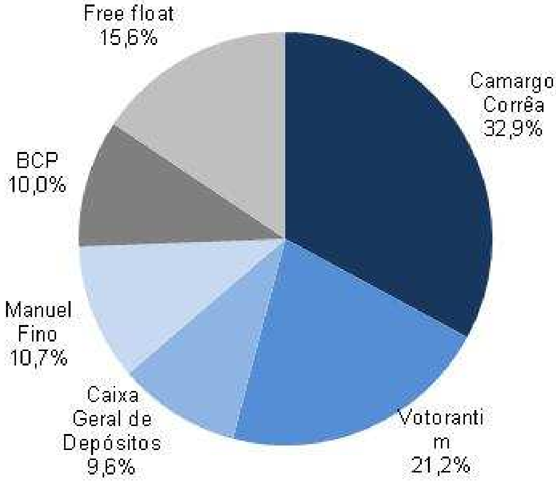
Before the offer from CSN the company's main shareholders were: Teixeira Duarte, Lafarge, Manuel Fino, BCP, Caixa Geral de Depósitos, Bipadosa and Cinvest with 18,9% of free float.

However, after the board decided to reject the offer, two other companies came into scene: Votorantim and Camargo Corrêa.

Votorantim signed an agreement with Caixa Geral de Depósitos where common goals have been established. Such goals include the maintenance of asset growth, investment grade rating as well as corporate independence. The agreement is valid for ten years and the combination of both shares is used to determine the controlling stake of the company. The idea behind the agreement was to promote a stable shareholder structure.

Due to the fact that Manuel Fino has a call-option over the shares sold to Caixa Geral de Depósitos (9,6%) that percentage is also imputable to compute his controlling stake of the company.

Source: Company presentation, own calculations



Problems have emerged because of this new structure where the two Brazilian companies own more than 50% of Cimpor. There is the chance that some alterations in Brazil operations might occur forced by the competition authority, CADE, in order to prevent imperfect competition in the regions where concentration issues are identified, which according to the Ministry of Finance happens when there is more than 20% of joint market share.

By the time this report was written, Cimpor had signed an Agreement (APRO- *Acordo para Prevenção da Reversibilidade da Operação*) with CADE where they have compromised to keep the *status quo* of their Brazilian operations until CADE reaches a final decision.

3- THE INDUSTRY

3.1- Overview

Cimpor is a classic cement player with its core business relying in the activity of producing and selling cement. As most of the other major players, they also produce concrete and aggregates in a vertical integration optic.

Before presenting a deeper analyse of the industry, there are some key points relevant that should be highlighted. The fact that it is a capital-intensive industry has some implications for the companies operating in the sector. An example of that is the exhaustive planning and precautions that must be taken before any investment decision since it will take years to recover. Quality or any other type of differentiation is very limited since the product is quiet homogeneous. Moreover, it is a very mature product with more than two centuries of existence and clearly linked with GDP.

Furthermore, due to the high transportation costs associated with the business, cement is not easily traded when compared to other commodities, which means that very different prices are observed in the different countries or regions. Regarding this issue it is interesting to notice that among the traded cement - which only accounts for about 6% of the total cement demanded - the global top five companies are responsible for 50% of it, which supports the theory that only a global player can create value from trading strategies.

In this section the cement industry will be presented, starting with an explanation of its value chain followed by an analysis of the industry structure, their competitive forces, and the pricing process.

3.2- The value chain

The value chain is composed by four main stages. The first stage is the raw materials procurement with the mining for clay, sand and limestone and the grinding for the mixture. The second stage consists of the clinker production through the heating, dehydration, calcification and cooling. The third stage is where the cement is produced with the mix of clinker with gypsum followed by the grinding and storage. The fourth and last stage is the distribution that can be done by truck, ship, train, etc.

In order to achieve a good margin throughout the whole process, companies need economies of scale; size is key in the industry. Consequently, it has been observed a clear tendency towards consolidation and integration as the top 10 market share has increased from 16% in 1988 to about 50% in 2010.

Typically cement companies vertically integrate to keep the oligopoly profits of the cement business and to defend themselves from concrete players so that they are not able to gain market power.

Regarding consolidation, there are several reasons that attract companies to do so. Companies want to diversify; they do not want to be too dependent on one limited market so they expand to reduce risk. Another important reason is that this is an industry with an important learning process and established companies can have some advantages in sharing best practises between the different regions where they operate. At last but certainly not the least, by expanding to emerging countries, companies can access very attractive markets not only in terms of size but also in terms of profitability margins.

3.3- Industry Structure

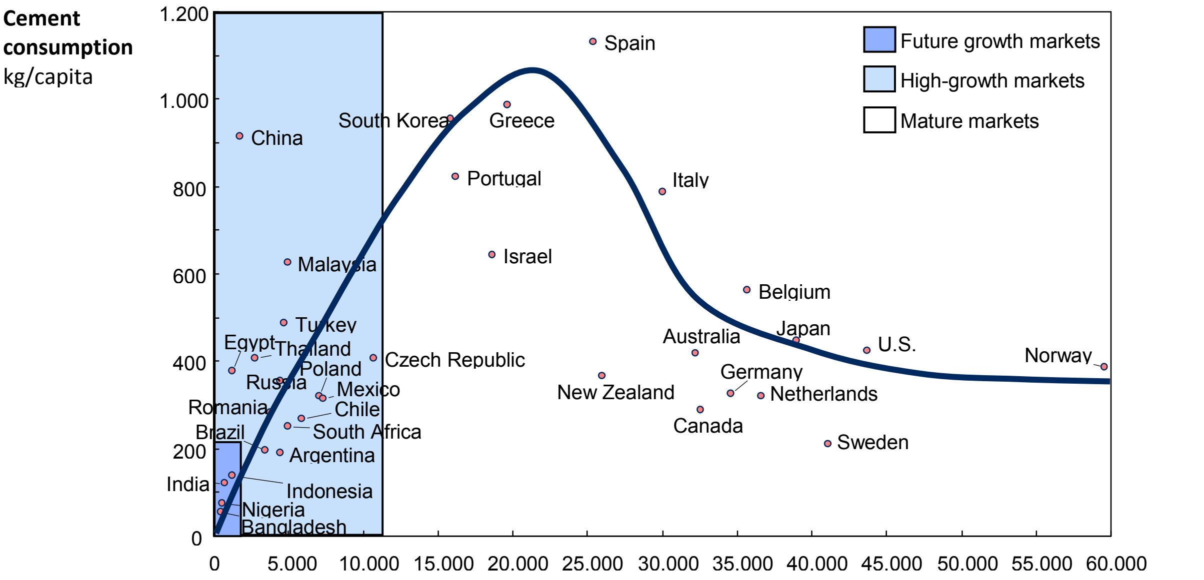
The cement industry is tightly linked with the GDP as well as with the population growth, meaning that the current stage in the development process of one country is very useful to determine market stage of the cement industry.

One can expect that countries with low levels of GDP per capita and in the early stages of infra-structure development to became, in the long-term, high demanders of cement. Most of African countries but also some Asian ones are good examples of *future growth markets*.

High growth markets are most of the times emerging countries with medium levels of GDP per capita and with several infrastructure projects. The most typical examples are countries like Brazil, China, Egipt, Turkey, etc. These countries constitute the large majority of markets where Cimpor is exposed.

Finally, *mature markets* are those with high GDP per capita levels and where construction of infrastructures has already peaked and therefore no growth or negative growth is expected. European and North American countries are the obvious examples.

INCOME AND CEMENT CONSUMPTION RELATIONSHIP



Source: Global Cement Report, 7th edition

Nevertheless, there are other important factors influencing the needs for cement consumption. A country with density of population and high rates of urbanization will probably need to build more infrastructures than a country with low levels of population density where individual houses can be preferred. Also, countries like Sweden will present low levels of cement consumption due to the availability of other resources like wood.

Regarding the weight that each of these markets has in the current world cement demand, it must be noticed that emerging markets are by far the most important ones since they represent around 80% of the demand against 20% from developed countries. It can be very easily observed in the major players like Lafarge, Holcim, Cemex, and even Cimpor that emerging markets account for around 2/3 of their sales. However, China must be treated as a single case since they are responsible for 50% of the world cement demand. It is expected that Chinese suppliers will pressure prices internationally once they start expanding from China due to their much lower plant construction costs.

3.4- Competitive Forces

The competitive forces in the cement industry create a very attractive environment for the companies who are already established as major players.

New entrants are not a serious threat because existing players have enormous advantages related to scale and scope economies. Another constraint is the amount of capital required as well as the time and money spent in approval processes.

Suppliers also have limited influence. The companies need mostly two types of inputs: energy and raw materials. In terms of energy, the liberalization of the market has lead to a decrease in prices, the year of 2010 was an exception, due to higher competition at the same time that plants are becoming more and more efficient. In terms of raw materials, the cement plants are suppliers' major clients, which reduce their bargaining power.

There is not a clear substitute of cement. Eventually, in some cases steel might be a good substitute. However, because of the rising steel prices, cement is becoming more attractive.

In terms of customers, the vertical integration observed in most of cement producers has given them more power since it enables them to control the distribution channels. The fact that the price is determined at a local basis also limits customers' bargaining power.

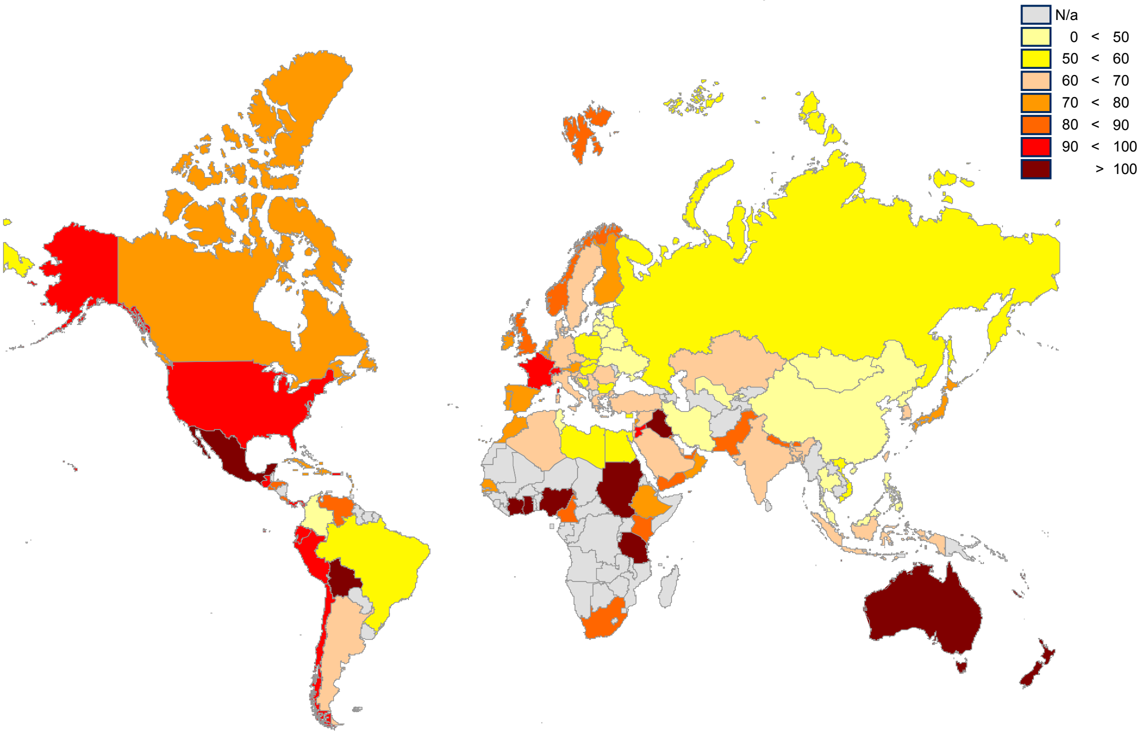
At last, the industry rivalry can be considered as moderate since oligopolies are commonly observed in most of the markets with limited levels of competition. The conduct of the major players is also relevant to keep healthy margins.

3.5- Price

As mentioned before, cement is too expensive to transport from long distances which means that its price is determined through a supply/demand relationship at a local basis.

Therefore one can expect to observe very different prices in the different countries reflecting, among other things, the intensity of competition in those markets.

THE DIFFERENT PRICES AROUND THE WORLD - Ex-Factory Prices in $/ton



Source: OneStone Consulting

By analysing the figure above, one can notice that there is a considerable difference in prices practiced in China and in the prices of the other countries, which becomes even more relevant when the country in question in responsible for 50% of the world cement consumption.

The reasons are basically two: the lower costs of their plants as well as the high number of players competing for the Chinese market.

However, in the rest of the countries there are also important factors that influence the cement price. The control of channels and import terminals can have an effect on prices as well as protectionist regulations can prevent efficient prices due to the lack of competition. A country with a weak currency can also be less threatened by imports since they become a less attractive investment target. Therefore, the countries where higher prices are practiced are the ones more consolidated and integrated where barriers of new entrants or substitutes are higher.

4- VALUATION ASSUMPTIONS

4.1- Methodology

Cimpor's equity value will be determined by a SOTP (Sum of the Parts) valuation through separate WACC-based DCF approaches for each of the countries where Cimpor operates. This methodology is quite reasonable for Cimpor since the company has a target D/E ratio of 50% which is not too far from their current level.

Therefore, the FCFF's of each country will be separately calculated and then discounted at a specific WACC that reflects the risks of each country. To reach the EV for each of the countries, both the FCFF's and the WACC's will be computed in Euros.

Moreover, in order to prevent cyclicality issues - which can be of a significant importance in the cement sector - to have an excessive weight in the final value of the company, the model will be provided of an explicit period of 40 years supported by some macro-economic assumptions regarding inflation, exchange rates, GDP growth, population growth, and cement consumption. By the end of the explicit period- 2050- all the relevant items are expected to be stable from then onwards, which means that the computation of the terminal value will be supported by a growth rate that has already stabilized in the last years of the explicit period.

4.2- Wacc

As mentioned before, the FCFF's will be computed in Euros which means that, in order to prevent consistency, the discount rate to be used must be also be in Euros.

In accordance with the Literature Review chapter, the cost of capital was computed based on the CAPM.

Therefore, the first thing to determine is the Euro risk free rate which was assumed to be equal to the 10-year German bonds of 3,16%, for the reasons mentioned in the chapter referred above.

In terms of the Equity Risk Premium used, it has been historically between 5% and 5,75% in developed markets however the tendency is to use slightly higher values. Damodaran defends an ERP of 5% for developed economies while Bloomberg uses a 5,75%. The model will be slightly more conservative than Damodaran in order to be sensible to current conditions and assumes a 5,5% reference market premium. After that it was added a country specific risk premium to the reference market premium that was extracted from Damodaran source and it varies from the 0,38% in Spain to 6% in Mozambique. Due to the recent sovereign debt crises Portugal already requires a premium of 1,28%.

The Beta of 1,1 is derived from an industry unlevered Beta of 0,82 from Damodaran which is then leveraged again at the company target D/E ratio.

In order to calculate the cost of debt one needs to determine both the Euribor and the spread the company pays to finance themselves. It was assumed a Euribor of 2,84%, which is derived from an average of the Euribors expectable for the next ten years according to the spot and forward market from Bloomberg.

Although the company has historically financed themselves with spreads between 2% and 2,5% for maturities of 3-5 years, they currently need higher values than that between 3,5% and 4%. The model will assume a spread of 3,5% as it is expectable that credit conditions will slightly improve in few years.

Regarding the D/E ratio it is assumed to be the company's target value of 50% as they have been rapidly approximating from this value in the last years while the tax rates assumed are the current rates of each country.

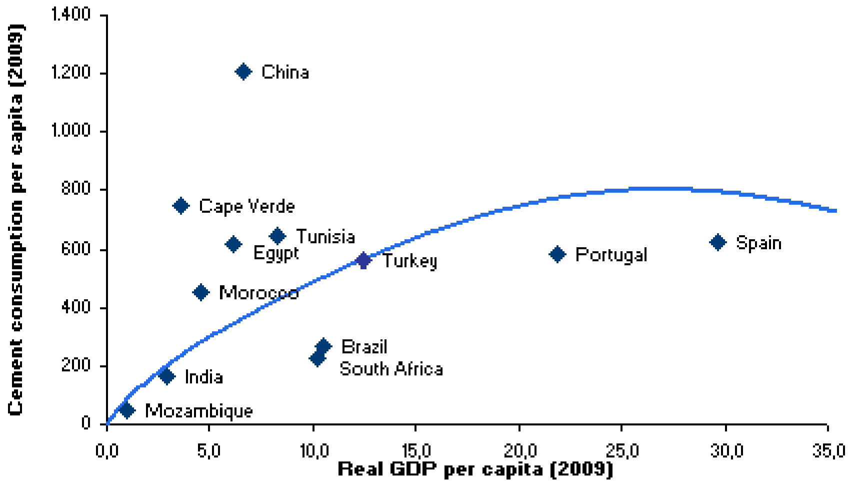
WACCs												
Cost of equity	**Portugal**	**Spain**	**Brazil**	**Egypt**	**Turkey**	**S. Africa**	**Morocco**	**Mozmb**	**Tunisia**	**China**	**India**	**C. Verde**
Risk free rate	3,16%	3,16%	3,16%	3,16%	3,16%	3,16%	3,16%	3,16%	3,16%	3,16%	3,16%	3,16%
Local risk free	**3,16%**	**3,16%**	**3,16%**	**3,16%**	**3,16%**	**3,16%**	**3,16%**	**3,16%**	**3,16%**	**3,16%**	**3,16%**	**3,16%**
Equity Risk Prm.	5,50%	5,50%	5,50%	5,50%	5,50%	5,50%	5,50%	5,50%	5,50%	5,50%	5,50%	5,50%
Country premum	1,28%	0,38%	3,00%	3,60%	4,13%	1,73%	3,60%	6,00%	2,63%	1,05%	3,60%	4,00%
Local mkt premium	**6,78%**	**5,88%**	**8,50%**	**9,10%**	**9,63%**	**7,23%**	**9,10%**	**11,50%**	**8,13%**	**6,55%**	**9,10%**	**9,50%**
Unlevered beta	0,82	0,82	0,82	0,82	0,82	0,82	0,82	0,82	0,82	0,82	0,82	0,82
Levered beta	**1,1**	**1,1**	**1,1**	**1,1**	**1,1**	**1,1**	**1,1**	**1,1**	**1,1**	**1,1**	**1,1**	**1,1**
Cost of equity	**10,69%**	**9,67%**	**12,43%**	**13,61%**	**14,22%**	**11,22%**	**13,23%**	**15,80%**	**12,16%**	**10,55%**	**13,08%**	**13,75%**
Cost of debt	**Portugal**	**Spain**	**Brazil**	**Egypt**	**Turkey**	**S. Africa**	**Morocco**	**Mozmb**	**Tunisia**	**China**	**India**	**C. Verde**
Euribor	2,84%	2,84%	2,84%	2,84%	2,84%	2,84%	2,84%	2,84%	2,84%	2,84%	2,84%	2,84%
Spread	3,50%	3,50%	3,50%	3,50%	3,50%	3,50%	3,50%	3,50%	3,50%	3,50%	3,50%	3,50%
Cost of debt	**6,34%**	**6,34%**	**6,34%**	**6,34%**	**6,34%**	**6,34%**	**6,34%**	**6,34%**	**6,34%**	**6,34%**	**6,34%**	**6,34%**
WACC	**Portugal**	**Spain**	**Brazil**	**Egypt**	**Turkey**	**S. Africa**	**Morocco**	**Mozmb**	**Tunisia**	**China**	**India**	**C. Verde**
Target D/E	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5
Tax rate	29,00%	30,00%	34,00%	20,00%	20,00%	28,00%	30,00%	32,00%	30,00%	25,00%	34,00%	28,00%
WACC in euros	**8,63%**	**7,93%**	**9,68%**	**10,76%**	**11,17%**	**9,00%**	**10,30%**	**11,97%**	**9,59%**	**8,61%**	**10,12%**	**10,69%**

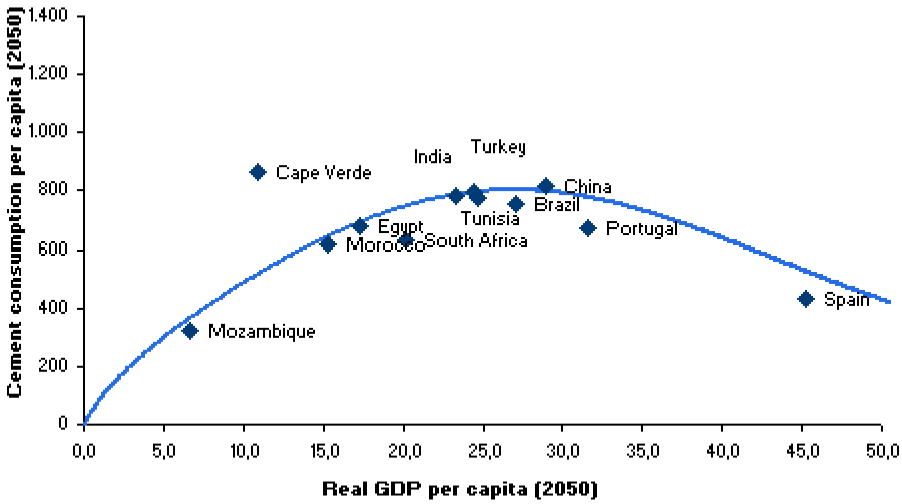
4.3- Cement Consumption

One of the key factors when valuing a cement company is to forecast the future cement consumption level in each of the countries where the firm operates. As mentioned in previous sections, there is a strong relationship between the level of cement consumption and the stage of the development process of one country. The main idea supporting this relationship is that an emerging economy will lack a lot of infrastructures so as their GDP per capita grows they are expected to invest more in infrastructures and consequently to consume more cement. On the other hand, after a certain level of GDP per capita, cement consumption per capita is expected to decrease, as such an economy only needs to consume enough cement to maintain their already existent infrastructures.

