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THE REFINANCING OF CIMPOR – CASE STUDY

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Abstract

The present case is about the refinancing of Cimpor, a highly profitable Portuguese cement group that encounters a set of obstacles in its debt restructuring. The case is intended to be used in a Corporate Finance class and is divided in three distinct parts: a case A which presents a detailed description of the internal and external events that increased Cimpor's refinancing risk, a case B which informs the audience of the outcome of the refinancing process, and a Teaching Note with suggested questions and answers to be used in class.

Key words: Credit rating, debt instruments, credit crisis, refinancing risk

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The Refinancing of Cimpor (A)

Late in the afternoon on November 4, 2010, António Varela glanced out the window as his plane approached the Lisbon Airport through clear skies. He was just returning from a four day U.S. Private Placement roadshow, which could put an end to Cimpor's refinancing constraints. Cimpor – Cimentos de Portugal SA had faced many difficulties to restructure its debt and was now on the verge of obtaining all the funds necessary to finance investment and operations over the following two years. The company had faced successive obstacles, since 2008, to access European capital markets, mainly caused by external events. António Varela, Cimpor's chief financial officer, was highly committed to maintaining an investment grade credit rating and barely managed to succeed as the Group endured a long period of rating uncertainties.

Cimpor's well-structured geographic portfolio and profit resilience through the financial crisis made it highly noticeable among other global cement firms. By the end of 2009 the Group's industry-leading profitability drew the attention of a Brazilian firm, which launched a hostile takeover bid that forced Standard and Poor's to place Cimpor on CreditWatch. The bid was instantly rejected, but was closely followed by a major change in the shareholder structure of the company, with the addition of two new Brazilian shareholders who controlled, together, more than 50% of the equity of Cimpor. Apprehensive about possible conflicts of interest between the new shareholders, Standard and Poor's extended Cimpor's credit restrictions until the end of May 2010. By the time Cimpor could finally access the European debt market, the European sovereign debt crisis brought traditional borrowing sources to a halt among heavy market volatility.

With debt markets virtually closed until September 2010 and a pressuring EUR 600 million Eurobond reaching maturity on May 27, 2011, Varela had to postpone the issuance of a new debenture bond in the European debt market and adapt his refinancing plan to the pressing needs of the company. By the end of the Summer Varela designed a whole new debt operation and changed the financial course of the firm. Besides a series of short to medium-term debt instruments negotiated to guarantee near-term requirements, Cimpor needed to issue long-term debt to increase the Group's average debt maturity. Confronted by this situation, Varela prepared a careful approach to the American market, where he aspired to find potential long-term investors who looked beyond Cimpor's country of origin and into its unique business portfolio.

The European Cement Industry

The cement sector came to life in the 1830s with the development of several humble businesses in remote European villages. After World War II the industry experienced a strong consolidation of domestic markets, imposing higher barriers to entry as market players achieved economies of scale. In the 1980s companies responded to the elevated consolidation in national markets by pursuing internationalization strategies. Even though the cement industry underwent an accelerated internationalization over the last 30 years, high transportation costs meant that most companies continued operating in regional markets. The movement designed to consolidate the industry worldwide was led by global cement groups such as Lafarge, Holcim, Cemex, HeidelbergCement and Cimpor, among others.

2008 was a reversal year for the global cement industry. After a period of exceptional growth supported by cheap debt, construction markets weakened and cement consumption contracted gravely against the backdrop of the global financial crisis. Input costs became extremely volatile and consumption shifted to emerging markets with China, India and Brazil sustaining incomparable growth levels. World cement and clinker trade decreased as large importing markets, such as the USA, started relying progressively on their domestic production base. This decrease in trade spread the negative effects of the economic decline beyond western economies and onto large exporting countries such as Turkey, which were forced to turn to domestic consumption and reallocate the overcapacity installed during the booming years.

The downturn pressured cement companies to trim down capital investments, to enforce cost-efficiency measures and preserve free cash flow. Mergers and acquisitions activity cooled down after the frenetic years of 2006 and 2007 where ease of access to credit led to historically high multiples' in acquisitions.

In the early summer months of 2010 the industry experienced a brief rebound, but a full recovery still appeared as a distant reality. Industry experts expected the Iberian market, in particular, to remain depressed, hampering the economic recovery of cement companies exposed to that market. A balanced market portfolio with a mix of developed and developing end-markets became more important than ever for companies to stabilize cash flows and access credit markets.

By 2010 year-end, world cement consumption was expected to exceed 3 billion tons for the first time, with China accounting for more than half of global demand.

The History of Cimpor

Cimpor was founded in 1976 as a result of the nationalization of most Portuguese companies operating in the cement industry, following the 1974 Revolution. In 1976 six companies were merged together to form Cimpor Cimentos de Portugal, E.P. From the beginning Cimpor was a vertically integrated cement focused company with operations in other segments such as aggregates (mixture of different sized stones), mortar (mixture of fine sand, cement and water) and concrete (mixture of sand, stone, cement and water).

In 1986, with the accession of Portugal to the European Union, the country was impelled to initiate the privatization of Cimpor. With the prospect of privatization and increased competition in a newly deregulated market, Cimpor embarked in an international expansion program. The first step towards internationalization was made in 1992 with the acquisition of 97.7% of the Spanish holding company Corporation Noroeste S.A., in Galicia. The privatization process started in 1994 when the government sold 20% of its participation in the company, and was accomplished in four distinct phases the last one ending in 2001 when the government sold the remaining 10% share to Teixeira Duarte, one of the largest construction companies in Portugal.

In 1996 Cimpor was reincorporated as a holding company under the name Cimpor – Cimentos de Portugal, SGPS, S.A. As a holding company, the Group's business consists of holding shares in other companies and providing management services to its subsidiaries. Cimpor holding company owns the operating companies headquartered in Portugal and 100 per cent of Cimpor Financial Operations and Cimpor Inversiones S.A.U., a sub-holding company incorporated in 2002 which controls the Group's investments in companies operating abroad (see **Exhibit 1** for a simplified outline of the business organizational chart).

Since its first international acquisition in 1992, Cimpor embraced a fierce growth strategy through acquisitions. Before the 2009 industry downturn, the Group was committed to pursuing an aggressive acquisition strategy and, in 2007 and 2008 alone, Cimpor entered four new markets, China, Turkey, Peru[1] and India. Thus, the Group achieved a broad presence in the multinational cement industry with operations in 12 countries: Portugal, Spain, Morocco, Tunisia, Egypt, Turkey, Brazil, Mozambique, South Africa, China, India and Cape Verde (**Exhibit 2**). By the end of 2009 emerging markets accounted for about 65% of the firm's total turnover, and the mature markets, Portugal and Spain, accounted for 19% and 16%, respectively. In the majority of regions in which Cimpor operates, the Group strives to be number one in terms of market share: it is the domestic market leader in Portugal, Mozambique and Cape Verde, and the second largest in the Iberia Peninsula, as well as the third largest in Brazil.

During the years preceding the financial crisis the Group experienced accelerated growth and continuously improving profits. The Group's acquisition strategy resulted in a significant level of leverage and the deteriorating industry environment weakened its operating income, pressuring Cimpor to adopt a more prudent approach to spending in 2009. The conservative financial policy allied with the well-diversified geographic portfolio paid off and Cimpor ended the year with results clearly above those of comparable firms. In 2009 Cimpor was the only global cement company which enjoyed positive EBITDA growth (3.3%), detaining as well the highest EBITDA margin (29.1%). Despite the expansion plan implemented by Cimpor until 2008, the company managed to maintain a solid Balance Sheet with a prudent capital structure, presenting a Debt/EBITDA below the average of comparable firms. Although Cimpor was not, in size, the largest operator, it was undeniably the *top performer* in terms of profitability (see **Exhibit 3** for reference data on Cimpor and its competitors).

Takeover Bid and Changes in Shareholder Structure

Notwithstanding Cimpor's recent performance, the Group had been suffering from great shareholder instability in the past years, between two of Cimpor's largest investors, Manuel Fino and Teixeira Duarte. This instability allied with the firm's remarkable profitability, made Cimpor highly susceptible to bids from other industry players. On December 18, 2009, the Brazilian company Companhia Siderúrgica Nacional (CSN) announced a takeover bid over 100% of Cimpor's 672 million shares at a price of € 5.75 per share with a minimum acceptance level of 50% plus one share. The Brazilian steel player was interested in detaining a solid position in the fast-growing Brazilian cement market and Cimpor, with a 9% market share, represented a tempting solution.

[1] The Group sold its participation in Peru two years later, in 2009.

On January 7, 2010, the Group's Board of Directors rejected the takeover bid, advising shareholders not to sell their shares under what they considered to be a hostile, irrelevant and disturbing offer. The offer was deemed to undervalue Cimpor, not yielding a deserved premium for Cimpor's shareholders given the Group's proven performance and premiums paid in previous industry deals (the Group claimed CSN was offering a 5.9% premium against premiums ranking between 42% and 58% for comparable offers in Europe in the previous 5 years). Almost two months after the initial offer, CSN raised the price per share to € 6.18 and a minimum requirement of only one-third of the share capital plus one share. On February 23, the company announced the failure of the takeover as only 8.6% of the share capital of Cimpor had been tendered, a percentage well below the stated conditions for success.

CSN's was not the sole offer. On January 13, 2010, the Brazilian group Camargo Corrêa announced a merger proposal with Cimpor. At the time, Camargo Corrêa was the fourth player in Brazil with a 9% market share, after Votorantim Cimentos, João Santos and Cimpor, with 41%, 13% and 9% market shares, respectively. Two weeks later Camargo Corrêa succumbed to the pressure from CMVM, the securities market regulator, and removed the merger proposal, stating that it remained seriously interested in finding a solution capable of creating value for Cimpor and the shareholders. On February 10, 2010, Camargo Corrêa signed an agreement with Teixeira Duarte to purchase a 22.2% shareholding stake in Cimpor, followed by an agreement, one day later, to buy out Bipadosa's 6.5% stake in the company at a price of € 6.50 per share. By the end of May, Camargo Corrêa increased the shareholdings to 32.9%, just below one-third of the company's total shares[2].

Meanwhile, in the beginning of February, yet another Brazilian group proved to be highly interested in Cimpor. Votorantim Cimentos, one of the largest conglomerates in Latin America and the market leader in Brazil, acquired Lafarge's 17.28% and Cinveste's 3.9% shareholding in Cimpor. Votorantim entered a subsequent shareholder's agreement with Caixa Geral de Depósitos, S.A. (which holds 9.6% of the share capital) which brought together both parties' voting rights, forming a minority block just below one-third of the voting rights (30.8% voting rights were assigned to Caixa Geral de Depósitos and Votorantim Cimentos).