The graphs below were taken from a study of BESI, based on the Global Cement Report, where the function of the expected cement consumption is presented along with the positioning of the countries where Cimpor operates both in the year of 2009 and in 2050.

Source: The Global Cement Report, BESI research

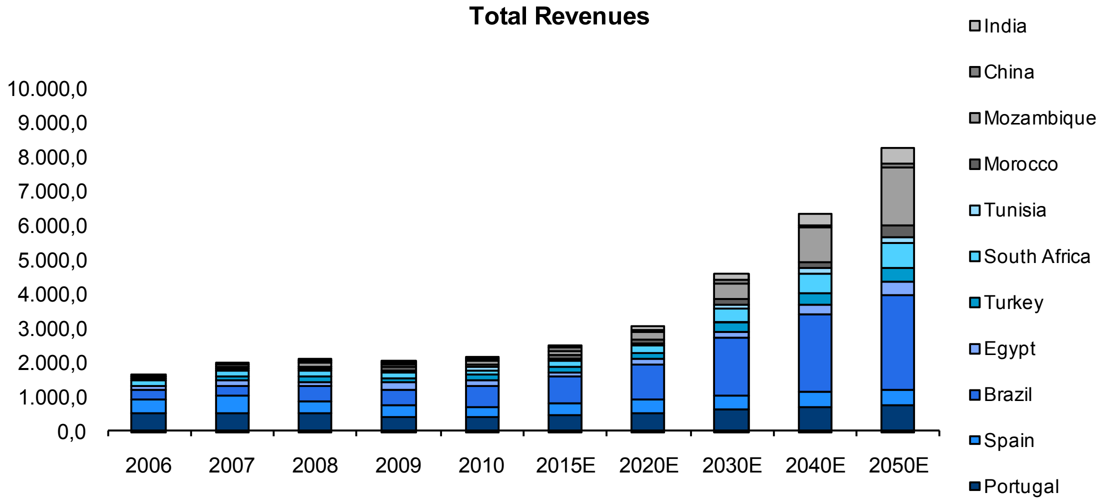




In order to determine the annual levels of total cement consumption for each of the different countries, the model uses the values obtained by the study that gradually moves the positioning of the countries in terms of cement consumption per capita from those observed in 2009 to the expected in 2050 and multiplies them by the population of the country. The population growth was extracted from the United Nations source.

4.4- Revenues

Source: own calculations



As mentioned in the Industry Overview chapter, the cement industry is characterised by having high entry barriers either because of the amount of investment required to enter or the significant economies of scale of the existent players. Moreover, the competition between the players is very predictable and stable and no significant changes in their respective market shares usually occur.

Therefore, to forecast the tons of cement and clinker (Cimpor's main business) sold by Cimpor in each of the markets, the model assumes the maintenance of their current market share and multiplies it by the total cement consumption of the country. The fact that since 2007 until 2010 the market share of Cimpor in Portugal has always been of 55% illustrates the stability in competition argued above.

Besides cement and clinker, in some of the countries where Cimpor operates they also sell secondary mixed products as concrete and aggregates. To calculate the tons of concrete and aggregates sold by cimpor the model assumes they represent a fixed percentage of the cement and clinker tons sold overtime. This assumption will not have a relevant impact in the valuation as cement and clinker represent most of Cimpor revenues and an even greater percentage of their profits.

Regarding prices, the model assumes that they follow the local inflation in most of the countries except in South Africa and China. In South Africa prices are not expected to increase in the next few years as they are still reflecting the boom in construction of the last years supported by the World Cup and the public-housing program. On the other hand the model assumes an increase in Chinese prices above inflation of 2% in 2011 and 2012 and of 1% in

2013 and 2014 as inefficient players with negative results are leaving the market, thus reducing the pressure on prices. After that it is assumed that they return to the inflation levels. As already mentioned all the calculations are in Euros, including prices, despite being linked with local inflation, which means that to determine the price growth of one country in year *x*, the model converts the price of the year *x-1* to the local currency using the exchange rate of year *x-1* and them multiplies it by the local inflation rate and converts it again to Euros using the exchange rate of year *1*. Consequently, all the exchange rates as well as local inflation rates from 2011 to 2050 of each one of the countries had to be computed.

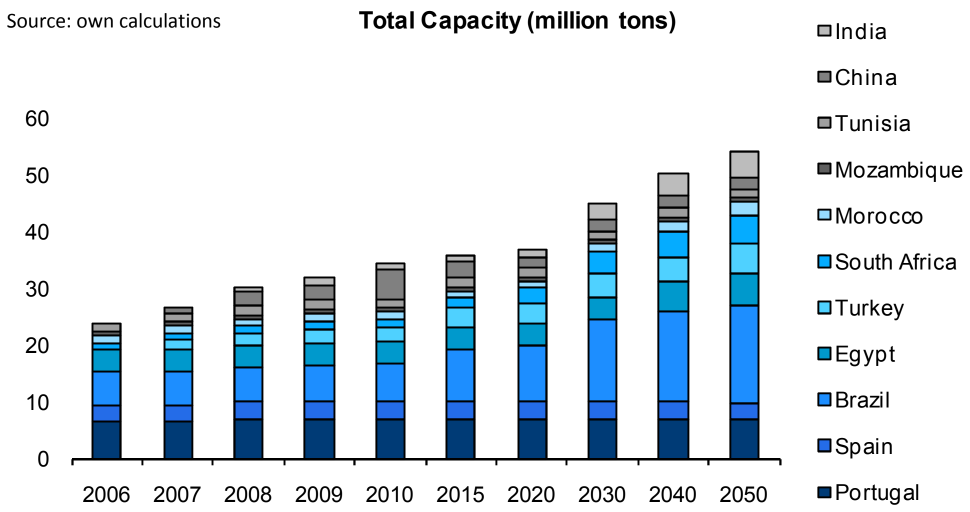
The inflation rates used until 2015 are the ones published by the IMF and from then on it is assumed that the higher inflation rates will gradually converge to the average eurozone inflation of 1,5%. Exchange rates until 2015 were extracted from the spot and forward rates market from Bloomberg and rates from 2016-2050 were calculated by inflation differentials.

Inflation	**2005**	**2010**	**2015E**	**2020E**	**2025E**	**2030E**	**2035E**	**2040E**	**2045E**	**2050E**
Portugal	2,1%	0,8%	1,8%	1,7%	1,6%	1,6%	1,5%	1,5%	1,5%	1,5%
Spain	3,4%	1,2%	1,8%	1,7%	1,6%	1,6%	1,5%	1,5%	1,5%	1,5%
Brazil	6,9%	5,1%	4,5%	3,3%	2,6%	2,1%	1,9%	1,7%	1,6%	1,6%
Egypt	8,8%	12,0%	6,5%	4,5%	3,2%	2,5%	2,1%	1,9%	1,7%	1,6%
Turkey	8,2%	9,7%	4,0%	3,0%	2,4%	2,0%	1,8%	1,7%	1,6%	1,6%
South Africa	3,4%	5,8%	4,5%	3,3%	2,6%	2,1%	1,9%	1,7%	1,6%	1,6%
Morocco	1,0%	2,0%	2,6%	2,1%	1,9%	1,7%	1,6%	1,6%	1,5%	1,5%
Mozambique	6,4%	9,3%	5,6%	3,9%	2,9%	2,3%	2,0%	1,8%	1,7%	1,6%
Tunisia	2,0%	4,2%	2,9%	2,3%	2,0%	1,8%	1,7%	1,6%	1,6%	1,5%
China	1,8%	3,1%	2,0%	1,8%	1,7%	1,6%	1,6%	1,5%	1,5%	1,5%
India	4,2%	13,2%	4,0%	3,0%	2,4%	2,0%	1,8%	1,7%	1,6%	1,6%
Cape Verde	0,4%	1,4%	2,0%	1,8%	1,7%	1,6%	1,6%	1,5%	1,5%	1,5%
Eurozone inflation	**2,2%**	**1,1%**	**1,9%**	**1,6%**	**1,5%**	**1,5%**	**1,5%**	**1,5%**	**1,5%**	**1,5%**

Exchange rates	**2005**	**2010**	**2015E**	**2020E**	**2025E**	**2030E**	**2035E**	**2040E**	**2045E**	**2050E**
Brazilian real	3,04	2,38	3,00	3,41	3,63	3,78	3,87	3,92	3,95	3,97
Egyptian pound	7,27	7,62	14,70	18,50	20,61	21,99	22,86	23,40	23,72	23,91
Turkish lira	0,00	2,09	2,89	3,19	3,36	3,47	3,53	3,57	3,60	3,61
South African rand	7,93	10,13	12,41	13,97	14,90	15,50	15,87	16,09	16,23	16,31
Moroccan dirham	11,14	11,20	11,56	11,91	12,17	12,33	12,43	12,50	12,53	12,56
Mozambican metical	28,50	44,02	52,27	60,29	65,83	69,42	71,66	73,03	73,85	74,35
Tunisian dinar	1,62	1,90	2,31	2,45	2,52	2,57	2,60	2,61	2,62	2,63
Chinese renminbi	0,00	9,12	8,36	8,37	8,43	8,48	8,51	8,53	8,54	8,54
Indian rupee	0,00	63,66	74,58	80,85	85,26	88,08	89,81	90,87	91,50	91,87
Cape Verdean escudo	110,27	110,27	110,27	110,27	110,27	110,27	110,27	110,27	110,27	110,27

Source: International Monetary Fund, Bloomberg, own calculations

4.5- Capacity



It is important to bare in mind that due to transportation costs and other market barriers, cement can not be considered a global commodity, which results in very different prices as well as in difficulties in adjusting production to demand. Nevertheless, Cimpor trading strategy helps the company to face the differences in cement capacity and demand over the countries allowing the company to improve utilization rates at the cost of decreasing margins as long as the distance between the regions and the difference in prices and costs justifies it.

Capacity increases or decreases considered in the short-term were derived from already announced investment plans, being Brazil the most relevant example. On the other hand, capacity increases and decreases in the long-term were computed by taking into account the average utilization rate of each country of the previous 2 years.

The assumptions of the model regarding capacity are that, when the average utilization rate of the previous two years is higher than 90%, an adjustment of 10% upwards in capacity will take place; while in the situations where the average of the same two years is below 60%, an adjustment of 10% downwards will happen. There are several exceptions to this rule which reflect the specific stage of the cement industry in the market as well as the costs and prices of each country. Regarding mature markets like Spain, the downwards adjustment will take place whenever the average utilization rate of the last two years is below 75% and the adjustment will be of 15% instead of 10%, while upwards adjustments will only take place when the average utilisation rate is above 95%. The reason is that the cement consumption of the country is expected to decrease over time and it is not predictable any shift in that trend. Other countries with better prospects of growth like Turkey will have an upwards adjustment of 20% in order to take advantage of the fast development of the market. Undeveloped and uncertain markets like Mozambique will have higher adjustments both downwards and upwards because the need to respond rapidly to market changes is higher as there is no certainty about the future of the cement market. Finally, countries with low operational costs like China or India will have downwards adjustments only if the average of the last two years is below 80% since the reduction in costs that would resulted from a decrease in capacity would not be that relevant.

Obviously, the expenses regarding investments in new capacity, maintenance of existent capacity as well as disposal of capacity will have different consequences in the CAPEX of the company.

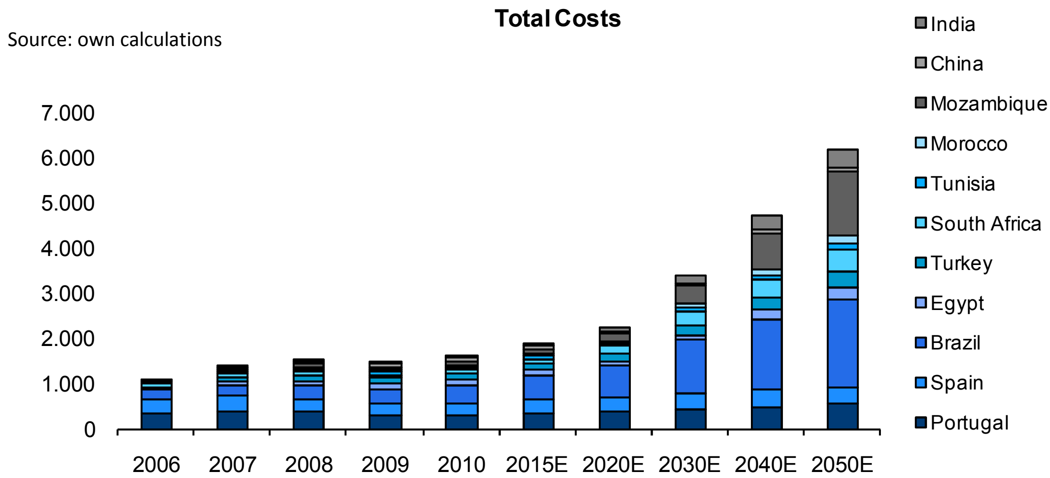
4.6-Capex and Depreciation

The capital expenses planed by Cimpor depend largely on the assumptions described above regarding capacity. In order to compute the CAPEX per year of each one of the countries, three types of expenses were clearly distinguished: the first one will be called maintenance expense and it will reflect how much Cimpor spends in maintenance per ton of capacity in each country; the second one is the investment expense and it is the amount spend per each unit of additional capacity added; finally the third one, dispose expenses, is how much the company saves for the dispose of each unit of existent capacity. The values used for each of the three types of expenses vary significantly from country to country and were extracted from a company source relative to the year of 2009. After that, it is assumed that the per/ton values will follow local inflation, using once again the inflation and exchange rates previously computed by the model. The total values of CAPEX per country are therefore the sum of the maintenance and investment capex subtracted by the dispose expenses. This way, capacity differentials will be used to calculate investment and dispose expenses while total capacity will be used to determine maintenance expenses.

In terms of depreciation, the model comprises two main assumptions: that the acceleration to maintenance capex is 10% and that the depreciation years are 20. This means that in order to calculate the depreciation for the current year, the model multiplies the difference between the depreciation of the previous year and the maintenance capex of this year by the acceleration rate of 10% and subtracts it from the depreciation of the previous year. After that, the expenses regarding capacity additions/reductions are depreciated by 20 years and added/subtracted to/from that value.

Amortizations do not play a role for purposes of valuation as intangible assets are relatively irrelevant in a cement company.

4.7-Costs



The most important cost items in Cimpor, as well as in the most part of cement companies are personnel, maintenance, raw material, fuel and electricity that together account for more than 80% of the total costs.

The detailed cost structure of the company was not possible to obtain, however an approximation regarding the weight of fixed and variable costs in the year of 2009 was provided and the values of 30% and 70% respectively, were assumed in the model.

Fixed costs were computed based on the cost per ton of capacity which was deducted by dividing total fixed costs by the tons of capacity and were assumed to follow local inflation on a yearly basis. This way, to determine the total amount of fixed costs the model will take into account both the cost per/ton of capacity as well as the increases or decreases in capacity extracted from previous assumptions.

On the other side variable costs will take into account the quantity of cement sold instead of the total capacity. The methodology to determine variable costs is similar to the one used for fixed costs and consists in determining a cost per/ton of cement sold which will grow at the rate of the local inflation and that will then be multiplied by the tons of cement sold.

4.8-Working Capital

The difference between several asset accounts as stocks, customers, receivables or state assets and liability accounts as employee's benefits, provisions, suppliers, or other payables originates working capital needs. When analysing Cimpor, it is possible to note that not only the total working capital has a very stable behaviour as a percentage of sales between 15,3%

and 16,2% in the last three years, but also that each of the accounts separately presents an impressively static evolution as a percentage of sales. This way, the model computes the working capital for each year as fixed percentage of sales of 16% which was deducted from the average of the single accounts of the last 3 years.

4.9 Debt and interest

Cimpor has maintained reasonable levels of debt throughout the years. Despite some events that had negative effects on its debt ratio, as the acquisition of operations in turkey that cost Eur 530m to the company, Cimpor has always been able to grow without recurring to the equity market. Comparing to the other players, Cimpor has one of the lowest net debt/EBITDA ratio of 2.48 in 2010 and according to the company Cimpor will have no needs to refinance in the next two years.

Cimpor's debt can be divided in terms of its maturity as well as in terms of currency. Currently, 42% of cimpor's Debt is in the form of Bonds while 31% is long term bank loans and 27% is short-term bank loans. In terms of currency, it is important to highlight that more than 80% of their loans are in Euro, which has favoured Cimpor in the last year because of their exposure to emerging markets. Since most of the currencies of the countries where Cimpor operates have appreciated considerably against the euro – the Brazilian *real* (16%), the South African *rand* (17%), the Indian *rupia* (10%) or the Turkey *lira* (8%) – the company had more 43,6M euros of EBITDA than they would have had if exchange rates had remain unchanged in the last year. This means that instead of a 3,9% increase in EBITDA the company would have had a decrease of -3,3%.

Cimpor was able to keep their BBB- rating with a stable outlook which means a better rating than some of their competitors, namely Titan, Heidelberg cement or Cemex and the same level that Italcementi or Lafarge.

In terms of capital returns, Cimpor presented a ROIC of 7,8%, ROE of 13,5% and a ROCE of 8,0%, which represent a slightly decrease comparing with the previous years largely due to the increasing weight of assets that resulted mostly from the appreciation of real. Nevertheless, this numbers are higher than most of the other global cement players.

However, it was not possible to obtain as much detailed information about Cimpor debt planning as desirable and consequently some assumptions had to be made.

Regarding the target level of D/E, it has been mentioned before that 50% will be assumed since the company current level is not distant from that value and they do not have financial needs for the next two years, which means that by that time the target ratio will be achieved.

This assumption will have some implications in the valuation of the company because from the year of 2011 onwards it is assumed that the company will keep their levels of debt, meaning that new debt will be issued at the same rate that old debt is reimbursed.

During the explicit period, Cimpor will have always positive results higher than their investment needs so the excess cash accumulated will be accounted in an Excess Cash rubric. Although without a direct influence in the valuation of the company, it must be noted the intention of the company to keep a dividend payout ratio of 60% of the total net income. In the last years, the company has been able to approximate from its target, particularly in the last two years where the objective was accomplished. However, because the company will continuously generate cash-flows higher than their investment needs this ratio will increase substantially as it would not make sense to keep accumulating cash indefinitely.

In order to calculate the cost of debt, forecasts for the Euribor were taken from Bloomberg and then a spread of 3,5% was added. The spread considered should reflect current markets conditions which means a higher value than historical values that are around 2% and 2,5% for 3-5 years maturity as those would not be possible to obtain nowadays. Nowadays the company is demanded a spread of 3,5% to 4% over Euribor to finance themselves, so the assumption of the model of 3,5% is based on the expectations that conditions will slightly improve in the upcoming years. This spread is in accordance with the opinion of Investment Bankers responsible for Cimpor's financing operations.

5- INDIVIDUAL VALUATIONS

5.1- Portugal

Portugal is Cimpor’s home market where the company enjoys a stable market share of 56% and their direct competitors, Secil accounts for around 44%. The company has 3 plants with an annual capacity with own clinker of 6,9mn tons. The Portuguese market used to be very attractive for cement companies by 2000 with levels of cement consumption of 1,090 Kg per capita mainly driven by public works and housing. However, consumption levels have been decreasing since then almost every year and currently are below 600 kg per capita. In order to keep their plants at reasonable utilization levels, Cimpor’s efforts have been towards exports to other markets, namely Spain and Egipt. This is one of the reasons of why the company has not invested in capacity earlier in Andalusia, one of the main Portuguese exports destinies. Despite the success of this strategy in the last decade, the more recent decline of the Portuguese and Spanish construction sector has been too strong to be compensated by exports to Egypt. By analysing the numbers of utilized capacity, one can observe the huge differences between the rates of 2003-2008, between 82,7% and 92,3%, and the rates of 2009 and 2010, 63% and 67,5% respectively. Besides, the transportation costs associated with cement exports have been responsible for reducing margins both in Portugal and Spain.

Given that Portuguese consumption drivers, housing and public works, are both considerably limited in the current conjuncture the prospects of the market are not favourable to Cimpor.

Eur m	2008	2009	2010	2011E	2012E	2013E	2014E	2015E	2020E	2025E	2030E	2035E	2040E	2045E	2050E
Sales	546,6	448,8	441,4	428,4	447,1	467,5	487,2	506,7	558,3	607,3	653,4	696,9	736,3	769,2	794,3
EBITDA	171,9	149,6	139,6	132,4	141,3	145,3	148,5	153,8	185,7	202,3	217,1	229,8	239,8	245,7	246,6
EBITDA margin	31,4%	33,3%	31,6%	30,9%	31,6%	31,1%	30,5%	30,4%	33,3%	33,3%	33,2%	33,0%	32,6%	31,9%	31,0%
EBIT	117,3	94,0	85,4	81,2	92,7	98,9	103,8	110,6	147,3	165,7	180,3	191,7	199,6	202,9	200,8
EBIT x (1 - tax rate)	86,2	69,1	60,6	57,7	65,8	70,2	73,7	78,5	104,6	117,6	128,0	136,1	141,7	144,1	142,6
Depreciation	54,4	55,3	54,3	51,2	48,6	46,4	44,7	43,2	38,4	36,7	36,8	38,1	40,2	42,8	45,8
Working capital inv.	-24,3	22,3	-2,8	2,7	-3,0	-3,3	-3,2	-3,1	-1,6	-1,6	-1,4	-1,4	-1,2	-1,0	-0,7
Capex	-31,9	-18,8	-21,5	-23,2	-25,0	-27,0	-29,2	-29,7	-32,4	-35,2	-38,0	-41,1	-44,3	-47,8	-51,5
Free cash flow	**84,3**	**127,9**	**90,6**	**88,4**	**86,3**	**86,3**	**86,1**	**88,9**	**109,0**	**117,6**	**125,3**	**131,8**	**136,4**	**138,0**	**136,1**

Variable	Value
Risk free rate	3,2%
Market premium	6,8%
Unlevered beta	0,82
Cost of debt	6,3%
WACC	8,6%
Enterprise value	**1.342,9**
EV/EBITDA	10,1x
EV/tonne (Eur)	188

5.2- Spain

Cimpor has an important presence in Spain with 3,2mn tons of cement capacity with own clinker distributed by 4 plants, which represents 11% of market share. In order to be able to keep Portuguese good levels of utilization, the company acquired grinding facilities in the Canary Islands that now import clinker from Portugal.

The Spanish cement market showed an impressive growth from 1995 to 2006 reaching 1,28 kg per capita. However, since then it has fallen even faster to less than 50% of the numbers observed in 2006. Due to transportation costs, the first to be affected were the exporters and Portugal was the largest European cement exporter to Spain, this led to a decrease in the volume that Cimpor exported from Portugal to Spain.

Moreover, Andalusia home market was one of the drivers of cement consumption in Spain but in 2006 only 60% of Cimpor's sales in Andalusia came from local production, the other 40% came from Portuguese and Egyptian production. As a consequence of that both margins in Spain and in the export countries were negatively affected since transportation costs are a relevant part of the cost structure until 2007, when the company felt the need to adjust local sales to local clinker capacity and acquired 500k tons of capacity in Andalusia.

Eur m	2008	2009	2010	2011E	2012E	2013E	2014E	2015E	2020E	2025E	2030E	2035E	2040E	2045E	2050E
Sales	358,8	328,8	272,5	286,9	300,4	313,6	326,6	339,6	369,2	395,1	415,0	428,7	437,2	440,0	434,4
EBITDA	82,9	46,6	31,1	35,4	32,5	33,1	39,2	40,3	57,9	60,9	61,1	58,6	53,5	45,6	53,9
EBITDA margin	23,1%	14,2%	11,4%	12,3%	10,8%	10,6%	12,0%	11,9%	15,7%	15,4%	14,7%	13,7%	12,2%	10,4%	12,4%
EBIT	47,6	0,5	-10,5	-3,1	-3,3	-0,2	8,1	11,0	35,6	42,2	44,1	42,1	36,9	28,3	37,2
EBIT x (1 - tax rate)	33,3	0,3	-7,4	-2,2	-2,3	-0,2	5,6	7,7	24,9	29,5	30,9	29,5	25,8	19,8	26,1
Depreciation	36,4	46,1	41,6	38,5	35,8	33,4	31,2	29,2	22,3	18,7	17,0	16,5	16,7	17,3	16,6
Working capital inv	-3,9	9,4	6,2	-1,9	-2,2	-2,1	-2,1	-2,1	-1,0	-0,7	-0,5	-0,4	-0,3	-0,2	0,2
Capex	-35,4	-18,8	-11,0	-11,1	-11,2	-11,3	-11,5	-11,7	-12,8	-13,8	-15,0	-16,1	-17,4	-18,8	-17,2
Free cash flow	**30,4**	**37,1**	**29,5**	**23,4**	**20,2**	**19,8**	**23,2**	**23,1**	**33,5**	**33,7**	**32,4**	**29,4**	**24,7**	**18,2**	**25,7**

Variable	Value
Risk free rate	3,2%
Market premium	5,9%
Unlevered beta	0,82
Cost of debt	6,3%
WACC	7,9%
Enterprise value	**380,8**
EV/EBITDA	10,8x
EV/tonne (Eur)	122

5.3- Brazil

Brazil has been one of Cimpor's most important markets and, in 2010, it was the biggest contributor for the total EBITDA with 190,9M Eur against 139,4M Eur from Portugal. Cimpor is responsible for 9% of market share in Brazil with 6,14mn tons of capacity – in 2012 will be increased to 6,8mn tons - distributed by 6 plants.

Despite the constantly increases in cement consumption over the last years reaching the 268kg per capita in 2010, Brazil is still far below their natural consumption level if the country population, urbanization, infrastructures and GDP are taken into account.

Construction is already one of the most important sectors of Brazilian economy representing 16% of the GDP. The dynamics in the sector are mainly driven by the PAC (Programa de Aceleração de Crescimento), the government's incentives to provide low cost houses to the population and the decrease in taxes for building materials.

The prices in the Brazilian market have been relatively low due to irresponsible market conduct of some local producers; however the prices are already increasing as some of those inefficient players are leaving the market.

Cimpor has already announced new 400k tons of capacity for 2012. However, it should increase considerably as a response to the expected market growth.

Eur m	2008	2009	2010	2011E	2012E	2013E	2014E	2015E	2020E	2025E	2030E	2035E	2040E	2045E	2050E
Sales	401,3	427,4	593,2	650,2	664,9	686,0	730,4	759,4	1.027,6	1.343,1	1.655,9	1.953,6	2.235,8	2.496,0	2.732,6
EBITDA	102,3	123,1	169,0	187,9	185,1	185,3	191,9	207,5	310,7	406,7	484,8	570,6	678,1	729,9	807,5
EBITDA margin	25,5%	28,8%	28,5%	28,9%	27,8%	27,0%	26,3%	27,3%	30,2%	30,3%	29,3%	29,2%	30,3%	29,2%	29,6%
EBIT	70,1	88,4	124,8	145,4	139,2	136,3	139,7	156,5	258,2	343,2	404,7	478,2	582,1	616,6	687,7
EBIT x (1 - tax rate	46,3	58,4	82,4	95,9	91,9	90,0	92,2	103,3	170,4	226,5	267,1	315,6	384,2	407,0	453,9
Depreciation	30,8	34,3	43,6	42,5	45,8	49,0	52,2	51,1	52,6	63,5	80,1	92,4	96,0	113,3	119,8
Working capital inv	-28,6	1,4	-30,7	-8,3	-2,4	-3,4	-7,1	-4,7	-9,8	-10,3	-10,3	-9,4	-8,9	-8,2	-7,3
Capex	-43,1	-54,4	-30,4	-117,1	-116,4	-116,4	-41,7	-41,3	-149,1	-62,6	-81,5	-96,5	-103,9	-123,1	-132,6
Free cash flow	**5,3**	**39,7**	**64,9**	**13,1**	**18,9**	**19,1**	**95,6**	**108,4**	**64,1**	**217,2**	**255,5**	**302,1**	**367,4**	**389,0**	**433,8**

Variable	Value
Risk free interest r	3,2%
Market premium	8,5%
Unlevered beta	0,82
Cost of debt	6,3%
WACC	9,7%
Enterprise value (I	**1.578**
EV/EBITDA	8,4x
EV/tonne (Eur)	242

5.4- Egypt

Egypt is one of the markets where Cimpor has more capacity with 3,9 mn tons and very attractive although decreasing margins of 45% in the last years and 32,1% in 2010. As one of the top African per capita cement consumers, Cimpor has been able to benefit from the market conditions more than doubling the sales from 2002 to 2009.

In order to be able to meet the increasing demand of 2010, Egypt imported cement from Portuguese plants, which helps to explain the negative evolution observed in EBITDA margins.

In terms of prices the Egyptian market has evolved favourably since 2003, when extremely low levels were observed. After that, they have always increased due to demand pressure and currently represent more than 80% of the prices practiced in Portugal.

Eur m	2008	2009	2010	2011E	2012E	2013E	2014E	2015E	2020E	2025E	2030E	2035E	2040E	2045E	2050E
Sales	161,2	240,6	212,2	212,3	189,7	171,1	154,3	135,6	138,5	161,9	204,0	250,5	301,2	354,0	409,2
EBITDA	73,2	104,5	75,5	73,8	64,1	55,9	49,7	42,8	43,7	54,5	75,8	94,9	109,2	127,9	153,8
EBITDA margin	45,4%	43,4%	35,6%	34,8%	33,8%	32,7%	32,2%	31,6%	31,5%	33,6%	37,2%	37,9%	36,3%	36,1%	37,6%
EBIT	58,9	93,2	64,3	63,7	53,6	45,2	38,8	31,9	32,9	43,3	64,1	80,9	90,1	105,3	130,5
EBIT x (1 - tax rate)	47,1	74,5	51,5	51,0	42,9	36,1	31,1	25,6	26,3	34,7	51,3	64,7	72,1	84,2	104,4
Depreciation	10,9	11,1	9,6	10,1	10,5	10,8	10,9	10,9	10,8	11,1	11,7	14,0	19,1	22,6	23,4
Working capital inv	-12,5	-10,0	2,4	0,3	3,6	3,0	2,7	3,0	-0,1	-1,2	-1,4	-1,6	-1,7	-1,7	-1,8
Capex	-5,1	-9,1	-14,3	-14,9	-13,8	-13,1	-12,0	-10,8	-11,1	-11,9	-12,8	-52,9	-19,7	-23,3	-25,1
Free cash flow	**40,3**	**66,6**	**49,2**	**46,5**	**43,2**	**36,8**	**32,6**	**28,6**	25,9	32,7	48,8	24,3	69,8	81,8	100,9

Variable	Value
Risk free rate	3,2%
Market premium	9,1%
Unlevered beta	0,82
Cost of debt	6,3%
WACC	10,8%
Enterprise value	**393,3**
EV/EBITDA	5,3x
EV/tonne (Eur)	101

5.5- Turkey

Cimpor entered in Turkey in 2007 right before the financial crisis with the acquisition of 2,9mn tons of capacity by Eur 530m. However, construction in Turkey has suffered with the financial crisis and, as a consequence of that, consumption has been gradually decreasing since then and Cimpor has suffered both in terms of EBITDA and in margins. Besides, there is a serious concern that regulation to abolish tax refunds on smaller homes will lead to the bankruptcy of several construction companies. Nevertheless, the market is expected to recover their levels of

2007 and a slight recovery in 2010 was already observed due to the new line of clinker production which reduced total cost substantially.

All in all, the investment in Turkish operations is often criticized since it delays to justify with results the Eur 530m paid in 2007.

Eur m	2008	2009	2010	2011E	2012E	2013E	2014E	2015E	2020E	2025E	2030E	2035E	2040E	2045E	2050E
Sales	156,1	107,5	142,5	148,7	143,7	143,9	146,8	148,8	178,6	212,1	246,8	282,6	320,0	356,9	393,8
EBITDA	15,6	11,1	20,0	21,9	21,9	22,8	17,6	11,0	19,4	28,6	26,3	34,9	43,8	34,3	40,6
EBITDA margin	10,0%	10,3%	14,0%	14,7%	15,2%	15,9%	12,0%	7,4%	10,9%	13,5%	10,6%	12,4%	13,7%	9,6%	10,3%
EBIT	-0,8	-18,7	-2,7	0,8	2,3	4,5	-0,9	-8,1	4,3	15,5	11,6	20,4	28,9	15,3	20,7
EBIT x (1 - tax rate)	-0,6	-14,9	-2,2	0,6	1,8	3,6	-0,7	-6,5	3,4	12,4	9,3	16,3	23,2	12,3	16,6
Depreciation	16,2	29,6	22,6	21,0	19,6	18,3	18,5	19,1	15,2	13,1	14,6	14,5	14,8	19,0	19,9
Working capital inv	-6,7	9,5	-6,6	-0,8	0,8	0,0	-0,5	-0,3	-1,0	-1,2	-1,1	-1,2	-1,2	-1,1	-1,1
Capex	-70,4	-62,2	-6,9	-7,0	-6,6	-32,4	-38,5	-9,1	-9,8	-10,5	-13,6	-14,6	-78,7	-20,4	-21,9
Free cash flow	**-61,5**	**-38,0**	**6,9**	**13,9**	**15,6**	**-10,5**	**-21,1**	**3,2**	7,8	13,8	9,2	15,0	-42,0	9,7	13,4

Variable	Value
Risk free rate	3,2%
Market premium	9,6%
Unlevered beta	0,82
Cost of debt	6,3%
WACC	11,2%
Enterprise value	**49,0**
EV/EBITDA	2,2x
EV/tonne (Eur)	20

5.6- South Africa

South Africa is one of the countries with higher potential regarding cement consumption. Despite the decreases in 2009 and 2010, in the long term the country should increase its cement consumption when compared with countries with similar levels of GDP, as the country will feel the need to improve its infrastructures and to build low-cost houses. Moreover, the country presents attractive prices that resulted in well above average profitability margins of 40,7% in 2010 and is the fourth contributor to EBITDA accounting for Eur 58,9M.

In 2005, the company decided to invest in new capacity, almost doubling it, as they were the only producer operating at full capacity. Cimpor entered the market with the acquisition of NPC that together with PPC Cement, Alpha and Lafarge SA dominate the South African market. Until 2008, the World Cup championship, the Coega Harbour development project as well as the public housing program supported cement consumption growth.

However, there is still much potential for cement growth in the country since the housing deficit, one of the key drivers, is still very large comparing with other similar countries.

Eur m	2008	2009	2010	2011E	2012E	2013E	2014E	2015E	2020E	2025E	2030E	2035E	2040E	2045E	2050E
Sales	138,2	152,8	130,9	149,2	155,0	159,5	164,1	175,5	254,6	337,9	416,3	486,8	561,1	640,4	728,4
EBITDA	46,2	70,4	46,6	50,9	50,5	49,2	51,2	54,2	74,9	100,6	119,1	138,0	155,8	185,8	205,0
EBITDA margin	33,4%	46,1%	35,6%	34,1%	32,6%	30,9%	31,2%	30,9%	29,4%	29,8%	28,6%	28,4%	27,8%	29,0%	28,1%
EBIT	38,9	58,9	33,3	38,0	37,8	36,9	39,2	41,3	56,9	78,8	91,8	106,6	118,8	147,3	159,2
EBIT x (1 - tax rate)	28,0	42,4	24,0	27,3	27,2	26,6	28,2	29,7	41,0	56,7	66,1	76,7	85,5	106,0	114,6
Depreciation	7,3	11,5	13,3	13,0	12,6	12,3	12,1	13,0	18,0	21,8	27,3	31,5	37,0	38,6	45,8
Working capital inv	-7,6	-0,4	2,2	-2,7	-0,9	-0,7	-0,7	-1,8	-2,6	-2,6	-2,1	-2,3	-2,4	-2,6	-3,0
Capex	-21,8	-7,5	-9,0	-9,8	-9,8	-9,7	-31,0	-33,7	-16,4	-68,7	-27,8	-32,9	-38,9	-41,9	-49,7
Free cash flow	**5,8**	**46,0**	**30,4**	**27,7**	**29,2**	**28,5**	**8,5**	**7,1**	**40,0**	**7,3**	**63,6**	**73,1**	**81,1**	**100,1**	**107,7**

Variable	Value
Risk free rate	0,0%
Market premium	5,5%
Unlevered beta	0,04
Cost of debt	2,8%
WACC	20,0%
Enterprise value	**424,5**
EV/EBITDA	8,3x
EV/tonne (Eur)	259

5.7- Morocco

Morroco is one of the most profitable markets of Cimpor with incredibly stable EBITDA margins rounding the 45% and cement consumption per capita of 452kg, which is approximately the double of 10 years ago.

One of the major threats to the construction sector is the liberalization of the economy and the consequent exposure to imports from other countries. However, the delay of the market openness has contributed to keep the market stability as well as the profitability levels of the already established players. The main drivers for cement consumption are housing, infrastructure and tourism. The Government's program of fiscal incentives to property developers will continue for several years as well as the considerable investment in tourism facilities, ports and highways.

Eur m	2008	2009	2010	2011E	2012E	2013E	2014E	2015E	2020E	2025E	2030E	2035E	2040E	2045E	2050E
Sales	88,8	94,2	95,1	102,1	99,4	98,5	97,9	97,8	106,0	109,9	142,5	179,8	221,9	267,7	316,4
EBITDA	41,0	41,8	42,0	45,8	43,9	43,0	42,4	42,0	45,5	46,3	64,6	80,8	98,1	115,0	141,1
EBITDA margin	46,1%	44,4%	44,2%	44,8%	44,1%	43,7%	43,3%	43,0%	42,9%	42,1%	45,4%	45,0%	44,2%	43,0%	44,6%
EBIT	30,5	33,2	32,3	36,0	34,1	33,2	32,5	32,1	35,0	35,2	52,7	65,6	78,6	90,0	113,9
EBIT x (1 - tax rate)	21,4	23,3	22,6	25,2	23,9	23,3	22,8	22,4	24,5	24,6	36,9	45,9	55,0	63,0	79,7
Depreciation	8,0	8,6	9,7	9,7	9,8	9,8	9,9	10,0	10,5	11,2	12,0	15,2	19,5	25,0	27,3
Working capital inv	-5,3	0,4	-1,0	-1,0	0,4	0,1	0,1	0,0	-0,4	-0,1	-1,2	-1,1	-1,4	-1,5	-1,6
Capex	-9,3	-9,6	-9,7	-10,0	-10,1	-10,3	-10,4	-10,6	-11,6	-12,5	-13,5	-17,4	-22,5	-29,1	-31,3
Free cash flow	**14,8**	**22,6**	**21,7**	**24,0**	**24,0**	**23,0**	**22,3**	**21,8**	**23,0**	**23,2**	**34,2**	**42,7**	**50,6**	**57,5**	**74,1**

Variable	Value
Risk free rate	3,2%
Market premium	9,1%
Unlevered beta	0,82
Cost of debt	6,3%
WACC	10,3%
Enterprise value	**294,7**
EV/EBITDA	6,4x
EV/tonne (Eur)	230

5.8- Mozambique

Cimpor is the largest player in Mozambique with a market share above the 80% as they are the only local producers, meaning that all the rest is imported. However, Cimpor has only 0,7mn tons of capacity which reflects the low level of cement consumption per capita of 48kg.

In order to attract foreign investment, the government of Mozambique is investing in industrial sectors, creating this way a positive dynamic in the construction sector.

The high GDP growth rates foresee an increase in the per capita consumption levels in the next years and, in order to be able to keep up with the demand, Cimpor recently acquired new capacity in Nacala, a city in the north of the country.

Regarding its operational activity, Cimpor had some problems as the depreciation of metical put the production factors under pressure and Cimpor was forced to decrease the imports of clinker. Independently of the operational problems, the depreciation of metical also had a negative effect in the group results.

Eur m	2008	2009	2010	2011E	2012E	2013E	2014E	2015E	2020E	2025E	2030E	2035E	2040E	2045E	2050E
Sales	77,4	80,3	77,2	93,6	100,5	116,4	123,9	139,4	216,3	324,3	483,5	690,9	954,7	1.284,5	1.691,6
EBITDA	13,6	11,9	7,6	13,1	14,6	19,1	20,5	25,2	39,0	56,9	82,0	127,6	160,0	223,2	298,8
EBITDA margin	17,6%	14,9%	9,8%	14,0%	14,6%	16,4%	16,6%	18,1%	18,0%	17,5%	17,0%	18,5%	16,8%	17,4%	17,7%
EBIT	8,8	6,3	2,1	8,2	9,9	14,4	16,0	20,8	32,9	47,8	68,1	110,2	132,4	188,5	254,6
EBIT x (1 - tax rate)	6,0	4,3	1,4	5,6	6,7	9,8	10,9	14,1	22,3	32,5	46,3	75,0	90,1	128,2	173,1
Depreciation	4,7	5,5	5,1	4,9	4,8	4,6	4,5	4,4	6,1	9,1	13,9	17,3	27,5	34,8	44,2
Working capital inv	-5,8	0,6	-0,2	-2,5	-1,1	-2,6	-1,2	-2,5	-3,0	-3,8	-4,7	-5,8	-9,5	-11,3	-13,3
Capex	-9,0	-12,1	-3,2	-3,3	-3,4	-3,4	-3,5	-3,5	-5,5	-8,5	-13,2	-99,1	-26,5	-34,2	-44,2
Free cash flow	-4,1	-1,7	3,1	4,6	7,0	8,5	10,7	12,5	19,9	29,3	42,3	-12,7	81,5	117,4	159,7

Variable	Value
Risk free rate	3,2%
Market premium	11,5%
Unlevered beta	0,82
Cost of debt	6,3%
WACC	12,0%
Enterprise value	**239,5**
EV/EBITDA	18,3x
EV/tonne (Eur)	350

5.9- Tunisia

The cement consumption levels in Tunisia have been increasing in the last two decades mainly due to private projects, government investment in infrastructure and a high growth of urban population. Currently, the consumption per capita is about 649kg which does not seem sustainable when projected against those of comparable countries. Regarding prices, the company does not face many risks as they are regulated by the government, despite the upcoming liberalization of the economy and country's democratization which means that the volatility of EBITDA margins is related with the unstable energy costs observed.

Tunisia was not substantially affected by the financial crisis as they present few external liabilities and therefore, the investment in the construction market, that represents about 30% of the workforce of the country, was not very affected. Moreover, the pipeline of construction projects in Tunisia estimated to be more than Eur 35bn, which is much more than the country's GDP. Some government related drivers of cement consumption should be highlighted as the investment in tourism infrastructure, the incentives to low-cost housing, energy and transport projects.