With these two moves, Cimpor witnessed, in less than one month, a dramatic change in its shareholder structure, moving from a majority Portuguese ownership to a structure where over 50% of the voting rights were detained by two direct competitors in the Brazilian national market (**Exhibit 4**). The Board of Directors was also subject to major changes. In total, only seven previous members remained in office and eight new members were elected, including a new CEO – Francisco de Lacerda, a new Chairman – António Castro Guerra, and six other non-executive members, of which two represented Camargo Corrêa and one represented Votorantim Cimentos. Following the share purchase, Brazilian authorities opened a regulatory antitrust investigation involving the three corporations. The regulator allowed Cimpor to continue operating the Brazilian assets until investigations were completed, but requested Cimpor to celebrate an Agreement to Preserve Reversibility of Operations (APRO)[3] and prohibited senior management representing the Brazilian shareholders to access inside information and to participate in the discussion of the Board's strategic decisions concerning the Brazilian market.

[2] Overcoming the 33.33% threshold forces the launch of a full takeover offer for 100% of share capital, as set forth in the Portuguese stock market regulation.

[3] "An agreement by which the parties involved in complex transactions agree to keep the structure of the companies separate, freezing out the transaction until clearance is given by CADE (Administrative Council for Economic Defense)". Source: **Global Competition Review**, "*The Antitrust Review of the Americas 2011*"

Credit Rating

In the last quarter of 2008, Standard and Poor's concerned with the adverse effects of the financial crisis on construction markets and the instability of the cash flows of cement operators, decided to revise the ratings of most global cement companies (**Exhibit 5**).

After over 3 years enjoying a stable "BBB" rating, Cimpor experienced its first drawback in credit evaluation, as S&P placed the rating on CreditWatch with negative implications[4] from November 11, 2008 onwards. Three months later, after a thorough evaluation of the Group's financial profile, the rating agency lowered Cimpor's long-term corporate credit rating one notch, from "BBB" to "BBB-". Additionally, S&P maintained the ratings on CreditWatch with negative implications due to what the rating agency considered Cimpor's weak liquidity condition. To avoid a future downgrade to speculative grade grounds, the rating agency pressured Cimpor's management to address covenant concerns, cut spending further and support its liquidity position with additional backup facilities. In May 2009, S&P reaffirmed the "BBB-" long-term corporate credit rating and replaced CreditWatch with a negative outlook[5]. The rating agency removed the company from CreditWatch as they believed that Cimpor would have satisfied their requirements before the next test date to occur at the end of June.

Confronted by the risk of breaching covenants and losing its investment grade status, Cimpor implemented a full financial austerity package and renegotiated the contractual limit on the Net Debt to EBITDA ratio of some of its debt instruments, from 3.5 to 4.0. This measure, although bearing extra financial costs, proved to be decisive as in September 2009 S&P revised Cimpor's outlook from "negative" to "stable".

As the 2009 year-end approached, after an exceptional recovery of its ratings and prepared to address the European credit market, S&P placed Cimpor once again on CreditWatch with negative implications, as a result of the unsolicited takeover bid by CSN. Given Standard and Poor's parent-subsidiary methodology[6], Cimpor's ratings would be capped in the event of a successful offer, as CSN presented a weaker credit profile than Cimpor ("BB+").

After the failure of CSN's acquisition, Standard and Poor's maintained the Portuguese cement manufacturer on CreditWatch with negative implications due to the changes in shareholder structure. For a better assessment of the situation, S&P credit analysts assembled with Cimpor's management and with representatives of each Brazilian shareholder. On one hand the new shareholder structure could benefit the Group given the new shareholders' long-term strategic interest in Cimpor and the corporate governance policies in place; on the other hand, the new shareholder structure exposed Cimpor to new risks that needed to be clarified. The two new shareholders, Camargo Corrêa and Votorantim Cimentos, were direct competitors of Cimpor in Brazil and their position in the decision making process could become a hindrance for the new Board due to potential conflicts of interest. The new ownership structure also increased the operational risks in what was becoming Cimpor's star market as a result of the ongoing regulatory antitrust investigations in Brazil.

After considering the circumstances, Standard and Poor's concluded that the shareholder structure could benefit the Group and that, in the absence of adverse developments, it should not

[4] CreditWatch highlights S&P's opinion regarding the potential direction of a rating in the near term, usually within 90 days.

[5] Outlook highlights S&P's opinion regarding the potential direction of a rating in the intermediate term, typically six months to two years. Note: a rating cannot be on CreditWatch and have an Outlook at the same time.

[6] Rating criteria states that subsidiaries cannot have a higher credit rating than the parent company.

affect Cimpor's creditworthiness. As a result, by May 2010, S&P considered that the shareholder structure had stabilized, thus reaffirming the long and short-term ratings on Cimpor at "BBB-/A-3", with a "stable" outlook (see **Exhibit 6 and 7** for Standard and Poor's rating criteria and matrix).

Debt Characteristics

At the end of the third quarter of 2010 Cimpor's total Financial Debt totaled over EUR 2.1 billion and was essentially divided between three types of instruments: a EUR 600 million Eurobond issued in 2004, two US Private Placements issues (USPP) placed in 2003 (USD 354 million) and sundry bank loans and club deals totaling more than EUR 1.2 billion (see **Exhibit 8**). The Group's financial debt was held mainly in Euros and US dollars, with these currencies accounting for 81% and 14% of total debt, respectively. The remaining 5% of financing was contracted in various local currencies of countries in which Cimpor operates. Local financing allowed the Group to obtain a certain degree of natural hedging, reducing the company's exposure to fluctuations in each country's local currency.

During 2008 Cimpor's persistent aggressive acquisition strategy entailed high investment costs and resulted in a 37% increase of the Group's Net Financial Debt, from EUR 1.36 billion in 2007 to around EUR 1.86 billion in 2008. In 2009, the Group's containment policy yielded positive results, with Net Financial Debt dropping almost 9%, to EUR 1.70 billion. This favored Cimpor as it reduced its immediate need to search for new funding at a time when credit conditions were worsening. Since the last quarter of 2008 and throughout the first half of 2009, markets experienced high volatility and an increase in spreads which made new debt issuances uninviting. This trend was only reverted by mid-2009, with credit spreads shrinking throughout the rest of year (**Exhibit 9**).