Eur m	2008	2009	2010	2011E	2012E	2013E	2014E	2015E	2020E	2025E	2030E	2035E	2040E	2045E	2050E
Sales	64,0	69,9	76,5	78,0	75,2	72,6	69,3	65,1	63,5	81,9	100,7	119,4	137,1	154,2	170,4
EBITDA	17,0	19,7	22,5	21,5	20,3	19,1	17,6	15,9	14,0	21,8	29,6	35,2	39,5	42,7	48,2
EBITDA margin	26,6%	28,1%	29,3%	27,5%	27,0%	26,3%	25,5%	24,4%	22,1%	26,6%	29,4%	29,5%	28,8%	27,7%	28,3%
EBIT	9,3	11,9	16,3	14,9	13,8	12,8	11,4	9,8	8,3	16,1	23,8	28,4	31,5	33,3	38,1
EBIT x (1 - tax rate)	6,5	8,3	11,4	10,4	9,7	9,0	8,0	6,9	5,8	11,3	16,7	19,8	22,1	23,3	26,7
Depreciation	7,7	7,7	6,2	6,6	6,4	6,3	6,2	6,1	5,7	5,7	5,8	6,8	8,0	9,5	10,0
Working capital inv	-3,6	0,0	-1,7	-0,1	0,4	0,4	0,5	0,7	-0,6	-0,6	-0,6	-0,6	-0,6	-0,5	-0,5
Capex	-3,2	-5,1	-14,1	-5,3	-5,2	-5,2	-5,1	-5,0	-5,4	-5,8	-18,5	-21,9	-8,8	-10,4	-11,2
Free cash flow	**7,5**	**10,9**	**1,7**	**11,6**	**11,4**	**10,5**	**9,6**	**8,6**	**5,6**	**10,6**	**3,4**	**4,2**	**20,7**	**21,8**	**25,0**

Variable	Value
Risk free rate	3,2%
Market premium	8,1%
Unlevered beta	0,82
Cost of debt	6,3%
WACC	9,6%
Enterprise value	**122,0**
EV/EBITDA	5,7x
EV/tonne (Eur)	74

5.10- China

China is currently responsible for more than 50% of the world cement consumption, an impressive number that combines both the most populated economy in the world with one of the highest per capita cement consumption levels of 1,208kg.

Cimpor has 3 plants in China with a total capacity of 6,0mn tons but its market share is still inferior to 1%, as the company is not operating at its full capacity because prices are too low. However, prices expectations are that they will increase in the upcoming years incorporating the effects of the inefficient producers that will leave the market.

Despite current unfavourable conditions for cement producers, China is still one of the most attractive countries in the world as their GDP growth rates are continuously among the highest of the emerging markets and the regions of Beijing and Shanghai are still under a huge development process.

Environmental constraints will have effects in the cement supply in 2011 which will provide some competitive advantage to Cimpor as they comply with all the requirements.

Eur m	2008	2009	2010	2011E	2012E	2013E	2014E	2015E	2020E	2025E	2030E	2035E	2040E	2045E	2050E
Sales	65,6	81,1	92,9	97,2	98,1	87,2	88,8	83,6	62,7	76,1	86,7	95,2	102,0	108,0	113,3
EBITDA	6,3	4,7	-12,3	-8,1	8,5	14,1	15,8	8,2	9,1	13,4	12,3	14,0	14,8	15,2	15,0
EBITDA margin	9,5%	5,9%	-13,3%	-8,4%	8,6%	16,1%	17,8%	9,8%	14,5%	17,6%	14,2%	14,7%	14,5%	14,0%	13,2%
EBIT	2,2	0,2	-20,6	-16,5	1,2	7,7	9,7	0,4	2,7	8,1	6,2	8,2	9,0	9,1	8,6
EBIT x (1 - tax rate)	1,6	0,1	-15,5	-12,4	0,9	5,8	7,3	0,3	2,0	6,1	4,6	6,1	6,7	6,8	6,5
Depreciation	3,7	4,6	8,3	8,3	7,2	6,3	6,2	7,7	6,4	5,4	6,1	5,8	5,8	6,0	6,3
Working capital inv	-8,1	-1,5	-2,6	-0,6	-0,1	1,8	-0,3	0,8	-0,4	-0,4	-0,3	-0,3	-0,2	-0,2	-0,2
Capex	-37,9	-49,6	-8,1	8,6	6,0	-4,5	-35,5	-5,8	-3,7	-30,7	-5,2	-5,6	-6,0	-6,5	-7,0
Free cash flow	**-40,6**	**-46,4**	**-17,9**	**4,0**	**14,0**	**9,4**	**-22,4**	**3,1**	**4,3**	**-19,7**	**5,3**	**6,1**	**6,4**	**6,2**	**5,7**

Variable	Value
Risk free rate	3,2%
Market premium	6,6%
Unlevered beta	0,82
Cost of debt	6,3%
WACC	8,6%
Enterprise value	**46,9**
EV/EBITDA	-5,8x
EV/tonne (Eur)	9

5.11- India

India is one of the most promising long term countries in terms of cement consumption, as they have a population of 1,2bn people and is well behind China in what respects to infrastructures. This means that the current levels of cement consumption of 165 per capita have an amazing growth potential.

The boom in infrastructure observed in India has created the conditions to boost the construction sector through investment in highways, roads, housing, bridges and ports. However, according to the ministry of Finance the government spending in infrastructure of the next five years will more than double, which will enable cement companies to increase significantly their volume of business in the country.

Cimpor's presence in India is still quit modest with less than 1% of market share and a capacity of 1,2mn tons in a market that is dominated by the big international companies: Holcim, Lafarge, Italcementi and Heidelberger.

Eur m	2008	2009	2010	2011E	2012E	2013E	2014E	2015E	2020E	2025E	2030E	2035E	2040E	2045E	2050E
Sales	32,3	52,9	43,4	50,0	52,2	55,6	56,4	62,3	95,6	135,8	189,1	250,3	311,9	371,2	424,0
EBITDA	3,1	9,9	-2,0	-0,9	1,9	4,4	4,6	4,8	6,6	9,0	11,1	15,7	16,0	19,5	28,6
EBITDA margin	9,7%	18,8%	-4,6%	-1,9%	3,5%	8,0%	8,1%	7,7%	6,9%	6,6%	5,9%	6,3%	5,1%	5,3%	6,7%
EBIT	2,4	3,8	-8,1	-6,6	-3,3	-0,2	0,3	0,6	2,5	4,5	5,5	9,0	7,7	10,1	19,2
EBIT x (1 - tax rate)	1,6	2,5	-5,4	-4,3	-2,2	-0,2	0,2	0,4	1,6	3,0	3,7	6,0	5,1	6,7	12,7
Depreciation	0,7	6,2	6,1	5,6	5,1	4,7	4,3	4,2	4,1	4,5	5,6	6,7	8,3	9,4	9,4
Working capital inv	-5,4	-2,7	1,1	-1,0	-0,3	-0,5	-0,1	-0,9	-1,2	-1,7	-1,8	-2,1	-1,9	-1,9	-1,6
Capex	-1,6	-3,7	-1,4	0,0	0,0	-1,2	-4,8	-5,4	-8,6	-12,3	-4,4	-5,7	-7,5	-8,8	-9,5
Free cash flow	**-4,6**	**2,3**	**0,4**	**0,3**	**2,6**	**2,8**	**-0,4**	**-1,7**	**-4,1**	**-6,5**	**3,0**	**4,8**	**4,0**	**5,4**	**10,9**

Variable	Value
Risk free rate	3,2%
Market premium	9,1%
Unlevered beta	0,82
Cost of debt	6,3%
WACC	10,1%
Enterprise value	**30,9**
EV/EBITDA	-32,6x
EV/tonne (Eur)	26

5.12- Cape Verde

The economy of Cape Verde, as well as the cement consumption, is highly exposed to tourism activity. The consequence of that was a significant increase of cement consumption levels in the last years to keep up with the tourism activity evolution. In terms of cement per capita, the levels of Cape Verde are relatively high comparing with other countries; however, it must be taken into account that tourism infrastructures are responsible for most of the cement consumption, which is logically not incorporated in GDP per capita.

It must be noticed that, despite the fact that Cimpor has no clinker plants in the country, which means that all of their sales are imported from other countries, they managed to have more than 70% of the country market share.

Eur m	2008	2009	2010	2011E	2012E	2013E	2014E	2015E	2020E	2025E	2030E	2035E	2040E	2045E	2050E
Sales	42,1	31,3	35,8	32,6	35,2	38,0	40,4	42,2	54,6	68,7	81,9	95,6	107,9	120,2	130,8
EBITDA	4,2	3,8	4,4	4,0	4,3	4,6	4,9	5,1	6,6	8,3	9,9	11,6	13,1	14,6	15,9
EBITDA margin	10,0%	12,1%	12,1%	12,1%	12,1%	12,1%	12,1%	12,1%	12,1%	12,1%	12,1%	12,1%	12,1%	12,1%	12,1%
EBIT	3,2	2,9	3,2	2,8	3,1	3,4	3,7	3,9	5,3	6,9	8,4	9,9	11,2	12,6	13,7
EBIT x (1 - tax rate)	2,3	2,1	2,3	2,0	2,2	2,5	2,7	2,8	3,8	4,9	6,0	7,1	8,1	9,1	9,9
Depreciation	1,0	0,9	1,1	1,1	1,2	1,2	1,2	1,2	1,4	1,5	1,6	1,7	1,9	2,0	2,2
Working capital inv	-3,4	2,2	-1,0	0,6	-0,4	-0,4	-0,4	-0,3	-0,4	-0,5	-0,4	-0,4	-0,3	-0,4	-0,3
Capex	-1,0	-1,1	-1,1	-1,1	-1,2	-1,2	-1,2	-1,2	-1,4	-1,5	-1,6	-1,7	-1,9	-2,0	-2,2
Free cash flow	**-1,1**	**4,1**	**1,3**	**2,6**	**1,8**	**2,0**	**2,3**	**2,5**	**3,4**	**4,4**	**5,6**	**6,7**	**7,8**	**8,6**	**9,6**

Variable	Value
Risk free rate	3,2%
Market premium	9,5%
Unlevered beta	0,82
Cost of debt	6,3%
WACC	10,7%
Enterprise value	**37,3**
EV/EBITDA	9,4x
EV/tonne (Eur)	n.a.

5.13- Others

In order to respond to differentials in demand and capacity and to take advantages of their size, Cimpor implements an exhaustive trading strategy. This way, instead of spending considerable amounts of money in capacity additions or reductions, the company opts for a more flexible structure that is only at the reach of the biggest global players.

Variable	Value
Risk free interest rate	3,2%
Market premium	5,5%
Unlevered beta	1,11
Tax rate	29,0%
Target D/E	0,50
Levered beta	1,5
Cost of equity	11,4%
Cost of debt	6,34%
Long term growth	**0,0%**
WACC	**9,13%**
Enterprise value (Dec 10)	**10,8**

5.14- Sum of the Parts

The SOTP valuation consists in the sum of the enterprise values of each one of the countries subtracted by the net debt of the country as well as company's other investments or obligations. It can be easily observed the weight of both Portugal and Brazil in the total value of the company as they are by far the two largest contributors to Cimpor's results.

CIMPOR - SOTP		
Segment	**Value**	**%**
Portugal	1.342,9	27%
Spain	380,8	8%
Brazil	1.577,5	32%
Egypt	393,3	8%
Turkey	49,0	1%
South Africa	424,5	9%
Morocco	294,7	6%
Mozambique	239,5	5%
Tunisia	122,0	2%
China	46,9	1%
India	30,9	1%
Cape Verde	37,3	1%
Other activities	10,8	0%
Enterprise value (Dec 2010)	**4.950,2**	**100%**
Invest. in associated companies	23,1	
Other investments	47,4	
Net debt (Dec 2010)	1.534,5	
Other obligations	189,9	
Equity value (Dec 2010)	**3.296,4**	
Shares outstanding (#m)	664,7	
Price target (Eur)	**4,96**	
Current price (Eur)	4,86	
Potential upside/downside	**2%**	

6- RELATIVE VALUATION

As previously discussed in the literature review, relative valuation can be very useful as a complement to absolute valuation as it may highlight some important characteristics of the firm as well as it provides support for the values calculated before.

Relative valuation implicitly assumes that the market prices the companies correctly, however the reliability of those values to valuate Cimpor is only as good as the companies used as peer group are similar to Cimpor. This way, the selection of the peer group is undoubtedly the most important step in the relative valuation.

In the case of Cimpor, it was firstly selected a wide group of cement players that because of their business nature and because of the markets where they operate could be considered as reasonable comparable companies (see Appendix 12.1) for more details about the multiples selected) . Nevertheless, the selection of the peer group was restricted to companies that besides of the business nature and market exposure presented similar prospects of growth and profitability –more specifically sales growth and ROIC - for the years of 2011 and 2012.

Company	Sales Growth (%)		ROIC (%)		P/E		EV/EBITDA	
	2011E	2012E	2011E	2012E	2011E	2012E	2011E	2012E
Buzzi Unicem	6%	7%	6%	7%	14,3x	9,9x	6,2x	4,9x
Titan Cement	1%	2%	7%	7%	13,4x	12,2x	7,0x	6,5x
Saint-Gobain	8%	7%	10%	11%	11,5x	9,4x	6,6x	5,9x
Holcim	1%	7%	6%	8%	17,6x	13,5x	8,4x	7,2x
Italcementi	3%	5%	4%	5%	23,9x	14,2x	6,0x	5,3x
Kingspan	21%	6%	8%	11%	18,6x	11,8x	10,7x	8,0x
Lafarge	7%	8%	6%	7%	12,2x	9,2x	7,7x	6,8x
Cemex	5%	5%	5%	3%	n.a.	n.a.	12,8x	11,0x
HeidelbergCement	6%	8%	7%	8%	11,5x	8,3x	8,2x	7,0x
Travis Perkins	52%	7%	9%	10%	11,6x	10,0x	7,8x	6,6x
Wienerberger	12%	6%	3%	5%	31,1x	15,7x	8,9x	7,1x
Wolseley	3%	7%	10%	13%	15,3x	12,0x	7,9x	6,7x
CIMPOR	**6,9%**	**-**	**3,7%**	**-**	**16,6x**	**16,8x**	**8,3x**	**8,2x**
Average	**3,4%**	**-**	**5,6%**	**-**	**15,0x**	**10,7x**	**7,7x**	**6,5x**

In terms of EV/EBITDA, the values reached by the analysis are consistent, although lower than those implicit in the DCF valuation. This model implicitly assumes a premium of 15% in comparison with its peers that is explained by Cimpor's higher EBITDA margins.

Regarding P/E, the results obtained are in accordance with those from the EV/EBITDA although below the ones computed in the estimates of this work.

EV/ EBITDA	Bear Case	Base Case	Bull Case
Target EV/EBITDA	6,7x	7,7x	8,7x
EBITDA 2011E	586,80	586,80	586,80
Target EV	3928,94	4515,74	5102,54
Net Debt	1534,46	1534,46	1534,46
Other adjustments	119,37	119,37	119,37
Equity Value	2275,11	2861,91	3448,71
# Shares	664,75	664,75	664,75
Share Price	**3,42**	**4,31**	**5,19**

P/E	Bear Case	Base Case	Bull Case
Target P/E	12,8x	14,8x	16,8x
Net Income 2011E	201,09	201,09	201,09
Equity Value	2574,14	2976,33	3378,52
# Shares	664,75	664,75	664,75
Share Price	**3,87**	**4,48**	**5,08**

7- COMPARISON WITH BESI ESTIMATES

After finishing my own valuation of Cimpor, a comparison with one of the valuations from the investment banks who cover Cimpor was requested. In order to do that I have chosen BESI as it was the one that provided me a better access to their estimates.

Another important reason to choose BESI estimates to compare with my own valuation was the fact that we adopted similar methodologies and that assumptions converge to a large extent.

Throughout this section, I will present the main differences in the two valuations responsible for the difference in prices: 6.00€ resulted from BESI estimates and 4,96€ from my own estimates.

The majority of the differences have to do with the cost of capital. Both BESI and mine estimates use a WACC methodology, however, there are several differences in the way this one is computed.

In terms of the risk free rate, I have assumed a rate equivalent to a 10 year German bond of 3,16% while BESI opted for a value between German and other European countries bonds of 4,5%. I believe that such an assumption is conceptually wrong because one should not assume a value for the risk free rate of one currency when financial products in this same currency are accessible at lower prices in liquid markets; that means that the higher rate is not free of risk, otherwise it should not be higher.

Regarding the Equity Risk Premium, I have used more conservative values than BESI: 5,5% vs 4% respectively. Damodaran defends an ERP of 5% for developed economies while Bloomberg values are around 5,75%, at the same time it has been observed in most of analysts a tendency to use ERP higher than 5% which is why I believe a ERP of 4% is too low. However, it is my perception that most of the analysts will gradually increase the risk premiums they have been using, in order to reflect the uncertainty lived in these days.

There is one more important variable to determine the cost of equity which is different in both estimates, the beta. BESI valuation added premiums to the betas of the different countries which I did not. The reason is that the specific risk of each country should already be reflected in the country specific risk premium previously added to the ERP, and when a premium is added to the beta there is the chance that a double counting might occur.

In terms of the cost of debt, there is a significant difference between the low spread assumed by BESI and the one used in my estimates. BESI spread of 2,5% is supported by historical values which I do not believe the company will be able to achieve in the upcoming years.

8- SENSITIVITY ANALYSIS

Equity Value		Share Price		Sensitivity
3 297,1	3 297,1	4,96 €	4,96 €	i) Base case
2 998,0	3 662,7	4,51 €	5,51 €	ii) ERP +/- 0.5%
3 011,3	3 516,5	4,53 €	5,29 €	iii) Euribor +/- 1%
2 838,5	4 114,8	4,27 €	6,19 €	iv) Eurozone Inflation -/+ 1%
2 565,9	3 403,5	3,86 €	5,12 €	v) Cement consumtion -/+ 10%
2 672,3	3 961,9	4,02 €	5,96 €	vi) Prices variation -/+ 5%

In this section, the model will test the impact in the share price of positive and negative modifications in some key variables.

i) The first point represents the share price with all the assumptions used in the valuation

ii) At this point, the variations in the share price when a different ERP is used are tested. This is a relevant point as sometimes it may be one of the main responsible for different results in valuations. As one can observe in the table, the price variation range is in this case 1€ per share.

iii) A variation of 1% in Euribor will lead to a price range from 4,53€ to 5,29€. Nowadays this subject gains particular importance as there is a lot of uncertainty around the capacity of Portuguese companies to be able to finance themselves at reasonable costs. Nonetheless the variations observed are clearly below the ones one would observe in companies with higher levels of debt.

iv) When presenting the macroeconomic assumptions, it has been argued that inflation of emergent economies in the long run would gradually converge to the levels of the eurozone inflation which were assumed to reach 1,5%. At this point, the variation of the share price is tested when the value of the eurozone inflation is either 1% higher or lower. It is important to bare in mind that both cost and prices were assumed to follow inflation, therefore the large EBITDA margins of Cimpor can explain the differences in the values obtained with modifications in the inflation rate.

v) Here I have tested both an increase and a decrease of 10% in cement consumption levels in each of the countries where Cimpor operates. As mentioned before, the model assumes that the quantity of cement sold by Cimpor depends directly on the levels of cement consumption. Curiously, the share price does not have a wide variation probably because the company would need to invest more in new capacity to keep up the growth in cement consumption.

vi) A test against variations in cement prices has obviously an enormous impact in the share price, which after observing the impacts of inflation changes was already expected.

After an analysis of the sensitivity of Cimpor's share price to some basic variables it becomes evident that even the more sophisticated models are quite volatiles and exposed to their main assumptions. I believe this fact enhances the importance of such tests as they are able to quantify potential gains or losses associated with modifications in the economic context.

9- INVESTMENT CASE

After a detailed analysis of Cimpor I suggest a HOLD recommendation resulting from a target price of 4,96 and a current price of 4,86 which reflects an upside potential of 2%.

The focus on emerging economies has been responsible for the positive results of the company of the last years and there is a clear tendency that their weight in the company will increase significantly. The case of Brazil is particularly interesting as it is responsible for 30% of the total value of the company. However, some African countries like Egypt or South Africa are also expected to have a more important role in the performance of the company.

A strong cash-flow generation capacity combined with a well diversified portfolio make Cimpor an attractive and solid company to invest.

Moreover, Cimpor has one main advantage over their competitors: EBITDA margins. The reasons for Cimpor to have such good margins are their focus on the clinker business as opposed to aggregates or concretes as well as their efficient cost structure. Nevertheless, good margins are already priced in as one can observe in the EV/EBITDA multiples.

In terms of investment prospects, it should be highlighted the increases in capacity in Brazil, South Africa or India as the main responsible for a total capacity increase of the company from 34,5 m. tons in 2010 to 54 m. tons in 2050.

The main concern regarding the future of Cimpor has to do with the ability of the company to keep performing in the current political and economic environment lived in Portugal.

10- **CONCLUSIONS**

The more obvious but important conclusion is that there is not a perfect or universal valuation method that is adequate to any company in any industry or region. The advantages and disadvantages associated with the different methodologies must be all weighted and taken into account when deciding which method to use for a specific company. In the case of Cimpor the WACC seemed to be a pretty reasonable despite of the fact that a relative valuation using the multiples might also be a good complement.

Another important conclusion has to do with the importance of the assumptions made as well as with their subjectivity and reliability. Throughout the valuation of Cimpor I was faced with many obstacles that had several ways of being overcome however the identification of the most appropriate assumption will be as successful as the more discussions and arguments one can find to justify each one of the potential assumptions.

It must also be noticed that despite of the complexity and theoretical support that some estimates have, the analyst is always limited to the information and data he can access. Very often, that information and data are the ones that the company wants him to have access. Therefore, it is not strange that most of the analyst recommendations are to buy or hold while very few of them are to sell.

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<u>Company Research</u>

BESI equity research reports

BPI equity research reports

Millennium equity research reports

Santander equity research reports

<u>Industry research</u>

Accenture research reports

Cimpor reports and presentations

Mckinsey research reports

One Stone Consulting

Lafarge reports

Cemex reports

Heidelberg Cement reports

Buzzi Unicem reports

Holcim reports

Italcementi reports

The Global Cement reports

<u>Others</u>

Damodaran - www.stern.nyu.edu/~adamodar

Bloomberg - www.bloomber.com

Reuters - www.reuters.com

IMF - www.imf.org

Banco de Portugal - www.bportugal.pt

OECD - www.oecd.org

12- APPENDIX

12.1- The Peer Group

Lafarge

Lafarge is a French company that produces and sells building materials where cement, aggregates, concretes and ready-mixed products account for more than 90% of their business and gypsum is responsible for the rest.

Lafarge is the world's largest Building Materials company and the leader in the cement market. Currently, Lafarge employs around 76,000 people in 78 different countries.

In order to respond to the different demands of the countries where they operate, Lafarge has two strategic priorities: cement, primarily in emerging markets, and innovative solutions and products in more developed and saturated markets.

In terms of the locations where Lafarge operates, it should be noted that European and North American economies are still responsible for half of their sales, however Latin America and Asian countries have been increasing their weights in Lafarge business volume in the last years. Regarding growth prospects, the company is expected to increase their sales in 6% and 7% respectively in the years of 2011 and 2012 with similar values of profitability with ROIC of 6% and 7% in the next two years.

Heidelberg Cement

Heidelberg Cement is a fully integrated building materials company that produces and sells cement and aggregates as well as ready-mixed products and other related services as a supplement of their product range.

Heidelberg is divided in five geographic areas: Western and Northern Europe, Eastern Europe and Central Asia, North America, Asia Pacific and finally Africa and Mediterranean Basin. Regarding Heidelberg business location, it should be highlighted the fact that the company has no operations in Latin America, one of the most attractive markets for most of the cement companies.

In terms of sales breakdown by products, cement and aggregates are by far their most important products responsible for around 90% of the business while the other building materials and services account for the other 10%.

Heidelberg strategy is similar with that of most of the major global players and consists in focusing on cement in high-growth markets in developing countries and on vertical integration in mature markets. The expansion of the company can be achieved either organically, through acquisitions or partnerships.

The company is expected to grow at the rates of 6% and 8% in the next two years and to have ROIC's of 7% and 8%.

Buzzi Unicem

Buzzi Unicem is an international multiregional company focused on cement, ready-mixed concrete and aggregates. In 2010, the company had revenues of 2,684.4 m€ which are similar to those of Cimpor.

Uzzi Unicem has a presence in 11 different countries with Italy, USA and Germany as the most important markets, despite of the modest increase in sales in emerging markets as Russia, Mexico or Poland.

The company, as well as Cimpor, can be identified as pure cement players as cement and clinker and concrete and aggregate products are responsible for 99% of their business.

In terms of growth, Buzzi Unicem is expected to increase sales in 6% and 7% in 2011 and 2012 with similar results for profitability ratios with a ROIC of 6% and 7% for the respective two years.

Italcementi

Italcementi is an Italian company and is the world's fifth largest cement producer with a total capacity of 75 million tons.

As most of cement players, Italcementi's activities of producing and selling cement and clinker as well as ready-mixed concrete and aggregates are responsible for 95% of their revenues.

In terms of segmentation for geographic area, Central and Western Europe as well as Emerging Europe, North Africa and Middle East are their most relevant markets with a combined share of 75% of the revenues with a decreasing tendency in Central and Western Europe and an increasing one in all other regions.

The company is exposed to exchange rate risk which affected positively their results due to the same reasons of Cimpor, meaning the appreciation of North African currencies against the Euro.

In the next two years, the company is expected to increase their revenues by 3% and 5% respectively and to present medium levels of profitability with ROIC's of 4% and 5%.

Cemex

Cemex is a Mexican cement company and the third largest in the world with a total capacity of cement production of 96 million tons. The company employs 46,000 people worldwide and produces building materials in more than 50 countries but, due to their trading capabilities, has operations in almost 100 countries.

Regarding ready-mixed concretes, the company is the world's leading supplier as they represent 46% of their revenues.

In terms of geographic distribution, Cemex's operations have very similarities with Cimpor with South and Central American countries accounting for 36% of their sales and Europe for 35%.

Cemex strategy has been characterized by successful acquisitions quickly integrated and with good levels of operating efficiency.

The growth prospects for 2011 and 2012 are an increase of 5% in sales in both years while in terms of profitability ratios a ROIC of 5% and of 3% are expected.

<u>Holcim</u>

Holcim is a Switzerland cement company and more globally spread than any other building materials company in the world. Currently, the company employs more than 80,00 people and operates in 70 different countries with production facilities in about 2,500 locations. Throughout the years, the company has been able to diversify in terms of geography while adopting a concentration strategy in their core business.

More than one third of the company revenues came from Asia Pacific while Europe is responsible for about 30%. In terms of mature versus emerging markets it must be noticed that emerging ones since 2006 have been gradually increasing their weight in the company's revenues. As all the companies mentioned above, their core business is the production and selling of cement and aggregates, however, some innovative products as asphalt are also sold in mature markets, especially in urban centers.

12.2- Main Figures and ratios

Data (Eur m)	2004	2005	2006	2007	2008	2009	2010	2011E	2012E	2013E	2014E	2015E
Sales	1.427,7	1.623,3	1.724,6	2.064,1	2.185,2	2.164,8	2.269,4	2.425,7	2.449,7	2.504,4	2.576,3	2.645,3
EBITDA	451,9	495,8	563,0	607,0	586,3	605,9	553,6	586,8	597,8	605,8	614,0	621,0
EBIT	323,4	355,4	408,1	438,1	392,6	376,9	323,8	369,0	385,0	397,0	406,2	414,5
Financial costs	86,9	77,2	104,7	68,6	-36,0	41,2	33,6	83,8	101,4	105,7	109,2	112,2
EBT	316,7	352,2	365,8	390,1	258,3	313,8	263,2	283,2	281,6	289,4	295,0	300,4
Taxes	52,9	75,7	60,1	69,3	24,9	68,1	96,8	82,1	81,7	83,9	85,5	87,1
Net income	263,8	276,5	305,6	320,8	233,3	245,7	166,4	201,1	199,9	205,4	209,4	213,3
Net income for shareholders	256,2	266,2	291,9	304,1	219,4	237,0	156,5	189,2	188,0	193,3	197,0	200,6
Total assets	3.411,5	3.805,4	3.857,8	4.834,0	4.615,3	4.927,4	5.384,9	5.522,8	5.613,4	5.715,5	5.821,5	5.908,8
Net debt	1.229,0	1.039,8	929,0	1.415,7	1.949,8	1.659,2	1.534,5	1.534,5	1.534,5	1.534,5	1.534,5	1.534,5
Equity for shareholders	1.159,2	1.519,1	1.579,7	1.796,4	1.505,1	1.830,5	2.132,8	2.228,0	2.302,6	2.383,0	2.464,1	2.526,8
Total equity	1.222,9	1.584,6	1.653,7	1.899,3	1.615,8	1.923,0	2.230,2	2.337,4	2.423,8	2.516,4	2.609,9	2.685,3
Current liabilities	272,5	306,5	293,9	380,7	377,5	347,0	391,1	421,8	426,0	435,5	448,0	460,0
Free cash flow to the equity				-347,4	-353,0	422,8	196,1	227,0	206,8	164,1	175,3	234,3
Free cash flow to the firm					81,1	283,7	282,5	264,2	277,4	237,4	249,7	308,2
Dividends					136,0	166,7	93,9	113,5	112,8	116,0	137,9	150,5
Shares outstanding (#m)					663,5	664,0	664,7	664,7	664,7	664,7	664,7	664,7
Price Target					-	-	4,96	4,96	4,96	4,96	4,96	4,96
Equity Value					-	-	3.297,1	3.296,4	3.296,4	3.296,4	3.296,4	3.296,4
EV					-	-	4.951,0	4.984,2	4.984,2	4.984,2	4.984,2	4.984,2
EPS					0,33	0,36	0,24	0,28	0,28	0,29	0,30	0,30

ratios	2004	2005	2006	2007	2008	2009	2010	2011E	2012E	2013E	2014E	2015E
Sales growth					5,9%	-0,9%	4,8%	6,9%	1,0%	2,2%	2,9%	2,7%
EBITDA growth					-	-	-	6,0%	1,9%	1,3%	1,4%	1,1%
EBITDA margin					26,8%	28,0%	24,4%	24,2%	24,4%	24,2%	23,8%	23,5%
ROIC					6,0%	4,1%	3,2%	3,7%	3,6%	3,6%	2,7%	2,3%

12.3- Working Capital

Assumptions&Indicators												
Company's	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2015E**	**2020E**	**2025E**	**2030E**	**2040E**	**2050E**
Working capital												
Stocks/sales	11,3%	10,8%	11,7%	15,7%	14,1%	16,2%	15,3%	15,3%	15,3%	15,3%	15,3%	15,3%
Customers/sales	16,9%	16,1%	16,5%	15,0%	12,7%	12,7%	13,5%	13,5%	13,5%	13,5%	13,5%	13,5%
Other receivables/sales	1,1%	1,2%	1,2%	1,4%	1,4%	1,1%	1,3%	1,3%	1,3%	1,3%	1,3%	1,3%
State assets/sales	2,2%	2,3%	1,5%	2,1%	2,5%	2,7%	2,4%	2,4%	2,4%	2,4%	2,4%	2,4%
Other assets/sales	0,2%	0,3%	0,3%	0,5%	1,2%	1,0%	0,9%	0,9%	0,9%	0,9%	0,9%	0,9%
Employees benefits	0,4%	0,2%	0,1%	0,2%	0,2%	0,2%	0,2%	0,2%	0,2%	0,2%	0,2%	0,2%
Provisions	0,1%	0,1%	0,2%	0,1%	0,0%	0,0%	0,1%	0,1%	0,1%	0,1%	0,1%	0,1%
Suppliers	9,5%	9,1%	10,0%	9,9%	8,8%	8,9%	9,2%	9,2%	9,2%	9,2%	9,2%	9,2%
Other payables	3,7%	3,0%	3,7%	2,8%	2,9%	3,3%	3,0%	3,0%	3,0%	3,0%	3,0%	3,0%
State	3,0%	2,5%	2,3%	2,0%	1,8%	2,0%	1,9%	1,9%	1,9%	1,9%	1,9%	1,9%
Other current liabilities	3,3%	3,0%	3,1%	3,0%	2,9%	3,1%	3,0%	3,0%	3,0%	3,0%	3,0%	3,0%
Working capital/sales	**11,7%**	**12,7%**	**11,8%**	**16,6%**	**15,3%**	**16,2%**	**16,0%**	**16,0%**	**16,0%**	**16,0%**	**16,0%**	**16,0%**

12.4- Debt and Cash

Assumptions															
Debt	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011E**	**2012E**	**2013E**	**2014E**	**2015E**	**2020E**	**2030E**	**2040E**	**2050E**
Euribor															
Average rate	2,22%	3,15%	4,29%	4,75%	1,36%	1,06%	1,50%	2,29%	2,54%	2,75%	2,92%	3,46%	3,85%	3,71%	3,71%
Globally															
End of year debt (Eur m)	1.456	1.418	1.956	2.119	2.098	2.194	2.360	2.360	2.360	2.360	2.361	2.361	2.362	2.363	2.364
Interest costs (Eur m)	81,1	88,4	96,4	114,6	67,7	68,8	113,9	136,7	142,6	147,5	151,5	164,3	173,6	170,5	170,6
Average interest rate (%)	5,5%	6,2%	5,7%	5,6%	3,2%	3,2%	5,00%	5,79%	6,04%	6,25%	6,42%	6,96%	7,35%	7,21%	7,21%
Spread over Euribor (%)	3,33%	3,00%	1,42%	0,87%	1,85%	2,14%	3,50%	3,50%	3,50%	3,50%	3,50%	3,50%	3,50%	3,50%	3,50%
Cash and liquid investments	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011E**	**2012E**	**2013E**	**2014E**	**2015E**	**2020E**	**2030E**	**2040E**	**2050E**
Globally															
Cash (Eur m)	416	489	540	170	439	660	660	660	660	660	660	660	660	660	660
Interests received (Eur m)	38,6	46,5	45,2	32,1	15,7	22,7	30,1	35,3	37,0	38,3	39,5	43,1	45,6	44,7	44,7
Average interest rate (%)	11,8%	10,3%	8,8%	9,0%	5,2%	4,1%	4,57%	5,36%	5,61%	5,81%	5,98%	6,53%	6,91%	6,78%	6,78%
Spread over Euribor (%)	9,55%	7,12%	4,48%	4,29%	3,81%	3,07%	3,07%	3,07%	3,07%	3,07%	3,07%	3,07%	3,07%	3,07%	3,07%

12.5- Consolidated Financial Statements

Income Statement

Income statement													
Eur m	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2015E**	**2020E**	**2025E**	**2030E**	**2035E**	**2040E**
Portugal	560,0	576,5	531,6	562,6	546,6	448,8	441,4	506,7	558,3	607,3	653,4	696,9	736,3
Spain	347,0	373,1	430,5	470,9	358,8	328,8	272,5	339,6	369,2	395,1	415,0	428,7	437,2
Brazil	199,1	227,1	270,3	322,0	401,3	427,4	593,2	759,4	1.027,6	1.343,1	1.655,9	1.953,6	2.235,8
Egypt	66,8	103,9	127,8	120,6	161,2	240,6	212,2	135,6	138,5	161,9	204,0	250,5	301,2
Turkey	0,0	0,0	0,0	163,1	156,1	107,5	142,5	148,8	178,6	212,1	246,8	282,6	320,0
South Africa	87,5	115,8	119,5	129,8	138,2	152,8	130,9	175,5	254,6	337,9	416,3	486,8	561,1
Tunisia	53,6	53,4	59,6	59,7	64,0	69,9	76,5	65,1	63,5	81,9	100,7	119,4	137,1
Morocco	54,5	60,5	72,0	80,5	88,8	94,2	95,1	97,8	106,0	109,9	142,5	179,8	221,9
Mozambique	0,0	0,0	54,5	60,1	77,4	80,3	77,2	139,4	216,3	324,3	483,5	690,9	954,7
China	0,0	0,0	0,0	23,9	65,6	81,1	92,9	83,6	62,7	76,1	86,7	95,2	102,0
India	0,0	0,0	0,0	0,0	32,3	52,9	43,4	62,3	95,6	135,8	189,1	250,3	311,9
Cape Verde	0,0	12,5	18,0	30,5	42,1	31,3	35,8	42,2	54,6	68,7	81,9	95,6	107,9
Other	120,9	178,5	130,0	133,6	142,6	101,6	147,9	153,8	189,0	233,1	282,8	334,5	388,7
Intragroup eliminations	-61,8	-78,2	-89,4	-93,1	-89,8	-52,2	-92,2	-64,5	-84,0	-103,0	-121,0	-138,1	-154,5
Total sales	**1.427,7**	**1.623,3**	**1.724,6**	**2.064,1**	**2.185,2**	**2.164,8**	**2.269,4**	**2.645,3**	**3.230,4**	**3.984,3**	**4.837,7**	**5.726,7**	**6.661,5**
Portugal	176,3	183,0	173,9	172,7	171,9	149,6	139,6	153,8	185,7	202,3	217,1	229,8	239,8
Spain	86,8	102,9	143,7	137,8	82,9	46,6	31,1	40,3	57,9	60,9	61,1	58,6	53,5
Brazil	78,3	62,9	60,6	73,9	102,3	123,1	169,0	207,5	310,7	406,7	484,8	570,6	678,1
Egypt	30,0	48,5	63,3	58,6	73,2	104,5	75,5	42,8	43,7	54,5	75,8	94,9	109,2
Turkey	0,0	0,0	0,0	38,6	15,6	11,1	20,0	11,0	19,4	28,6	26,3	34,9	43,8
South Africa	39,9	41,9	47,9	43,0	46,2	70,4	46,6	54,2	74,9	100,6	119,1	138,0	155,8
Tunisia	16,1	14,6	17,5	18,9	17,0	19,7	22,5	15,9	14,0	21,8	29,6	35,2	39,5
Morocco	25,6	26,2	33,5	35,2	41,0	41,8	42,0	42,0	45,5	46,3	64,6	80,8	98,1
Mozambique	0,0	0,0	8,4	12,3	13,6	11,9	7,6	25,2	39,0	56,9	82,0	127,6	160,0
China	0,0	0,0	0,0	1,8	6,3	4,7	-12,3	8,2	9,1	13,4	12,3	14,0	14,8
India	0,0	0,0	0,0	0,0	3,1	9,9	-2,0	4,8	6,6	9,0	11,1	15,7	16,0
Cape Verde	0,0	1,2	2,3	3,0	4,2	3,8	4,4	5,1	6,6	8,3	9,9	11,6	13,1
Other	-1,0	14,6	11,8	11,1	9,0	8,8	9,7	10,2	12,5	15,4	18,7	22,1	25,7
EBITDA	**451,9**	**495,8**	**563,0**	**607,0**	**586,3**	**605,9**	**553,6**	**621,0**	**825,6**	**1.024,7**	**1.212,5**	**1.433,9**	**1.647,4**
Portugal	43,8	48,5	52,2	51,5	54,4	55,3	54,3	43,2	38,4	36,7	36,8	38,1	40,2
Spain	29,0	30,7	32,0	33,3	36,4	46,1	41,6	29,2	22,3	18,7	17,0	16,5	16,7
Brazil	14,1	21,7	25,5	29,4	30,8	34,3	43,6	51,1	52,6	63,5	80,1	92,4	96,0
Egypt	10,1	11,7	11,7	11,1	10,9	11,1	9,6	10,9	10,8	11,1	11,7	14,0	19,1
Turkey	0,0	0,0	0,0	14,0	16,2	29,6	22,6	19,1	15,2	13,1	14,6	14,5	14,8
South Africa	6,4	7,2	7,7	5,0	7,3	11,5	13,3	13,0	18,0	21,8	27,3	31,5	37,0
Tunisia	4,9	7,5	7,8	7,8	7,7	7,7	6,2	6,1	5,7	5,7	5,8	6,8	8,0
Morocco	4,8	7,0	7,7	6,8	8,0	8,6	9,7	10,0	10,5	11,2	12,0	15,2	19,5
Mozambique	0,0	0,0	0,9	1,5	4,7	5,5	5,1	4,4	6,1	9,1	13,9	17,3	27,5
China	0,0	0,0	0,0	1,6	3,7	4,6	8,3	7,7	6,4	5,4	6,1	5,8	5,8
India	0,0	0,0	0,0	0,0	0,7	6,2	6,1	4,2	4,1	4,5	5,6	6,7	8,3
Cape Verde	0,0	0,6	1,0	0,8	1,0	0,9	1,1	1,2	1,4	1,5	1,6	1,7	1,9
Other	2,3	2,6	2,1	2,4	2,9	4,8	4,8	6,4	8,6	11,5	15,3	20,5	27,5
Depreciation	**115,4**	**137,6**	**148,6**	**165,1**	**184,6**	**226,3**	**226,3**	**206,5**	**200,0**	**213,7**	**247,9**	**281,1**	**322,3**
Portugal	1,3	0,4	-0,5	3,6	0,3	0,3	-0,1	0,0	0,0	0,0	0,0	0,0	0,0
Spain	-0,6	2,1	2,1	10,4	-1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Brazil	0,3	0,5	0,0	6,7	1,4	0,3	0,6	0,0	0,0	0,0	0,0	0,0	0,0
Egypt	8,0	-0,5	1,0	1,5	3,5	0,2	1,6	0,0	0,0	0,0	0,0	0,0	0,0
Turkey	0,0	0,0	0,0	1,3	0,2	0,1	0,1	0,0	0,0	0,0	0,0	0,0	0,0
South Africa	0,1	0,1	0,6	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Tunisia	0,0	0,0	0,0	0,3	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Morocco	-0,8	0,0	0,0	0,0	2,4	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Mozambique	0,0	0,0	0,0	-17,4	0,2	0,1	0,4	0,0	0,0	0,0	0,0	0,0	0,0
China	0,0	0,0	0,0	0,0	0,3	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
India	0,0	0,0	0,0	0,0	0,0	-0,1	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Cape Verde	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Other	4,7	0,2	3,1	-2,6	1,9	1,8	0,9	0,0	0,0	0,0	0,0	0,0	0,0
Provisions	**13,2**	**2,8**	**6,4**	**3,8**	**9,1**	**2,8**	**3,5**	**0,0**	**0,0**	**0,0**	**0,0**	**0,0**	**0,0**
Portugal	131,1	134,1	122,2	117,7	117,3	94,0	85,4	110,6	147,3	165,7	180,3	191,7	199,6
Spain	58,3	70,0	109,5	94,0	47,6	0,5	-10,5	11,0	35,6	42,2	44,1	42,1	36,9
Brazil	63,9	40,7	35,1	37,7	70,1	88,4	124,8	156,5	258,2	343,2	404,7	478,2	582,1
Egypt	11,9	37,3	50,6	46,0	58,9	93,2	64,3	31,9	32,9	43,3	64,1	80,9	90,1
Turkey	0,0	0,0	0,0	23,3	-0,8	-18,7	-2,7	-8,1	4,3	15,5	11,6	20,4	28,9
South Africa	33,4	34,6	39,6	38,1	38,9	58,9	33,3	41,3	56,9	78,8	91,8	106,6	118,8
Tunisia	11,1	7,1	9,7	10,8	9,3	11,9	16,3	9,8	8,3	16,1	23,8	28,4	31,5
Morocco	21,5	19,2	25,9	28,4	30,5	33,2	32,3	32,1	35,0	35,2	52,7	65,6	78,6
Mozambique	0,0	0,0	7,5	28,3	8,8	6,3	2,1	20,8	32,9	47,8	68,1	110,2	132,4
China	0,0	0,0	0,0	0,3	2,2	0,2	-20,6	0,4	2,7	8,1	6,2	8,2	9,0
India	0,0	0,0	0,0	0,0	2,4	3,8	-8,1	0,6	2,5	4,5	5,5	9,0	7,7
Cape Verde	0,0	0,6	1,3	2,2	3,2	2,9	3,2	3,9	5,3	6,9	8,4	9,9	11,2
Other	-7,9	11,8	6,7	11,3	4,2	2,2	4,0	3,7	3,9	3,9	3,3	1,5	-1,8