Shrinking spreads allied with S&P's confirmation of the "BBB-" rating since May 2009, represented an ideal timing to proceed with a debt restructuring to lengthen the Group's debt maturity. In order to access the European bond market Cimpor needed to put in place an updated Euro Medium Term Note Programme[7] (EMTN). In the beginning of the summer Cimpor started developing an EMTN Programme, with a limit on debt issuance of EUR 2.5 billion. However, the design of the EMTN Programme revealed to be more complex than expected and by September it had not yet been completed, preventing the Group from taking advantage of the newly assigned "stable" outlook by S&P. The company only managed to complete the senior unsecured EUR 2.5 billion EMTN Programme by December 22nd, 2009.

By the time the EMTN Programme was in place, CSN had already launched its takeover bid over Cimpor, and the Group was placed once again on CreditWatch with a negative outlook. Unable to set up new financing operations and concerned with the possibility of a lingering takeover proceeding, Varela opted to follow a different path to lengthen the maturity of Cimpor's debt. Facing the restrictions imposed by the negative outlook Varela agreed with Santander Bank to extend the EUR 300 million bilateral loan contracted in August 2008 and maturing in June 2010. As a result, the bullet loan was divided into three tranches of EUR 100 million each, maturing at the end of each year from 2010 to 2012. Varela also succeeded in further increasing the Group's short-term credit lines through an extension of the underwritten Commercial Paper[8] Programme ceiling in Portugal, from EUR 50 million to EUR 435 million.

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[7] European medium term notes are highly flexible debt instruments with maturities, rates and amounts that can easily respond to the borrower's needs.

[8] Commercial paper is a short-term unsecured debt instrument issued by a corporation, usually sold at discount.

Throughout the last quarter of 2009 Cimpor's management increased substantially available underwritten backup credit lines, ensured a fast and diversified access to capital markets through the establishment of a new EMTN Programme and increased the Commercial Paper Programme ceiling. By December, credit lines obtained but not used, excluding commercial paper that has not been underwritten, reached a value close to EUR 779 million, up from EUR 498 million in December of the previous year, revealing a level of available credit limits appropriate to meet the needs of any extraordinary transactions.

Entering 2010 the Group continued to sustain its policy of financial restraint, thereby reducing the need for immediate funding. It was not until the end of May that S&P removed the ratings from CreditWatch and assigned Cimpor with a stable outlook allowing it to access the market without rating restrictions. However, by that time, markets were extremely volatile as a consequence of the Greek bailout made available by the Euro area member states and the IMF, earlier in the month. Although Cimpor had finally gathered the necessary conditions to access the European bond market, the external economic setting derived from the sovereign debt crisis hitting peripheral countries made it impossible to access the market in May. In June 2010, the pressure to restructure debt grew, as the debenture bond issue of approximately EUR 600 million was reclassified as a current liability. With less than a year to refinance this liability, the Group started to assess the best market timing for a new issue on the European debt market, together with some international banks, hoping that conditions would improve and markets could stabilize.

Financing costs

Over the years Cimpor favored the use of floating rate instruments, having about 85% of its total debt tied to variable rates. Aside half of the Eurobond (EUR 300 million) issued at a fixed rate, all other instruments were originally issued at a variable rate or were later converted to variable rates through interest rate swaps. In May 2010 the Eurobond would reach its maturity, and the Group planed on using this opportunity to obtain a better balance between floating and fixed-rate instruments, by refinancing the current Eurobond with a new issue on the European debt market mostly tied to a fixed rate.

With most of its debt dependent on Euribor rates[9] Varela followed closely the moves in European money market rates. Until the middle of October 2008 there was a sharp rise in Eurozone interest rates. That trend was reversed throughout 2009 and 2010, as a result of a 275 bps decrease in the ECB refinancing rate[10], down to 1.000% in May 2009, in an effort to improve slowing economic growth in the Area (**Exhibit 10**). To take advantage of the downward trend in Euribor rates, Cimpor negotiated bank loans linked to short-term rates, resetting every 1 to 3 months. This allowed for changes in market rates to have a direct impact on the amount of interest paid. Besides interest rate levels, interest paid was also affected by the change of Cimpor's credit rating in January 2009 (from "BBB" to "BBB-"). In some of the large bilateral loans, a portion of the required margin was directly linked to Standard and Poor's rating and suffered an increase as a result of the deteriorating risk profile of the company.

[9] Euro Interbank Offered Rate is based on the average interest rates at which a panel of more than 50 European banks borrows funds from other panel banks. Euribor rates have maturities from one week to one year. Euribor rates are considered the most important reference rates in the European money market and are highly influenced by changes in the ECB refinancing rate. (Source: euribor-rates.eu)

[10] The ECB refinancing rate is the interest rate banks have to pay when they borrow money from the ECB.

Overall, despite the large increase in net debt, the company's defensive floating position reaped some rewards, with its net interest costs increasing only by EUR 3 million and EUR 2 million, in 2008 and 2009 respectively, in spite of the overall declining financial climate.

Covenants

In its largest financial deals Cimpor had to comply with two main financial covenants: a leverage ratio – *Net Debt/EBITDA* – below or equal to 3.5 and a coverage ratio – *EBITDA/Net Financial Charges*[11] – above or equal to 5.