Other comprehensive income													
Eur m	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2015E**	**2020E**	**2025E**	**2030E**	**2035E**	**2040E**
Cash flow hedging instruments	-0,7	0,7	1,1	-8,7	3,3	3,5	2,0	0,0	0,0	0,0	0,0	0,0	0,0
Available-for-sale financial assets	-1,5	14,4	0,0	2,1	-1,7	-0,2	-0,1	0,0	0,0	0,0	0,0	0,0	0,0
Actuarial gains on pension fund	-3,2	-11,2	-2,8	6,6	-3,2	-4,1	-6,1	0,0	0,0	0,0	0,0	0,0	0,0
Currency translation adjustments	8,0	206,2	-92,9	60,9	-330,8	203,0	211,7	0,0	0,0	0,0	0,0	0,0	0,0
Adjustments in investments in assc	-1,7	2,1	-0,5	3,2	-3,3	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Total other comprehensive incom	**0,8**	**212,3**	**-95,1**	**64,1**	**-335,7**	**202,2**	**207,6**	**0,0**	**0,0**	**0,0**	**0,0**	**0,0**	**0,0**

Balance Sheet

Balance sheet													
Eur m	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2015E**	**2020E**	**2025E**	**2030E**	**2035E**	**2040E**
Goodwill	821,0	940,6	910,0	1.283,7	1.277,0	1.352,3	1.445,2	1.445,2	1.445,2	1.445,2	1.445,2	1.445,2	1.445,2
Intangible assets	14,2	12,2	10,7	13,3	42,5	69,6	69,9	69,9	69,9	69,9	69,9	69,9	69,9
Fixed tangible assets	1.456,8	1.567,5	1.541,8	1.895,1	2.007,9	2.127,8	2.188,3	2.182,2	2.310,3	2.567,9	3.055,0	3.635,9	4.091,5
Investment in associates	266,4	205,0	157,0	163,5	97,7	25,0	23,1	23,1	23,1	23,1	23,1	23,1	23,1
Other investments	7,6	10,9	153,3	164,3	131,4	9,9	13,4	13,4	13,4	13,4	13,4	13,4	13,4
Financial assets for sale	52,3	69,2	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Other receivables	1,5	2,3	6,3	11,9	10,9	11,9	12,5	12,5	12,5	12,5	12,5	12,5	12,5
State	2,7	2,6	3,5	20,5	16,3	28,0	33,9	33,9	33,9	33,9	33,9	33,9	33,9
Other assets	0,0	1,2	3,0	4,7	33,9	32,2	22,2	22,2	22,2	22,2	22,2	22,2	22,2
Tax deffered assets	102,9	91,1	81,2	123,2	103,0	107,3	128,9	128,9	128,9	128,9	128,9	128,9	128,9
Non-current assets	**2.725,5**	**2.902,7**	**2.866,8**	**3.680,2**	**3.720,7**	**3.764,0**	**3.937,5**	**3.931,4**	**4.059,5**	**4.317,1**	**4.804,2**	**5.385,1**	**5.840,7**
Stocks	151,8	173,6	177,0	230,6	327,8	294,3	362,0	405,4	495,0	610,6	741,3	877,5	1.020,8
Customers	232,5	258,7	263,8	323,9	313,4	264,2	284,4	356,0	434,7	536,2	651,0	770,6	896,4
Other receivables	20,4	17,0	19,0	22,8	29,6	28,9	24,7	34,4	42,1	51,9	63,0	74,6	86,7
State	32,7	34,3	37,0	29,9	43,3	52,7	60,3	64,3	78,5	96,9	117,6	139,2	161,9
Cash	239,5	416,1	489,4	540,3	169,6	439,2	659,7	659,7	659,7	659,7	659,7	659,7	659,7
Excess Cash								433,4	632,5	689,7	577,1	337,8	270,8
Other assets	9,2	3,0	4,8	6,5	10,8	25,9	22,3	24,3	29,7	36,6	44,4	52,6	61,1
Non-current assets for sale	0,0	0,0	0,0	0,0	0,0	58,3	34,0	0,0	0,0	0,0	0,0	0,0	0,0
Current assets	**686,0**	**902,7**	**991,0**	**1.153,8**	**894,6**	**1.163,4**	**1.447,4**	**1.977,5**	**2.372,2**	**2.681,4**	**2.854,1**	**2.912,0**	**3.157,5**
Total assets	**3.411,5**	**3.805,4**	**3.857,8**	**4.834,0**	**4.615,3**	**4.927,4**	**5.384,9**	**5.908,8**	**6.431,7**	**6.998,6**	**7.658,3**	**8.297,1**	**8.998,1**
Share capital	672,0	672,0	672,0	672,0	672,0	672,0	672,0	672,0	672,0	672,0	672,0	672,0	672,0
Own stock	-15,5	-12,8	-9,3	-19,9	-41,6	-39,9	-33,0	-33,0	-33,0	-33,0	-33,0	-33,0	-33,0
Exchange adjustments	8,6	212,5	121,3	183,8	-149,7	58,6	256,3	256,3	256,3	256,3	256,3	256,3	256,3
Reserves	240,2	262,9	255,6	272,0	283,1	287,5	280,7	280,7	280,7	280,7	280,7	280,7	280,7
Accumulated results	-2,2	118,4	248,2	384,5	521,9	615,3	714,9	1.150,1	1.347,1	1.536,0	1.783,5	1.938,2	2.122,2
Net profit for the year	256,2	266,2	291,9	304,1	219,4	237,0	241,8	200,6	335,2	455,4	556,7	683,2	798,4
Cimpor's equity	**1.159,2**	**1.519,1**	**1.579,7**	**1.796,4**	**1.505,1**	**1.830,5**	**2.132,8**	**2.526,8**	**2.858,4**	**3.167,4**	**3.516,3**	**3.797,4**	**4.096,6**
Minority interests	**63,7**	**65,5**	**74,1**	**102,9**	**110,7**	**92,5**	**97,4**	**158,5**	**248,0**	**374,7**	**537,2**	**740,2**	**979,5**
Total equity	**1.222,9**	**1.584,6**	**1.653,7**	**1.899,3**	**1.615,8**	**1.923,0**	**2.230,2**	**2.685,3**	**3.106,4**	**3.542,1**	**4.053,5**	**4.537,6**	**5.076,1**
Tax deffered liabilities	111,6	135,7	136,1	198,2	197,4	233,9	272,8	272,8	272,8	272,8	272,8	272,8	272,8
Employees benefits	22,2	27,4	24,9	17,0	16,6	20,0	19,1	19,1	19,1	19,1	19,1	19,1	19,1
Provisions	141,3	147,6	156,2	191,0	152,4	153,7	170,8	170,8	170,8	170,8	170,8	170,8	170,8
Loans	1.308,3	1.417,0	1.357,4	1.324,2	1.911,1	1.637,2	1.253,3	1.253,3	1.253,3	1.253,3	1.253,3	1.253,3	1.253,3
Leases	2,3	0,7	0,3	6,3	4,7	4,8	3,1	3,1	3,1	3,1	3,1	3,1	3,1
Other payables	13,6	19,8	19,8	20,8	19,5	28,0	26,2	26,2	26,2	26,2	26,2	26,2	26,2
State	3,9	4,1	2,3	1,8	1,5	1,0	0,5	0,5	0,5	0,5	0,5	0,5	0,5
Other non-current liabilities	155,0	123,9	152,5	169,1	115,2	122,4	80,0	80,0	80,0	80,0	80,0	80,0	80,0
Non-current liabilities	**1.758,2**	**1.876,1**	**1.849,5**	**1.928,6**	**2.418,4**	**2.200,9**	**1.825,8**	**1.825,8**	**1.825,8**	**1.825,8**	**1.825,8**	**1.825,8**	**1.825,8**
Employees benefits	0,7	6,0	3,3	2,1	4,7	4,6	4,2	5,6	6,8	8,4	10,2	12,1	14,0
Provisions	2,2	2,0	1,5	3,1	2,1	1,0	1,1	1,7	2,1	2,6	3,2	3,8	4,4
Loans	156,3	36,5	60,3	623,5	201,5	453,5	934,6	934,6	934,6	934,6	934,6	934,6	934,6
Leases	1,6	1,6	0,5	1,9	2,1	3,0	3,1	3,1	3,1	3,1	3,1	3,1	3,1
Suppliers	146,2	145,3	149,6	196,2	207,2	182,7	199,4	243,2	297,0	366,3	444,8	526,5	612,5
Other payables	45,8	57,4	49,9	73,3	59,0	61,1	73,9	79,8	97,4	120,2	145,9	172,7	200,9
State	29,7	45,4	41,1	45,0	41,1	37,1	44,2	50,4	61,6	76,0	92,2	109,2	127,0
Other current liabilities	48,0	50,4	48,5	60,9	63,3	60,6	68,4	79,3	96,8	119,4	145,0	171,6	199,6
Current liabilities	**430,4**	**344,7**	**354,6**	**1.006,1**	**581,1**	**803,4**	**1.328,8**	**1.397,7**	**1.499,5**	**1.630,6**	**1.779,0**	**1.933,6**	**2.096,2**
Total liabitilies	**2.188,5**	**2.220,8**	**2.204,1**	**2.934,7**	**2.999,5**	**3.004,4**	**3.154,6**	**3.223,6**	**3.325,3**	**3.456,4**	**3.604,8**	**3.759,4**	**3.922,0**

Cash Flow Statement

Cash flow statement													
Eur m	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2015E**	**2020E**	**2025E**	**2030E**	**2035E**	**2040E**
EBITDA		495,8	563,0	607,0	586,3	605,9	553,6	621,0	825,6	1.024,7	1.212,5	1.433,9	1.647,4
Taxes paid		-39,9	-49,8	-49,2	-5,7	-35,9	-79,5	-87,1	-145,6	-197,7	-241,7	-296,7	-346,7
Financial results		-34,1	-75,6	-55,1	-54,1	-52,9	-51,2	-113,2	-122,7	-128,3	-130,1	-128,8	-128,7
Change in working capital		200,2	-120,5	35,8	-445,4	42,5	8,5	-11,1	-22,9	-25,5	-26,9	-27,6	-31,1
Other		-21,5	17,6	-14,9	-80,0	7,6	-42,1	0,0	0,0	0,0	0,0	0,0	0,0
Cash flows from operating activities		**600,5**	**334,7**	**523,6**	**1,1**	**567,2**	**389,3**	**409,7**	**534,4**	**673,2**	**813,8**	**980,8**	**1.141,0**
Capex		0,0	0,0	0,0	0,0	-252,0	-130,7	-174,3	-276,0	-285,4	-260,3	-426,1	-403,5
Other investing cash flow		-284,1	-82,6	-871,0	-354,1	107,7	-62,5	-1,0	-1,0	-1,0	-1,0	-1,0	-1,0
Free cash flow		**316,4**	**252,2**	**-347,4**	**-353,0**	**422,8**	**196,1**	**234,3**	**257,4**	**386,8**	**552,5**	**553,6**	**736,5**
Dividends		0,0	0,0	0,0	0,0	-136,0	-166,7	-137,9	-286,2	-377,9	-491,6	-641,7	-756,4
Other		0,0	0,0	0,0	0,0	3,8	-19,0	-96,4	28,9	-8,9	-60,9	88,1	19,9
Net debt reduction		**316,4**	**252,2**	**-347,4**	**-353,0**	**290,6**	**10,4**	**0,0**	**0,0**	**0,0**	**0,0**	**0,0**	**0,0**

12.6- Individual Estimates

Portugal

Operational data										
Market data	**2010**	**2011E**	**2012E**	**2013E**	**2014E**	**2015E**	**2020E**	**2030E**	**2040E**	**2050E**
Local inflation (%)	0,8%	1,1%	1,4%	1,6%	1,7%	1,8%	1,7%	1,6%	1,5%	1,5%
Market data	**2010**	**2011E**	**2012E**	**2013E**	**2014E**	**2015E**	**2020E**	**2030E**	**2040E**	**2050E**
Population (millions)	10,7	10,7	10,7	10,7	10,7	10,7	10,8	10,6	10,4	10,1
growth (%)	0,2%	0,2%	0,2%	0,1%	0,1%	0,1%	0,0%	-0,2%	-0,3%	-0,4%
GDP/capita (2009 international us	21,6	21,6	21,7	21,9	22,1	22,4	23,4	25,6	28,4	31,5
growth (%)	-1,3%	0,2%	0,4%	0,9%	1,0%	1,1%	0,8%	1,0%	1,1%	1,1%
Consumption/capita (Kg)	506	611	627	644	659	673	681	693	692	674
growth (%)	-13,7%	20,8%	2,6%	2,8%	2,3%	2,1%	0,1%	0,1%	-0,1%	-0,4%
Consumption (million tonnes)	5,4	6,5	6,7	6,9	7,1	7,2	7,3	7,4	7,2	6,8
growth (%)	-13,5%	21,0%	2,7%	2,9%	2,4%	2,1%	0,1%	-0,1%	-0,4%	-0,8%
Market share (%)	55,5%	55,5%	55,5%	55,5%	55,5%	55,5%	55,5%	55,5%	55,5%	55,5%
Domestic	2.997	3.626	3.725	3.833	3.926	4.011	4.064	4.086	4.000	3.765
Exports	1.560	724	750	772	792	809	808	775	701	600
Utilization data	**2010**	**2011E**	**2012E**	**2013E**	**2014E**	**2015E**	**2020E**	**2030E**	**2040E**	**2050E**
Capacity (k tonnes)	**7.157**	**7.157**	**7.157**	**7.157**	**7.157**	**7.157**	**7.157**	**7.157**	**7.157**	**7.157**
Utilization rate (%)	67,5%	64,4%	66,3%	68,2%	69,9%	71,4%	72,2%	72,0%	69,6%	64,7%
Production (k tonnes)	**4.831**	**4.611**	**4.744**	**4.882**	**5.002**	**5.110**	**5.165**	**5.153**	**4.984**	**4.627**

Income statement	**2010**	**2011E**	**2012E**	**2013E**	**2014E**	**2015E**	**2020E**	**2030E**	**2040E**	**2050E**
External sales	349,9	385,6	402,2	420,6	438,4	456,0	503,1	591,4	670,9	729,4
Internal sales	91,5	42,9	44,9	46,8	48,8	50,7	55,2	62,0	65,3	64,9
Sales	**441,4**	**428,4**	**447,1**	**467,5**	**487,2**	**506,7**	**558,3**	**653,4**	**736,3**	**794,3**
		441,4	**416,5**	**428,0**	**442,7**	**458,2**				
Cash costs	302,2	295,8	306,0	317,2	328,2	339,2	372,6	436,4	496,5	547,7
EBITDA	**139,6**	**132,4**	**141,3**	**145,3**	**148,5**	**153,8**	**185,7**	**217,1**	**239,8**	**246,6**
		132,4	**141,3**	**145,3**	**148,5**	**153,8**				
Depreciation	54,3	51,2	48,6	46,4	44,7	43,2	38,4	36,8	40,2	45,8
Provisions	-0,1	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
EBIT	**85,4**	**81,2**	**92,7**	**98,9**	**103,8**	**110,6**	**147,3**	**180,3**	**199,6**	**200,8**
Capex industrial	**21,5**	**23,2**	**25,0**	**27,0**	**29,2**	**29,7**	**32,4**	**38,0**	**44,3**	**51,5**
Maintenance capex/tonne (Eur)	3,0	3,2	3,5	3,8	4,1	4,2	4,5	5,3	6,2	7,2
growth (%)		8,0%	8,0%	8,0%	8,0%	1,8%	1,7%	1,6%	1,5%	1,5%
Investment capex/tonne (Eur)	200,0	202,2	205,1	208,3	211,9	215,8	235,2	275,9	321,4	373,5
growth (%)		1,1%	1,4%	1,6%	1,7%	1,8%	1,7%	1,6%	1,5%	1,5%
Dispose capex/tonne (Eur)	25,0	25,3	25,6	26,0	26,5	27,0	29,4	34,5	40,2	46,7
growth (%)		1,1%	1,4%	1,6%	1,7%	1,8%	1,7%	1,6%	1,5%	1,5%

Spain

Operational data										
Market data	**2010**	**2011E**	**2012E**	**2013E**	**2014E**	**2015E**	**2020E**	**2030E**	**2040E**	**2050E**
Local inflation (%)	1,2%	1,0%	1,1%	1,3%	1,6%	1,8%	1,7%	1,6%	1,5%	1,5%
Market data	**2010**	**2011E**	**2012E**	**2013E**	**2014E**	**2015E**	**2020E**	**2030E**	**2040E**	**2050E**
Population (millions)	46,0	46,1	46,3	46,4	46,5	46,6	47,6	49,1	50,1	50,7
growth (%)	0,4%	0,3%	0,2%	0,2%	0,2%	0,2%	0,6%	0,2%	0,2%	0,1%
GDP/capita (2009 international us	29,0	29,1	29,4	29,8	30,2	30,5	32,4	36,2	40,5	45,3
growth (%)	-2,2%	0,3%	1,0%	1,2%	1,4%	1,2%	1,1%	1,1%	1,1%	1,1%
Consumption/capita (Kg)	558	582	602	620	635	648	633	587	518	433
growth (%)	-10,5%	4,2%	3,5%	3,0%	2,4%	2,1%	-0,4%	-1,0%	-1,3%	-2,0%
Consumption (million tonnes)	25,7	26,8	27,8	28,7	29,5	30,2	30,1	28,9	26,0	22,0
growth (%)	-10,1%	4,5%	3,7%	3,2%	2,7%	2,3%	0,1%	-0,8%	-1,1%	-2,0%
Market share (%)	10,5%	10,5%	10,5%	10,5%	10,5%	10,5%	10,5%	10,5%	10,5%	10,5%
Domestic	2.697	2.818	2.924	3.017	3.098	3.169	3.164	3.029	2.726	2.308
Exports	159	159	159	159	159	159	159	159	159	159
Utilization data	**2010**	**2011E**	**2012E**	**2013E**	**2014E**	**2015E**	**2020E**	**2030E**	**2040E**	**2050E**
Capacity (k tonnes)	**3.132**	**3.132**	**3.132**	**3.132**	**3.132**	**3.132**	**3.132**	**3.132**	**3.132**	**2.662**
Utilization rate (%)	81,2%	84,7%	87,7%	90,3%	92,6%	94,6%	94,5%	90,7%	82,0%	82,5%
Production (k tonnes)	**2.543**	**2.651**	**2.745**	**2.828**	**2.900**	**2.963**	**2.960**	**2.840**	**2.569**	**2.197**

Income statement	2010	2011E	2012E	2013E	2014E	2015E	2020E	2030E	2040E	2050E
External sales	271,8	286,2	299,6	312,8	325,8	338,8	368,3	414,0	436,1	433,1
Internal sales	0,7	0,7	0,8	0,8	0,8	0,8	0,9	1,0	1,2	1,4
Sales	**272,5**	**286,9**	**300,4**	**313,6**	**326,6**	**339,6**	**369,2**	**415,0**	**437,2**	**434,4**
IR		**272,5**	**249,8**	**255,0**	**261,6**	**268,5**				
Cash costs	239,9	249,5	258,6	267,7	276,8	286,2	311,3	353,9	383,7	380,6
EBITDA	**31,1**	**35,4**	**32,5**	**33,1**	**39,2**	**40,3**	**57,9**	**61,1**	**53,5**	**53,9**
	-0,1	**35,4**	**32,5**	**33,1**	**39,2**	**40,3**				
Depreciation	41,6	38,5	35,8	33,4	31,2	29,2	22,3	17,0	16,7	16,6
Provisions	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
EBIT	**-10,5**	**-3,1**	**-3,3**	**-0,2**	**8,1**	**11,0**	**35,6**	**44,1**	**36,9**	**37,2**
Capex industrial	**11,0**	**11,1**	**11,2**	**11,3**	**11,5**	**11,7**	**12,8**	**15,0**	**17,4**	**17,2**
Maintenance capex/tonne (Eur)	3,5	3,5	3,6	3,6	3,7	3,7	4,1	4,8	5,6	6,5
growth (%)		1,0%	1,1%	1,3%	1,6%	1,8%	1,7%	1,6%	1,5%	1,5%
Investment capex/tonne (Eur)	100,0	101,0	102,1	103,5	105,1	106,9	116,4	136,4	158,8	184,5
growth (%)		1,0%	1,1%	1,3%	1,6%	1,8%	1,7%	1,6%	1,5%	1,5%
Dispose capex/tonne (Eur)	25,0	25,2	25,5	25,9	26,3	26,7	29,1	34,1	39,7	46,1
growth (%)		1,0%	1,1%	1,3%	1,6%	1,8%	1,7%	1,6%	1,5%	1,5%