Throughout the years the Group always complied with the financial covenants included in its debt contracts. However, in 2008, the company witnessed a narrowing of the differential between its ratios and the pre-established commitments (**Exhibit 11**). To place the company in a more comfortable position, Varela raised the maximum leverage ratio imposed by some of the debt instruments to 4.0x until December 2010, returning to 3.5x thereafter. The renegotiation of the covenant terms of the U.S. Private Placements issued in 2003, required a down-payment of USD 50 million and increased the cost of the 10-year and 12-year USPP from 4.75% and 4.90%, to 5.75% and 5.90%, respectively. Nevertheless, the change was successful as S&P confirmed the company's "BBB-" rating, avoiding much larger costs associated with the possibility of a junk-bond downgrading.

2010 was less challenging with marked improvements in the *Net Debt/EBITDA* and *EBITDA/Net Financial Charges* ratios. In September these ratios were respectively 2.66 and 15.89, compared to 2.82 and 11.26 in December 2009, reflecting the Group's improving financial position. The progress in the coverage ratio was mainly the result of a decrease of Net Financial Charges due to the rise in interest received from Cash and Cash Equivalents, which increased substantially driven by Cimpor's strong operating performance.

Funds Requirements

By May 2010, Varela was focused on the restructuring of Cimpor's debt. The Group's Board of Directors had a strong commitment to maintain an appropriate balance between capital investments, cash flow generation, and a stable dividend policy. Despite Cimpor's robust cash flow generation the firm could not rely solely on internal sources to satisfy investment and financing needs anticipated for the near future as part of Cimpor's approved strategic plan.

Growth Projects in new and existing markets

Approaching the 2010 year-end, and after almost two years under a policy of financial contention, the Board of Cimpor decided to increase investment spending to avoid deterioration in the Group's competitive position. During the first 9 months of 2010 about half the total value of investments was allocated to capacity-enhancing projects, such as a new plant at Zaozhuang, China, a cement grinding facility at Matola, Mozambique, and a variety of projects in Brazil. The other half was related to the improvement of operational, environmental and safety conditions at plants. In the forthcoming years the Group planned to continue to improve efficiency and performance of its plants through the implementation of a company-wide program that was estimated to reduce costs in China, Turkey and Iberia by over EUR 60 million.

Regarding its capacity investments Cimpor's strategy would focus not only on growth opportunities in current geographies, but also in taking advantage of opportunities in new

[11] Net Financial Charges = Financial Expenses – Financial Income

locations. The Group was interested in operating in regions with low per capita cement consumption and first-class economic growth forecasts. Brazil was a perfect fit for these requirements. It presented exceptional growth prospects and was on the verge of receiving two major events that would boost investments in infrastructure, namely the Football World Cup and the Olympic Games. To adapt to future needs and maintain local market share Cimpor intended to build an extra 2.05 million ton capacity, corresponding to an additional investment of EUR 240 million, between 2011 and 2013. This investment included the construction of a new cement production unit in Caxitu as well as a third clinker production line and a cement grinding facility in Cezarina, increasing Cimpor's production capacity in Brazil by over 30%. Cimpor would also allocate more resources to the new plants already under construction, representing an additional capital expenditure of EUR 10 million, in 2011, in Brazil.

The Group was also committed to the consolidation of its presence in Mozambique. In the beginning of October 2010, Cimpor signed a binding agreement for the acquisition of 51% of the share capital of CINAC, a company with a cement grinding plant in Nacala, northern Mozambique. The conclusion of the acquisition was only expected for 2011, and represented an increase in Capex of USD 24 million.

Overall Cimpor expected capital expenditures to reach EUR 276 million in 2011 and EUR 229 million in 2012[12], in order to maintain its competitive position and seize the most promising market possibilities.

Debt Maturity

By September 2010 the Group had about EUR 1.2 billion in maturing debt to cover over the next 12 months (**Exhibit 12**). In the third quarter report, the company stated an existing 55% of current liabilities, corresponding to a 1.5 year average debt maturity. Financing needs were covered until December 2010, but in order to satisfy upcoming obligations and to avoid any liquidity constraints, Cimpor would have to complete a demanding debt restructuring in the near-term.

Dividends

Cimpor's management was committed to maintain a dividend policy which ensured a stable payout ratio and a dividend yield competitive both in the Portuguese and in the international cement market. On May 28, 2010, a dividend of 20 cents per share was paid to shareholders, totaling EUR 133 million. The financial management of the company intended to assure the distribution of a growing dividend per share and as such, the Board of Directors proposed, for the 2010 financial year, a dividend of 20.5 cents per share, subject to the approval of shareholders in the Shareholder's Annual General Meeting to be held in April 2011. If shareholders approved this dividend, Cimpor was expected to pay a total EUR 136 million dividend in mid-2011.

Initial Refinancing Plan

Following the confirmation of the "BBB-" rating with a stable outlook in May 2010, Cimpor's management started preparing for an upcoming Eurobond issue under the EMTN Programme. Varela and Jorge Saraiva, Head of Finance, intended to exchange the maturing bond with a new debenture bond with increased maturity, and also issue a new U.S. Private Placement to meet the company's remaining needs.

[12] Source: Millennium Investment Banking, Valuation update April 2011.

However, things did not work out as planned. On the week of S&Ps rating confirmation debt markets became extremely volatile driven by developments of the European sovereign debt crisis. Fears of a possible Greek default spilled over to Southern European countries and caused sovereign spreads to widen to record breaking levels (**Exhibit 13**). The installed panic was soon transformed into a "trust crisis", where market players ceased borrowing and forced debt markets to close. These negative events also contaminated the corporate sector, and in particular the construction and public works sector, which experienced an increase in spreads as well.

In spite of increased turbulence, the inverse movement between interest rates and credit spreads allowed for a relative preservation of the costs of funding. During the summer, Cimpor's management followed market conditions continuously, trying to pick the best timing to approach the European debt market. Unfortunately, conditions proved to be highly unfavorable for Cimpor until September. Caught in the middle of a "trust crisis", investors became highly averse to risk and less willing to lend through capital markets. Investors' unwillingness to lend was even greater for corporate firms from a country such as Portugal, with high public debt and budget deficits. Given its name, Cimpor – Cimentos de Portugal, the Group was easily associated with the Portuguese Republic which had suffered a two notch downgrade by S&P from "A+"to "A-" with a negative outlook, on April 27, 2010. Market players did not exclude the chances of further sovereign downgrade and associated Cimpor with the Portuguese Republic downgrade, not recognizing that no more than 19% of the company's turnover was generated in Portugal. Thus, with Cimpor viewed as an issuer located in a sovereign country with funding limitations, the company was unable to refinance its debt on the European capital markets and Varela was forced to set aside the original plan and move forward to the fallback solution.

The U.S. Private Placement

Liquidity Initiatives

Unable to proceed with the Eurobond issue, Varela had to adapt to what he first perceived to be a "worst case scenario". Instead of one large bond issue, the Group would have to perform a mix of smaller operations that, altogether, presented similar characteristics to those of the initial Eurobond scenario. Varela continued determined to approach the American market to obtain long-term US Private Placements (USPP) that enhanced the debt maturity of the Group. However he knew that in order to attract American investors, Cimpor needed to have other sources of funding in place beforehand. As a result, the Group's finance department designed a liquidity package composed by four main initiatives which depended on each other to succeed; the failure of one sole initiative could dampen the whole process by putting at risk the other liquidity operations, as well as the USPP.

The Group's first move, in the beginning of October 2010, was to negotiate a *bilateral extension* with Santander Bank of the payment dates of the three EUR 100 million tranches, already extended by 2 years at the end of 2009. Santander verbally agreed to extend the loan by one additional year and one month, in exchange for a down payment and the conversion of the bilateral credit loan into a fully underwritten commercial paper program, maturing in three equal tranches, in January 2012, 2013 and 2014.

After the negotiations with Santander, Varela arranged a meeting with the Royal Bank of Scotland (RBS) and Citibank, two international banks with whom the Group had already well established relations. Both parties settled to provide EUR 75 million each, in exchange for being nominated as financial intermediaries for the U.S. Private Placement to be held in the beginning of the following month. Varela accepted these demands and the two intermediaries agreed to provide new *committed back up facilities* of EUR 150 million, maturing in November 2012.

Subsequently Varela met with 5 major banks: BNP Paribas, Caixa Geral de Depósitos, ING, Société Général and Barclays and proposed a syndicate loan alternative to the Eurobond. Varela requested a EUR 100 million loan from each bank with a three year maturity, but Barclays rejected the proposal and dropped out of the negotiations. The other four banks and Cimpor reached an agreement for a EUR 320 million *forward start facility* available before the year end and maturing in May 2013[13]. Each bank verbally committed to a EUR 80 million loan, being appointed in exchange as bookrunners for an upcoming Eurobond benchmark deal under the EMTN Programme, in case the markets reopened.

At last, before the end of October, Cimpor's finance department gathered with representatives of two more banks, BBVA and ING, in order to renegotiate existing *club deals.* The negotiations resulted in a verbal commitment of an additional EUR 110 million of funding, maturing in November 2013.

In case all these financial transactions materialized, these liquidity initiatives would result in a net increase of EUR 410 million of Cimpor's liquidity[14]. The enhanced liquidity allied with the Group's committed unused backup facilities (around EUR 750 million down from EUR 779 in December 2009) and cash (EUR 401.4 million down from EUR 439.2 in December 2009), improved the Group's financial profile and served as a signal to American investors that a good guarantee system was in place, improving the Group's prospects of obtaining the level of funds required.

U.S. and U.K. Roadshow

On Sunday, October 31, António Varela left Portugal for an intensive four day roadshow in the US and the UK. Varela traveled in a 6-person team composed by Rui Zenoglio of the Finance Department, three representatives from RBS and one from Citibank.

The team had prepared a comprehensive road show presentation which highlighted the Group's main strengths and attempted to detach Cimpor from the negative outlook of the Portuguese Republic: industry-leading profitability and profit resilience through the cycle, balanced geographic portfolio, modest debt levels and commitment to investment grade credit rating.

The Roadshow aimed at attracting investors searching for possibilities of long-term investments, such as large insurance companies. In only four days, the team attended five one-on-one meetings and four group meetings, in locations dispersed all over the US and UK (**Exhibit 14)**. The Group aimed at obtaining a new USPP of EUR 73 million (USD 100 million) that would further diversify Cimpor's funding sources and extend the maturity profile. Throughout the meetings Varela noticed one peculiar characteristic: American investors did not seem to mind about Cimpor's country of origin. Quite the contrary! Confronted with low Treasury yields, investors viewed Cimpor as an opportunity to boost returns and diversify their portfolios.

[13] The syndicate of banks agreed to repay EUR 320 million of the EUR 600 million Eurobond maturing in May 2011 (Cimpor would only have to repay EUR 280 million of the maturing Eurobond in May 2011, and it would pay the remaining EUR 320 million to the syndicate of banks in May 2013).