Brazil

Operational data										
Market data	**2010**	**2011E**	**2012E**	**2013E**	**2014E**	**2015E**	**2020E**	**2030E**	**2040E**	**2050E**
Local inflation (%)	5,1%	4,6%	4,5%	4,5%	4,5%	4,5%	3,3%	2,1%	1,7%	1,6%
Eurozone inflation (%)	1,1%	1,3%	1,5%	1,6%	1,8%	1,9%	1,6%	1,5%	1,5%	1,5%
Average exchange rate	2,38	2,32	2,52	2,72	2,84	3,00	3,41	3,78	3,92	3,97
End of year exchange rate	2,25	2,39	2,66	2,79	2,89	3,11	3,43	3,79	3,92	3,97
Market data	**2010**	**2011E**	**2012E**	**2013E**	**2014E**	**2015E**	**2020E**	**2030E**	**2040E**	**2050E**
Population (millions)	193,3	194,9	196,5	198,0	199,5	199,5	203,1	212,2	216,2	215,4
growth (%)	0,9%	0,9%	0,8%	0,8%	0,7%	0,0%	0,6%	0,3%	0,1%	-0,1%
GDP/capita (2009 internatic	10,8	11,1	11,5	11,8	12,2	12,7	15,2	19,9	23,8	27,1
growth (%)	3,0%	2,9%	3,1%	3,0%	3,1%	3,8%	3,5%	2,2%	1,5%	1,1%
Consumption/capita (Kg)	285	302	319	337	356	374	470	625	716	757
growth (%)	6,5%	6,0%	5,6%	5,8%	5,4%	5,1%	4,1%	2,2%	1,0%	0,3%
Consumption (million tonne	55,1	58,9	62,7	66,8	71,0	74,6	95,5	132,7	154,7	163,0
growth (%)	7,4%	6,9%	6,4%	6,6%	6,2%	5,1%	4,7%	2,5%	1,0%	0,2%
Market share (%)	9,2%	9,2%	9,2%	9,2%	9,2%	9,2%	9,2%	9,2%	9,2%	9,2%
Domestic	5.067	5.417	5.766	6.148	6.529	6.861	8.782	12.210	14.229	14.996
Exports	21	21	21	21	21	21	21	21	21	21
Utilization data	**2010**	**2011E**	**2012E**	**2013E**	**2014E**	**2015E**	**2020E**	**2030E**	**2040E**	**2050E**
Capacity (k tonnes)	**6.511**	**6.511**	**7.311**	**8.111**	**8.911**	**8.911**	**9.802**	**14.351**	**15.786**	**17.365**
Utilization rate (%)	79,9%	83,5%	79,2%	76,1%	73,5%	77,2%	89,8%	85,2%	90,3%	86,5%
Production (k tonnes)	**5.202**	**5.438**	**5.787**	**6.169**	**6.550**	**6.882**	**8.803**	**12.231**	**14.250**	**15.017**

Income statement	2010	2011E	2012E	2013E	2014E	2015E	2020E	2030E	2040E	2050E
External sales	593,2	650,2	664,9	686,0	730,4	759,4	1.027,6	1.655,9	2.235,8	2.732,6
Internal sales	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Sales	**593,2**	**650,2**	**664,9**	**686,0**	**730,4**	**759,4**	**1.027,6**	**1.655,9**	**2.235,8**	**2.732,6**
Cash costs	424,2	462,3	479,9	500,7	538,5	551,9	716,9	1.171,1	1.557,7	1.925,1
EBITDA	**169,0**	**187,9**	**185,1**	**185,3**	**191,9**	**207,5**	**310,7**	**484,8**	**678,1**	**807,5**
Depreciation	43,6	42,5	45,8	49,0	52,2	51,1	52,6	80,1	96,0	119,8
Provisions	0,6	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
EBIT	**124,8**	**145,4**	**139,2**	**136,3**	**139,7**	**156,5**	**258,2**	**404,7**	**582,1**	**687,7**
Capex industrial	**30,4**	**117,1**	**116,4**	**116,4**	**41,7**	**41,3**	**149,1**	**81,5**	**103,9**	**132,6**
Maintenance capex/tonne	4,7	5,0	4,8	4,7	4,7	4,6	4,9	5,7	6,6	7,6
Investment capex/tonne (	98,4	105,6	101,5	98,2	98,5	97,5	103,1	119,6	138,6	160,7
growth (%)		7,4%	-3,9%	-3,2%	0,3%	-1,0%	1,5%	1,5%	1,5%	1,5%
Dispose capex/tonne (Eu	30,7	33,0	31,7	30,7	30,8	30,5	32,2	37,4	43,3	50,2

Egypt

Operational data										
Market data	**2010**	**2011E**	**2012E**	**2013E**	**2014E**	**2015E**	**2020E**	**2030E**	**2040E**	**2050E**
Local inflation (%)	12,0%	9,5%	8,5%	7,5%	7,0%	6,5%	4,5%	2,5%	1,9%	1,6%
Eurozone inflation (%)	1,1%	1,3%	1,5%	1,6%	1,8%	1,9%	1,6%	1,5%	1,5%	1,5%
Average exchange rate	7,62	8,05	9,38	10,67	12,43	14,70	18,50	21,99	23,40	23,91
End of year exchange rate	7,35	8,74	10,02	11,32	13,54	15,85	18,75	22,10	23,44	23,93
Market data	**2010**	**2011E**	**2012E**	**2013E**	**2014E**	**2015E**	**2020E**	**2030E**	**2040E**	**2050E**
Population (millions)	78,2	79,8	81,4	83,0	84,7	86,4	93,8	106,2	117,1	125,5
growth (%)	2,0%	2,0%	2,0%	2,0%	2,0%	2,0%	1,5%	1,1%	0,9%	0,6%
GDP/capita (2009 internatio	6,2	6,4	6,6	6,9	7,1	7,4	9,0	12,1	15,1	17,3
growth (%)	1,5%	3,2%	3,5%	3,6%	3,9%	4,2%	3,6%	2,6%	1,8%	1,1%
Consumption/capita (Kg)	628	607	583	558	537	514	472	534	620	679
growth (%)	1,2%	-3,4%	-3,8%	-4,3%	-3,8%	-4,4%	-2,2%	1,8%	1,4%	0,7%
Consumption (million tonnes	49,1	48,4	47,5	46,4	45,5	44,4	44,3	56,7	72,6	85,2
growth (%)	3,2%	-1,5%	-1,9%	-2,3%	-1,9%	-2,5%	-0,8%	3,0%	2,2%	1,3%
Market share (%)	6,8%	6,7%	6,5%	6,4%	6,4%	6,4%	6,4%	6,4%	6,4%	6,4%
Domestic	3.358	3.236	3.103	2.961	2.905	2.833	2.829	3.619	4.633	5.440
Exports	56	56	56	56	56	56	56	56	56	56
Utilization data	**2010**	**2011E**	**2012E**	**2013E**	**2014E**	**2015E**	**2020E**	**2030E**	**2040E**	**2050E**
Capacity (k tonnes)	**3.900**	**3.900**	**3.900**	**3.900**	**3.900**	**3.900**	**3.900**	**3.900**	**5.191**	**5.710**
Utilization rate (%)	78,8%	78,6%	78,1%	77,3%	75,9%	74,1%	74,0%	94,2%	90,3%	96,3%
Production (k tonnes)	**3.072**	**3.064**	**3.046**	**3.016**	**2.961**	**2.889**	**2.884**	**3.675**	**4.689**	**5.496**

Income statement	**2010**	**2011E**	**2012E**	**2013E**	**2014E**	**2015E**	**2020E**	**2030E**	**2040E**	**2050E**
External sales	212,2	212,3	188,7	169,1	151,3	131,6	129,5	185,0	272,2	370,2
Internal sales	0,0	0,0	1,0	2,0	3,0	4,0	9,0	19,0	29,0	39,0
Sales	**212,2**	**212,3**	**189,7**	**171,1**	**154,3**	**135,6**	**138,5**	**204,0**	**301,2**	**409,2**
Cash costs	136,7	138,5	125,5	115,2	104,6	92,8	94,8	128,2	191,9	255,4
EBITDA	**75,5**	**73,8**	**64,1**	**55,9**	**49,7**	**42,8**	**43,7**	**75,8**	**109,2**	**153,8**
Depreciation	9,6	10,1	10,5	10,8	10,9	10,9	10,8	11,7	19,1	23,4
Provisions	1,6	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
EBIT	**64,3**	**63,7**	**53,6**	**45,2**	**38,8**	**31,9**	**32,9**	**64,1**	**90,1**	**130,5**
Capex industrial	**14,3**	**14,9**	**13,8**	**13,1**	**12,0**	**10,8**	**11,1**	**12,8**	**19,7**	**25,1**
Maintenance capex/tonne	3,7	3,8	3,5	3,3	3,1	2,8	2,8	3,3	3,8	4,4
Investment capex/tonne (I	91,8	95,2	88,6	83,7	76,9	69,3	70,9	81,9	94,8	109,9
growth (%)		3,8%	-6,9%	-5,5%	-8,2%	-9,9%	1,5%	1,5%	1,5%	1,5%
Dispose capex/tonne (Eu	22,9	23,8	22,2	20,9	19,2	17,3	17,7	20,5	23,7	27,5

Turkey

Operational data										
Market data	**2010**	**2011E**	**2012E**	**2013E**	**2014E**	**2015E**	**2020E**	**2030E**	**2040E**	**2050E**
Local inflation (%)	9,7%	5,7%	5,6%	4,5%	4,5%	4,0%	3,0%	2,0%	1,7%	1,6%
Eurozone inflation (%)	1,1%	1,3%	1,5%	1,6%	1,8%	1,9%	1,6%	1,5%	1,5%	1,5%
Average exchange rate	2,09	2,17	2,43	2,60	2,74	2,89	3,19	3,47	3,57	3,61
End of year exchange rate	2,02	2,32	2,53	2,67	2,82	2,96	3,21	3,47	3,58	3,61
Market data	**2010**	**2011E**	**2012E**	**2013E**	**2014E**	**2015E**	**2020E**	**2030E**	**2040E**	**2050E**
Population (millions)	71,4	72,3	73,2	74,2	75,1	76,1	80,2	86,9	91,8	94,6
growth (%)	1,3%	1,3%	1,3%	1,3%	1,3%	1,3%	1,0%	0,7%	0,4%	0,2%
GDP/capita (2009 internatio	12,8	13,0	13,3	13,6	13,9	14,3	15,9	18,9	21,8	24,5
growth (%)	2,4%	1,8%	2,1%	2,2%	2,4%	2,5%	2,0%	1,6%	1,3%	1,1%
Consumption/capita (Kg)	574	582	588	597	608	617	659	727	772	795
growth (%)	1,6%	1,6%	1,0%	1,5%	1,9%	1,4%	1,2%	0,8%	0,5%	0,2%
Consumption (million tonnes	41,0	42,1	43,1	44,3	45,7	46,9	52,9	63,2	70,8	75,2
growth (%)	2,9%	2,8%	2,3%	2,8%	3,2%	2,7%	2,1%	1,5%	0,9%	0,4%
Market share (%)	5,3%	5,3%	5,3%	5,3%	5,3%	5,3%	5,3%	5,3%	5,3%	5,3%
Domestic	2.171	2.233	2.284	2.347	2.422	2.486	2.802	3.348	3.754	3.987
Exports	74	74	74	74	74	74	74	74	74	74
Utilization data	**2010**	**2011E**	**2012E**	**2013E**	**2014E**	**2015E**	**2020E**	**2030E**	**2040E**	**2050E**
Capacity (k tonnes)	**2.430**	**2.430**	**2.430**	**2.430**	**2.916**	**3.499**	**3.499**	**4.199**	**4.199**	**5.039**
Utilization rate (%)	92,4%	94,9%	97,0%	99,6%	85,6%	73,1%	82,2%	81,5%	91,1%	80,6%
Production (k tonnes)	**2.245**	**2.307**	**2.357**	**2.420**	**2.495**	**2.560**	**2.876**	**3.422**	**3.827**	**4.061**

Income statement	2010	2011E	2012E	2013E	2014E	2015E	2020E	2030E	2040E	2050E
External sales	142,5	147,7	141,7	140,9	142,8	143,8	168,6	226,8	290,0	353,8
Internal sales	0,0	1,0	2,0	3,0	4,0	5,0	10,0	20,0	30,0	40,0
Sales	**142,5**	**148,7**	**143,7**	**143,9**	**146,8**	**148,8**	**178,6**	**246,8**	**320,0**	**393,8**
Cash costs	122,5	126,8	121,8	121,1	129,2	137,8	159,2	220,6	276,2	353,2
EBITDA	**20,0**	**21,9**	**21,9**	**22,8**	**17,6**	**11,0**	**19,4**	**26,3**	**43,8**	**40,6**
Depreciation	22,6	21,0	19,6	18,3	18,5	19,1	15,2	14,6	14,8	19,9
Provisions	0,1	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
EBIT	**-2,7**	**0,8**	**2,3**	**4,5**	**-0,9**	**-8,1**	**4,3**	**11,6**	**28,9**	**20,7**
Capex industrial	**6,9**	**7,0**	**6,6**	**32,4**	**38,5**	**9,1**	**9,8**	**13,6**	**78,7**	**21,9**
Maintenance capex/tonne	2,8	2,9	2,7	2,7	2,6	2,6	2,8	3,2	3,8	4,4
growth (%)										
Investment capex/tonne (I	56,9	57,8	54,7	53,3	52,8	52,1	55,7	64,7	75,0	87,0
growth (%)										
Dispose capex/tonne (Eu	28,5	28,9	27,3	26,7	26,4	26,1	27,9	32,3	37,5	43,5
growth (%)										

South Africa

Operational data										
Market data	**2010**	**2011E**	**2012E**	**2013E**	**2014E**	**2015E**	**2020E**	**2030E**	**2040E**	**2050E**
Local inflation (%)	5,8%	5,8%	5,6%	5,2%	5,0%	4,5%	3,3%	2,1%	1,7%	1,6%
Eurozone inflation (%)	1,1%	1,3%	1,5%	1,6%	1,8%	1,9%	1,6%	1,5%	1,5%	1,5%
Average exchange rate	10,13	9,84	10,46	11,13	11,74	12,41	13,97	15,50	16,09	16,31
End of year exchange rate	9,59	10,08	10,83	11,43	12,06	12,75	14,08	15,55	16,11	16,32
Market data	**2010**	**2011E**	**2012E**	**2013E**	**2014E**	**2015E**	**2020E**	**2030E**	**2040E**	**2050E**
Population (millions)	49,9	50,4	51,0	51,5	52,1	52,7	54,4	56,6	58,1	59,0
growth (%)	1,1%	1,1%	1,1%	1,1%	1,1%	1,1%	0,4%	0,4%	0,2%	0,1%
GDP/capita (2009 internationa	10,2	10,5	10,8	11,1	11,4	11,8	13,4	16,0	18,0	20,2
growth (%)	0,0%	2,2%	2,6%	3,0%	3,1%	3,1%	2,3%	1,4%	1,2%	1,2%
Consumption/capita (Kg)	188	206	225	244	264	282	372	505	572	631
growth (%)	-17,9%	9,6%	9,3%	8,4%	8,3%	7,0%	4,8%	1,4%	1,1%	1,0%
Consumption (million tonnes)	9,4	10,4	11,5	12,6	13,8	14,9	20,2	28,6	33,2	37,2
growth (%)	-17,0%	10,8%	10,5%	9,6%	9,5%	8,1%	5,2%	1,8%	1,3%	1,2%
Market share (%)	12,5%	12,5%	12,5%	12,5%	11,9%	11,9%	11,9%	11,9%	11,9%	11,9%
Domestic	1.169	1.295	1.431	1.568	1.630	1.763	2.399	3.386	3.940	4.412
Exports	10	10	10	10	10	10	10	10	10	10
Utilization data	**2010**	**2011E**	**2012E**	**2013E**	**2014E**	**2015E**	**2020E**	**2030E**	**2040E**	**2050E**
Capacity (k tonnes)	**1.640**	**1.640**	**1.640**	**1.640**	**1.640**	**1.804**	**2.641**	**3.867**	**4.679**	**5.147**
Utilization rate (%)	70,2%	79,6%	87,9%	96,2%	100,0%	98,3%	91,2%	87,8%	84,4%	85,9%
Production (k tonnes)	**1.151**	**1.305**	**1.441**	**1.578**	**1.640**	**1.773**	**2.409**	**3.396**	**3.950**	**4.422**

Income statement	2010	2011E	2012E	2013E	2014E	2015E	2020E	2030E	2040E	2050E
External sales	130,9	149,2	155,0	159,5	164,1	175,5	254,6	416,3	561,1	728,4
Internal sales	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Sales	**130,9**	**149,2**	**155,0**	**159,5**	**164,1**	**175,5**	**254,6**	**416,3**	**561,1**	**728,4**
Cash costs	84,3	98,3	104,5	110,3	112,9	121,3	179,7	297,1	405,3	523,4
EBITDA	**46,6**	**50,9**	**50,5**	**49,2**	**51,2**	**54,2**	**74,9**	**119,1**	**155,8**	**205,0**
Depreciation	13,3	13,0	12,6	12,3	12,1	13,0	18,0	27,3	37,0	45,8
Provisions	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
EBIT	**33,3**	**38,0**	**37,8**	**36,9**	**39,2**	**41,3**	**56,9**	**91,8**	**118,8**	**159,2**
Capex industrial	**9,0**	**9,8**	**9,8**	**9,7**	**31,0**	**33,7**	**16,4**	**27,8**	**38,9**	**49,7**
Maintenance capex/tonne (E	5,5	6,0	6,0	5,9	5,9	5,8	6,2	7,2	8,3	9,7
Investment capex/tonne (Eu	122,3	133,2	132,3	130,8	130,2	128,9	137,6	159,6	184,9	214,5
growth (%)		8,9%	-0,7%	-1,1%	-0,5%	-1,0%	1,5%	1,5%	1,5%	1,5%
Dispose capex/tonne (Eur)	30,6	33,3	33,1	32,7	32,6	32,2	34,4	39,9	46,2	53,6

Morocco

Operational data										
Market data	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2020**	**2030**	**2040**	**2050**
Local inflation (%)	2,0%	2,6%	2,6%	2,6%	2,6%	2,6%	2,1%	1,7%	1,6%	1,5%
Eurozone inflation (%)	1,1%	1,3%	1,5%	1,6%	1,8%	1,9%	1,6%	1,5%	1,5%	1,5%
Average exchange rate	11,20	11,12	11,25	11,37	11,47	11,56	11,91	12,33	12,50	12,56
End of year exchange rate	11,04	11,19	11,31	11,42	11,52	11,60	11,94	12,34	12,50	12,56
Market data	**2010**	**2011E**	**2012E**	**2013E**	**2014E**	**2015E**	**2020E**	**2030E**	**2040E**	**2050E**
Population (millions)	32,0	32,2	32,5	32,8	33,1	33,4	35,0	38,2	40,5	41,9
growth (%)	0,8%	0,9%	0,8%	0,8%	0,8%	0,8%	1,1%	0,7%	0,4%	0,3%
GDP/capita (2009 internation	4,6	4,8	5,0	5,2	5,4	5,6	6,7	9,4	12,3	15,2
growth (%)	0,9%	3,3%	3,9%	3,9%	3,9%	3,9%	3,8%	3,0%	2,5%	2,0%
Consumption/capita (Kg)	452	466	443	429	415	404	383	406	517	615
growth (%)	0,0%	3,1%	-4,9%	-3,3%	-3,1%	-2,7%	-0,5%	3,1%	2,1%	1,5%
Consumption (million tonnes)	14,4	15,0	14,4	14,1	13,7	13,5	13,4	15,5	20,9	25,8
growth (%)	0,8%	4,0%	-4,1%	-2,5%	-2,2%	-1,9%	0,5%	3,8%	2,6%	1,7%
Market share (%)	7,8%	7,8%	7,8%	7,8%	7,8%	7,8%	7,8%	7,8%	7,8%	7,8%
Domestic	1.131	1.176	1.128	1.101	1.076	1.055	1.051	1.216	1.638	2.016
Exports	15	15	15	15	15	15	15	15	15	15
Utilization data	**2010**	**2011E**	**2012E**	**2013E**	**2014E**	**2015E**	**2020E**	**2030E**	**2040E**	**2050E**
Capacity (k tonnes)	**1.280**	**1.280**	**1.280**	**1.280**	**1.280**	**1.280**	**1.280**	**1.280**	**1.843**	**2.212**
Utilization rate (%)	87,4%	93,0%	89,3%	87,1%	85,2%	83,6%	83,3%	96,2%	89,7%	91,8%
Production (k tonnes)	**1.119**	**1.191**	**1.143**	**1.115**	**1.090**	**1.070**	**1.066**	**1.231**	**1.653**	**2.031**

Income statement	2010	2011E	2012E	2013E	2014E	2015E	2020E	2030E	2040E	2050E
External sales	95,1	102,1	98,4	96,5	94,9	93,8	97,0	123,5	192,9	277,4
Internal sales	0,0	0,0	1,0	2,0	3,0	4,0	9,0	19,0	29,0	39,0
Sales	**95,1**	**102,1**	**99,4**	**98,5**	**97,9**	**97,8**	**106,0**	**142,5**	**221,9**	**316,4**
Cash costs	53,1	56,4	55,5	55,4	55,5	55,8	60,5	77,9	123,8	175,3
EBITDA	**42,0**	**45,8**	**43,9**	**43,0**	**42,4**	**42,0**	**45,5**	**64,6**	**98,1**	**141,1**
Depreciation	9,7	9,7	9,8	9,8	9,9	10,0	10,5	12,0	19,5	27,3
Provisions	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
EBIT	**32,3**	**36,0**	**34,1**	**33,2**	**32,5**	**32,1**	**35,0**	**52,7**	**78,6**	**113,9**
Capex industrial	**9,7**	**10,0**	**10,1**	**10,3**	**10,4**	**10,6**	**11,6**	**13,5**	**22,5**	**31,3**
Maintenance capex/tonne (	7,5	7,8	7,9	8,0	8,2	8,3	9,0	10,5	12,2	14,2
Investment capex/tonne (Eu	103,3	106,8	108,2	109,9	111,7	113,8	123,7	144,0	167,1	193,9
growth (%)		3,3%	1,4%	1,5%	1,7%	1,8%	1,6%	1,5%	1,5%	1,5%
Dispose capex/tonne (Eur)	20,7	21,4	21,6	22,0	22,3	22,8	24,7	28,8	33,4	38,8

Mozambique

Operational data										
Market data	**2010**	**2011E**	**2012E**	**2013E**	**2014E**	**2015E**	**2020E**	**2030E**	**2040E**	**2050E**
Local inflation (%)	9,3%	5,6%	5,6%	5,6%	5,6%	5,6%	3,9%	2,3%	1,8%	1,6%
Eurozone inflation (%)	1,1%	1,3%	1,5%	1,6%	1,8%	1,9%	1,6%	1,5%	1,5%	1,5%
Average exchange rate	44,02	44,83	46,70	48,56	50,41	52,27	60,29	69,42	73,03	74,35
End of year exchange rate	43,90	45,76	47,64	49,48	51,33	53,20	60,96	69,70	73,14	74,38
Market data	**2010**	**2011E**	**2012E**	**2013E**	**2014E**	**2015E**	**2020E**	**2030E**	**2040E**	**2050E**
Population (millions)	21,6	22,0	22,5	22,9	23,4	23,8	26,2	31,3	36,4	41,2
growth (%)	2,0%	2,0%	2,0%	2,0%	2,0%	2,0%	1,9%	1,7%	1,4%	1,1%
GDP/capita (2009 internationa	1,0	1,0	1,1	1,1	1,2	1,2	1,6	2,9	4,6	6,7
growth (%)	2,9%	5,1%	5,3%	5,5%	5,4%	5,5%	5,9%	5,3%	4,3%	3,5%
Consumption/capita (Kg)	51	59	61	69	72	78	101	164	240	324
growth (%)	6,4%	15,5%	4,7%	12,8%	3,5%	8,3%	5,9%	3,2%	3,6%	2,5%
Consumption (million tonnes)	1,1	1,3	1,4	1,6	1,7	1,8	2,7	5,1	8,7	13,3
growth (%)	8,6%	17,8%	6,7%	15,1%	5,5%	10,4%	8,0%	4,9%	5,1%	3,6%
Market share (%)	79,9%	79,9%	79,9%	79,9%	79,9%	79,9%	79,9%	79,9%	79,9%	79,9%
Domestic	876	1.032	1.101	1.267	1.338	1.477	2.120	4.094	6.980	10.665
Exports	0	0	0	0	0	0	0	0	0	0
Utilization data	**2010**	**2011E**	**2012E**	**2013E**	**2014E**	**2015E**	**2020E**	**2030E**	**2040E**	**2050E**
Capacity (k tonnes)	**685**	**685**	**685**	**685**	**685**	**685**	**986**	**2.045**	**3.534**	**5.090**
Utilization rate (%)	53,7%	63,3%	67,6%	77,8%	82,1%	90,7%	90,4%	84,2%	83,0%	88,1%
Production (k tonnes)	**368**	**434**	**463**	**533**	**562**	**621**	**891**	**1.721**	**2.935**	**4.485**

Income statement	2010	2011E	2012E	2013E	2014E	2015E	2020E	2030E	2040E	2050E
External sales	77,2	93,6	100,5	116,4	123,9	139,4	216,3	483,5	954,7	1.691,6
Internal sales	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Sales	**77,2**	**93,6**	**100,5**	**116,4**	**123,9**	**139,4**	**216,3**	**483,5**	**954,7**	**1.691,6**
Cash costs	69,7	80,5	85,8	97,4	103,4	114,2	177,3	401,5	794,8	1.392,9
EBITDA	**7,6**	**13,1**	**14,6**	**19,1**	**20,5**	**25,2**	**39,0**	**82,0**	**160,0**	**298,8**
Depreciation	5,1	4,9	4,8	4,6	4,5	4,4	6,1	13,9	27,5	44,2
Provisions	0,4	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
EBIT	**2,1**	**8,2**	**9,9**	**14,4**	**16,0**	**20,8**	**32,9**	**68,1**	**132,4**	**254,6**
Capex industrial	**3,2**	**3,3**	**3,4**	**3,4**	**3,5**	**3,5**	**5,5**	**13,2**	**26,5**	**44,2**
Maintenance capex/tonne (I	4,7	4,9	4,9	5,0	5,1	5,2	5,6	6,5	7,5	8,7
Investment capex/tonne (Eu	112,3	116,5	118,1	119,9	121,9	124,1	134,2	155,4	179,9	208,6
growth (%)		3,7%	1,4%	1,5%	1,7%	1,8%	1,5%	1,5%	1,5%	1,5%
Dispose capex/tonne (Eur)	23,4	24,3	24,6	25,0	25,4	25,9	28,0	32,4	37,5	43,5

Tunisia

Operational data										
Market data	**2010**	**2011E**	**2012E**	**2013E**	**2014E**	**2015E**	**2020E**	**2030E**	**2040E**	**2050E**
Local inflation (%)	4,2%	3,5%	3,3%	3,1%	3,0%	2,9%	2,3%	1,8%	1,6%	1,5%
Eurozone inflation (%)	1,1%	1,3%	1,5%	1,6%	1,8%	1,9%	1,6%	1,5%	1,5%	1,5%
Average exchange rate	1,90	1,94	2,03	2,11	2,20	2,31	2,45	2,57	2,61	2,63
End of year exchange rate	1,89	2,00	2,07	2,15	2,25	2,37	2,46	2,57	2,61	2,63
Market data	**2010**	**2011E**	**2012E**	**2013E**	**2014E**	**2015E**	**2020E**	**2030E**	**2040E**	**2050E**
Population (millions)	10,5	10,6	10,7	10,8	11,0	11,1	11,6	12,4	12,9	13,2
growth (%)	1,0%	1,0%	1,0%	1,0%	1,0%	1,0%	0,9%	0,6%	0,3%	0,1%
GDP/capita (2009 international	8,4	8,7	9,1	9,5	9,9	10,3	12,6	17,5	21,5	24,7
growth (%)	1,5%	3,7%	4,4%	4,4%	4,4%	4,1%	4,2%	2,7%	1,7%	1,1%
Consumption/capita (Kg)	695	694	672	646	616	584	510	652	739	778
growth (%)	7,5%	0,0%	-3,3%	-3,9%	-4,5%	-5,2%	4,0%	1,7%	0,9%	0,3%
Consumption (million tonnes)	7,3	7,4	7,2	7,0	6,8	6,5	5,9	8,1	9,5	10,2
growth (%)	8,5%	1,0%	-2,3%	-2,9%	-3,6%	-4,3%	4,9%	2,2%	1,2%	0,4%
Market share (%)	22,8%	22,8%	22,8%	22,8%	22,8%	22,8%	22,8%	22,8%	22,8%	22,8%
Domestic	1.664	1.681	1.641	1.593	1.536	1.471	1.344	1.845	2.172	2.329
Exports	37	37	37	37	37	37	37	37	37	37
Utilization data	**2010**	**2011E**	**2012E**	**2013E**	**2014E**	**2015E**	**2020E**	**2030E**	**2040E**	**2050E**
Capacity (k tonnes)	**1.640**	**1.804**	**1.804**	**1.804**	**1.804**	**1.804**	**1.804**	**1.804**	**2.183**	**2.401**
Utilization rate (%)	101,3%	88,8%	86,8%	84,3%	81,3%	77,9%	71,4%	97,3%	94,4%	91,9%
Production (k tonnes)	**1.661**	**1.602**	**1.565**	**1.520**	**1.467**	**1.406**	**1.287**	**1.754**	**2.060**	**2.207**

Income statement	2010	2011E	2012E	2013E	2014E	2015E	2020E	2030E	2040E	2050E
External sales	76,5	78,0	75,2	72,6	69,3	65,1	63,5	100,7	137,1	170,4
Internal sales	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Sales	**76,5**	**78,0**	**75,2**	**72,6**	**69,3**	**65,1**	**63,5**	**100,7**	**137,1**	**170,4**
Cash costs	54,1	56,5	54,9	53,5	51,7	49,2	49,5	71,0	97,6	122,3
EBITDA	**22,5**	**21,5**	**20,3**	**19,1**	**17,6**	**15,9**	**14,0**	**29,6**	**39,5**	**48,2**
Depreciation	6,2	6,6	6,4	6,3	6,2	6,1	5,7	5,8	8,0	10,0
Provisions	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
EBIT	**16,3**	**14,9**	**13,8**	**12,8**	**11,4**	**9,8**	**8,3**	**23,8**	**31,5**	**38,1**
Capex industrial	**14,1**	**5,3**	**5,2**	**5,2**	**5,1**	**5,0**	**5,4**	**18,5**	**8,8**	**11,2**
Maintenance capex/tonne (E	2,9	2,9	2,9	2,9	2,8	2,8	3,0	3,5	4,0	4,7
Investment capex/tonne (Eur	57,1	57,6	56,9	56,6	55,9	54,8	58,4	67,9	78,8	91,4
growth (%)		0,9%	-1,3%	-0,6%	-1,2%	-2,0%	1,6%	1,5%	1,5%	1,5%
Dispose capex/tonne (Eur)	26,0	26,2	25,8	25,7	25,4	24,9	26,5	30,9	35,8	41,5

China

Operational data										
Market data	**2010**	**2011E**	**2012E**	**2013E**	**2014E**	**2015E**	**2020E**	**2030E**	**2040E**	**2050E**
Local inflation (%)	3,1%	2,4%	2,0%	2,0%	2,0%	2,0%	1,8%	1,6%	1,5%	1,5%
Eurozone inflation (%)	1,1%	1,3%	1,5%	1,6%	1,8%	1,9%	1,6%	1,5%	1,5%	1,5%
Average exchange rate	9,12	8,78	8,93	8,63	8,47	8,36	8,37	8,48	8,53	8,54
End of year exchange rate	8,40	9,15	8,71	8,54	8,40	8,31	8,37	8,48	8,53	8,54
Market data	**2010**	**2011E**	**2012E**	**2013E**	**2014E**	**2015E**	**2020E**	**2030E**	**2040E**	**2050E**
Population (millions)	1.341,4	1.348,1	1.354,9	1.361,6	1.368,4	1.375,3	1.410,0	1.451,5	1.450,7	1.419,2
growth (%)	0,5%	0,5%	0,5%	0,5%	0,5%	0,5%	0,5%	0,1%	-0,1%	-0,3%
GDP/capita (2009 internationa	7,1	7,7	8,4	9,2	10,0	10,8	15,0	21,6	26,0	29,0
growth (%)	7,9%	9,1%	9,0%	8,8%	8,8%	8,7%	5,3%	2,6%	1,1%	1,1%
Consumption/capita (Kg)	1.121	1.077	1.058	1.027	992	900	717	827	839	820
growth (%)	-7,2%	-4,0%	-1,7%	-2,9%	-3,4%	-9,4%	2,5%	0,5%	-0,1%	-0,3%
Consumption (million tonnes)	1.503,7	1.451,4	1.433,3	1.398,9	1.358,1	1.237,2	1.011,6	1.200,3	1.216,6	1.163,5
growth (%)	-6,8%	-3,5%	-1,2%	-2,4%	-2,9%	-8,9%	3,0%	0,6%	-0,2%	-0,6%
Market share (%)	0,3%	0,3%	0,3%	0,2%	0,2%	0,2%	0,2%	0,2%	0,2%	0,2%
Domestic	4.018	3.878	3.830	3.191	3.098	2.823	1.932	2.293	2.324	2.222
Exports	0	0	0	0	0	0	0	0	0	0
Utilization data	**2010**	**2011E**	**2012E**	**2013E**	**2014E**	**2015E**	**2020E**	**2030E**	**2040E**	**2050E**
Capacity (k tonnes)	**5.000**	**5.000**	**3.500**	**2.450**	**2.450**	**2.940**	**1.729**	**2.074**	**2.074**	**2.074**
Utilization rate (%)	61,7%	59,5%	84,0%	100,0%	97,1%	73,7%	85,8%	84,8%	86,0%	82,2%
Production (k tonnes)	**3.084**	**2.977**	**2.940**	**2.450**	**2.379**	**2.167**	**1.483**	**1.760**	**1.784**	**1.706**

Income statement	**2010**	**2011E**	**2012E**	**2013E**	**2014E**	**2015E**	**2020E**	**2030E**	**2040E**	**2050E**
External sales	92,9	97,2	98,1	87,2	88,8	83,6	62,7	86,7	102,0	113,3
Internal sales	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Sales	**92,9**	**97,2**	**98,1**	**87,2**	**88,8**	**83,6**	**62,7**	**86,7**	**102,0**	**113,3**
Cash costs	105,2	105,4	89,7	73,1	73,0	75,5	53,6	74,5	87,2	98,3
EBITDA	**-12,3**	**-8,1**	**8,5**	**14,1**	**15,8**	**8,2**	**9,1**	**12,3**	**14,8**	**15,0**
Depreciation	8,3	8,3	7,2	6,3	6,2	7,7	6,4	6,1	5,8	6,3
Provisions	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
EBIT	**-20,6**	**-16,5**	**1,2**	**7,7**	**9,7**	**0,4**	**2,7**	**6,2**	**9,0**	**8,6**
Capex industrial	**8,1**	**-8,6**	**-6,0**	**4,5**	**35,5**	**5,8**	**3,7**	**5,2**	**6,0**	**7,0**
Maintenance capex/tonne (	1,6	1,7	1,7	1,8	1,9	2,0	2,1	2,5	2,9	3,4
Investment capex/tonne (Eu	53,9	57,4	57,5	60,7	63,1	65,2	71,5	83,3	96,7	112,2
growth (%)		6,4%	0,2%	5,6%	3,9%	3,4%	1,6%	1,5%	1,5%	1,5%
Dispose capex/tonne (Eur)	10,8	11,5	11,5	12,1	12,6	13,0	14,3	16,7	19,3	22,4

India

Operational data										
Market data	**2010**	**2011E**	**2012E**	**2013E**	**2014E**	**2015E**	**2020E**	**2030E**	**2040E**	**2050E**
Local inflation (%)	13,2%	5,5%	4,1%	4,0%	4,0%	4,0%	3,0%	2,0%	1,7%	1,6%
Eurozone inflation (%)	1,1%	1,3%	1,5%	1,6%	1,8%	1,9%	1,6%	1,5%	1,5%	1,5%
Average exchange rate	63,66	63,08	67,73	70,89	73,14	74,58	80,85	88,08	90,87	91,87
End of year exchange rate	60,29	65,86	69,59	72,20	74,09	75,07	81,39	88,30	90,95	91,90
Market data	**2010**	**2011E**	**2012E**	**2013E**	**2014E**	**2015E**	**2020E**	**2030E**	**2040E**	**2050E**
Population (millions)	1.215,9	1.232,7	1.249,3	1.265,7	1.282,4	1.299,2	1.378,3	1.507,6	1.597,2	1.654,8
growth (%)	1,4%	1,4%	1,3%	1,3%	1,3%	1,3%	1,1%	0,7%	0,5%	0,2%
GDP/capita (2009 internationa	3,1	3,3	3,5	3,8	4,0	4,3	5,9	11,3	17,5	23,3
growth (%)	5,7%	6,7%	6,4%	6,4%	6,4%	6,4%	7,1%	5,7%	3,6%	2,3%
Consumption/capita (Kg)	177	189	201	212	224	239	317	516	693	784
growth (%)	7,4%	6,8%	6,2%	5,7%	5,3%	6,8%	5,8%	4,1%	2,0%	0,6%
Consumption (million tonnes)	215,2	233,0	250,8	268,7	286,7	310,1	437,6	778,5	1.107,6	1.298,0
growth (%)	9,0%	8,3%	7,7%	7,1%	6,7%	8,2%	7,0%	4,8%	2,5%	0,9%
Market share (%)	0,5%	0,5%	0,5%	0,5%	0,4%	0,4%	0,4%	0,4%	0,4%	0,4%
Domestic	968	1.048	1.129	1.209	1.217	1.317	1.858	3.164	4.502	5.276
Exports	0	0	0	0	0	0	0	0	0	0
Utilization data	**2010**	**2011E**	**2012E**	**2013E**	**2014E**	**2015E**	**2020E**	**2030E**	**2040E**	**2050E**
Capacity (k tonnes)	**1.180**	**1.180**	**1.062**	**956**	**956**	**1.051**	**1.539**	**2.727**	**3.993**	**4.392**
Utilization rate (%)	70,2%	69,8%	83,5%	99,3%	100,0%	98,3%	94,8%	91,1%	88,5%	94,3%
Production (k tonnes)	**829**	**823**	**886**	**950**	**956**	**1.034**	**1.459**	**2.485**	**3.535**	**4.143**

Income statement	2010	2011E	2012E	2013E	2014E	2015E	2020E	2030E	2040E	2050E
External sales	43,4	50,0	52,2	55,6	56,4	62,3	95,6	189,1	311,9	424,0
Internal sales	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Sales	**43,4**	**50,0**	**52,2**	**55,6**	**56,4**	**62,3**	**95,6**	**189,1**	**311,9**	**424,0**
Cash costs	45,4	51,0	50,4	51,1	51,8	57,4	89,1	178,0	295,9	395,4
EBITDA	**-2,0**	**-0,9**	**1,9**	**4,4**	**4,6**	**4,8**	**6,6**	**11,1**	**16,0**	**28,6**
Depreciation	6,1	5,6	5,1	4,7	4,3	4,2	4,1	5,6	8,3	9,4
Provisions	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
EBIT	**-8,1**	**-6,6**	**-3,3**	**-0,2**	**0,3**	**0,6**	**2,5**	**5,5**	**7,7**	**19,2**
Capex industrial	**1,4**	**0,0**	**0,0**	**1,2**	**4,8**	**5,4**	**8,6**	**4,4**	**7,5**	**9,5**
Maintenance capex/tonne (I	1,2	1,3	1,2	1,2	1,3	1,3	1,4	1,6	1,9	2,2
Investment capex/tonne (Eu	36,3	38,6	37,4	37,2	37,5	38,3	41,7	48,4	56,1	65,1
growth (%)		6,5%	-3,1%	-0,6%	0,8%	2,0%	1,6%	1,5%	1,5%	1,5%
Dispose capex/tonne (Eur)	12,1	12,9	12,5	12,4	12,5	12,8	13,9	16,1	18,7	21,7

Cape Verde

Operational data										
Market data	**2010**	**2011E**	**2012E**	**2013E**	**2014E**	**2015E**	**2020E**	**2030E**	**2040E**	**2050E**
Local inflation (%)	1,4%	2,0%	2,0%	2,0%	2,0%	2,0%	1,8%	1,6%	1,5%	1,5%
Market data	**2010**	**2011E**	**2012E**	**2013E**	**2014E**	**2015E**	**2020E**	**2030E**	**2040E**	**2050E**
Population (millions)	0,5	0,5	0,5	0,6	0,6	0,6	0,6	0,7	0,7	0,8
growth (%)	1,9%	1,9%	1,9%	2,0%	1,8%	2,0%	1,3%	0,9%	0,5%	0,2%
GDP/capita (2009 internation	3,6	3,8	3,9	4,1	4,3	4,5	5,5	7,7	9,5	10,9
growth (%)	1,5%	3,2%	4,8%	4,7%	4,7%	3,9%	4,3%	2,7%	1,7%	1,1%
Consumption/capita (Kg)	671	588	611	633	647	650	711	812	855	863
growth (%)	-10,5%	-12,4%	3,9%	3,7%	2,3%	0,5%	1,6%	0,9%	-0,2%	-0,2%
Consumption (million tonnes)	0,4	0,3	0,3	0,4	0,4	0,4	0,4	0,6	0,6	0,7
growth (%)	-8,8%	-10,7%	5,8%	5,8%	4,1%	2,4%	2,9%	1,8%	0,3%	0,0%
Market share (%)	72,1%	72,1%	72,1%	72,1%	72,1%	72,1%	72,1%	72,1%	72,1%	72,1%
Domestic	253	226	239	253	263	270	318	404	456	476
Exports	0	0	0	0	0	0	0	0	0	0
Utilization data	**2010**	**2011E**	**2012E**	**2013E**	**2014E**	**2015E**	**2020E**	**2030E**	**2040E**	**2050E**
Capacity (k tonnes)	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Utilization rate (%)	-	-	-	-	-	-	-	-	-	-
Production (k tonnes)	-	-	-	-	-	-	-	-	-	-

Income statement	2010	2011E	2012E	2013E	2014E	2015E	2020E	2030E	2040E	2050E
External sales	35,8	32,6	35,2	38,0	40,4	42,2	54,6	81,9	107,9	130,8
Internal sales	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Sales	**35,8**	**32,6**	**35,2**	**38,0**	**40,4**	**42,2**	**54,6**	**81,9**	**107,9**	**130,8**
Cash costs	31,5	28,7	31,0	33,4	35,5	37,1	48,0	72,0	94,8	114,9
EBITDA	**4,4**	**4,0**	**4,3**	**4,6**	**4,9**	**5,1**	**6,6**	**9,9**	**13,1**	**15,9**
Depreciation	1,1	1,1	1,2	1,2	1,2	1,2	1,4	1,6	1,9	2,2
Provisions	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
EBIT	**3,2**	**2,8**	**3,1**	**3,4**	**3,7**	**3,9**	**5,3**	**8,4**	**11,2**	**13,7**
Capex industrial	**1,1**	**1,1**	**1,2**	**1,2**	**1,2**	**1,2**	**1,4**	**1,6**	**1,9**	**2,2**