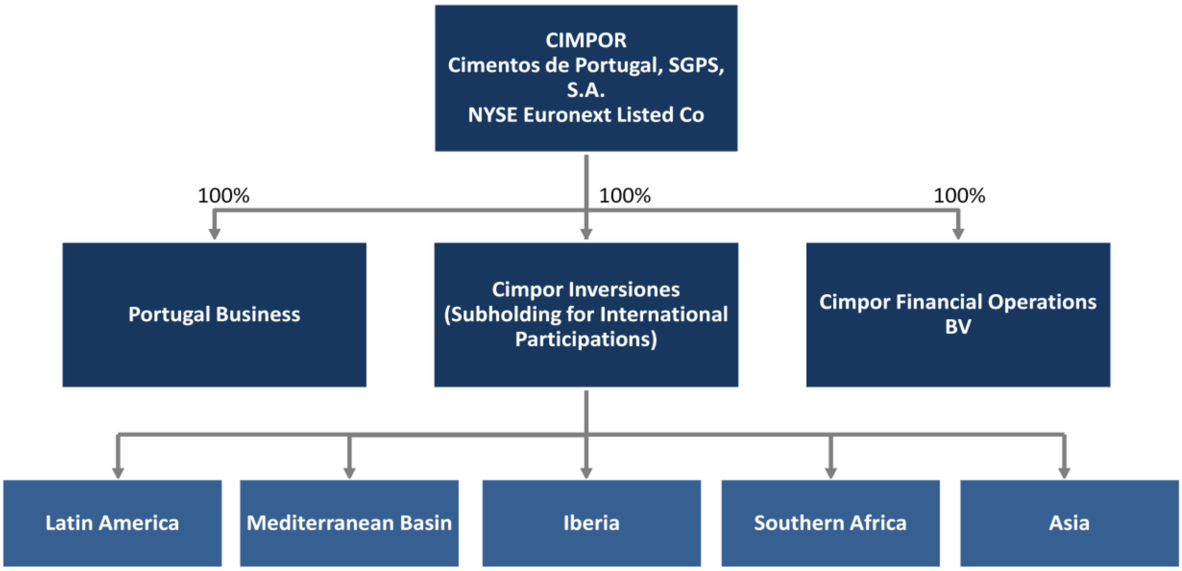
[14] Net increases in liquidity per transaction: Santander bilateral transaction: €0; RBS and Citi revolving line of credit: €55 M; Syndicate forward start facility: €320 M; ING and BBVA club deal refinancing: € 35 M.

Financing: A Recurring Process

As Varela returned home, after four days of intense traveling and negotiations, he was satisfied with the general outcome of the roadshow. Before giving a definite answer, insurance companies would have to perform due diligence on Cimpor, but Varela expected to receive a preliminary reply before the end of November. However, as weeks went by market conditions started to deteriorate, especially in Portugal where the Portuguese sovereign debt rate, which already stood at 6.6% at the end of the roadshow, exceeded the 7% threshold[15] on November 10, 2010. How would this affect the pricing of the USPP? And above all, would there still be any offers from US investors? After a highly demanding summer, it was now time to wait and see the fruits of the roadshow. Whatever the outcome, 2011 was just around the corner with new refinancing challenges lying ahead...

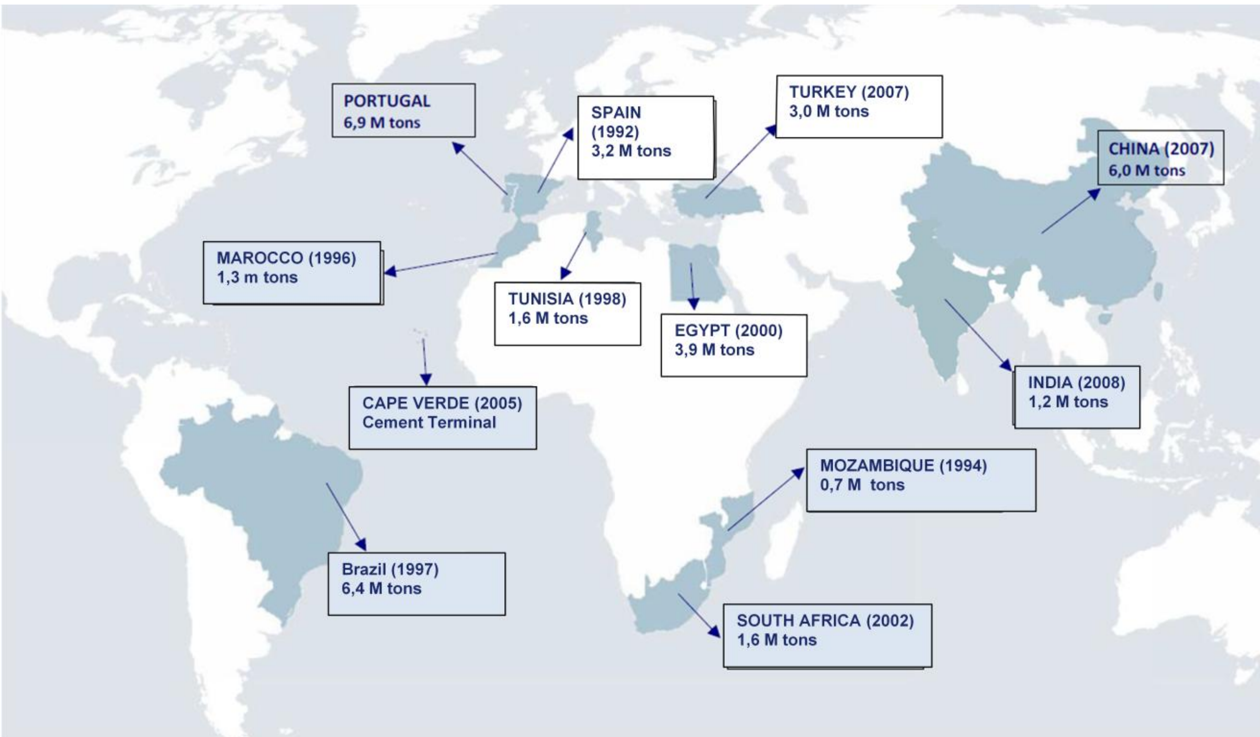
[15] The 7% yield represents an important threshold for 10-year government bonds because Greece and Ireland were forced to request a bailout package shortly after the yields on their 10-year bonds exceeded 7%.

Exhibit 1 CIMPOR Business Organizational Chart



Source: CIMPOR Internal Data

Exhibit 2 Map of CIMPOR operating countries (with respective year of entrance and tons produced in 2010)



Source: CIMPOR Internal Data

Exhibit 3 Reference data on Cimpor and comparable firms (Million Euros unless stated otherwise; Year ended December 31, 2009)

	Lafarge	Holcim	Cemex	Heidelberg Cement	Italcementi	Buzzi Unicem	Titan	Cimpor
Income Statement Items								
Total Revenues	15,884	14,000	10,538	11,118	5,006	2,672	1,361	2,086
EBITDA	3,507	3,067	1,926	1,895	1,064	542	329	603
Depreciation, Amortization	1,030	1,225	1,082	785	552	219	113	226
EBIT	2,477	1,842	844	1,110	512	323	216	377
Net Profit attributable to shareholders	736	1,471	75	43	71	140	123	237
Cash Flow Statement Items								
Other non-cash adjustments	441	271	833	- 221	98	- 88	82	69
Cash from operating activities	3,206	2,576	1,851	1,164	1,102	258	374	921
Capital Expenditures	1,645	1,661	355	771	680	381	166	237
Dividends Paid	393	-	N.A.	15	125	75	38	123
Balance Sheet Items								
Current Assets	6,640	7,281	3,028	4,257	2,684	1,647	510	1,163
Long-term Assets	32,857	25,903	28,033	21,251	7,129	4,413	2,496	3,764
Current Liabilities	6,045	6,258	2,625	3,367	1,762	910	527	803
Long-term Liabilities	16,652	12,059	14,696	11,138	3,359	2,437	1,019	2,201
Net Debt	13,795	9,284	10,514	8,423	2,420	1,209	971	1,699
Gross Debt	15,977	12,346	11,375	8,776	3,165	1,811	988	2,098
Common Equity	16,800	14,866	13,740	11,003	4,692	2,712	1,449	1,923
Other Reference Items								
Cement Capacity (Mil. Tons)	203	203	97	110	75	43	N.A.	34
Cement Utilization (Mil. Tons)	141	132	65	79	56	26	16	27
Interest Expense	879	517	994	722	125	120	63	68
Effective Tax Rate (%)	19.9%	24.1%	N.A.	N.A.	30.4%	27.1%	22.9%	21.7%
FCF[1]	1,561	915	1,497	393	422	- 123	207	684
FFO[2]	2,381	2,840	933	878	722	424	262	531
1-year Growth Metrics								
Revenues growth (%)	-16.5%	-11.5%	-23.8%	-21.6%	-13.3%	-24.1%	-13.8%	-0.2%
EBITDA growth (%)	-22.0%	-3.5%	-31.3%	-28.6%	-13.3%	-41.3%	-12.5%	3.3%
Net Profit growth (%)	-53.9%	-7.4%	-46.0%	-91.3%	-23.0%	-63.6%	-40.7%	8.0%
Sales by Product								
Cement	10,105	8,353	5,088	5,282	3,639	1,594	951	1,591
Aggregates	2,377	922	1,541	-	-	-	-	-
Aggregates and ready-mix concrete	3,032	-	3,860	5,123	1,111	1,078	396	428
Others and Eliminations	370	4,726	-34	713	257	-	14	67
Sales by region								
North America	2,845	2,306	2,046	2,892	401	613	366	-
West Europe	4,966	4,775	3,015	4,219	2,650	702	504	732
Middle East/North Africa	3,566	798	342	-	-	-	-	-
Mediterranean	-	-	446	661	1,338	695	275	512
Asia	1,837	3,920	339	2,237	400	-	-	131
East Europe	795	-	841	1,108	-	470	216	-
Sub-Saharan Africa	-	-	-	-	-	-	-	230
Latin America	614	2,202	3,221	-	-	180	-	427
Others	1,261	-	287	-	218	12	-	53

1 - Free Cash Flow = Operating cash flow – Capex

2 - Funds From Operations = Net Income from continuing operations + Depreciation, amortization and provisions + Deferred income taxes + Other non-cash expenses

Source: Bloomberg. Values from companies' financial reports cannot be used given the different accounting practices which result in similarly titled metrics which are not comparable.

Exhibit 4 Evolving shareholder structure

	2006		2007		2008		2009		2010		
	No. Of Shares	Share Capital (%)	No. Of Shares	Share Capital (%)	No. Of Shares	Share Capital (%)	No. Of Shares	Share Capital (%)	No. Of Shares	Share Capital (%)	Voting Rights (%)
Teixeira Duarte, SGPS, S.A.	151,112,489	22.49%	137,943,645	20.53%	153,884,443	22.90%	153,096,575	22.78%			
Credit Suisse Group	85,538,586	12.73%									
Lafarge	84,908,825	12.64%	115,989,135	17.26%	116,089,705	17.28%	116,089,705	17.28%			
Manuel Fino, SGPS, S.A.	75,825,000	11.28%	136,141,580	20.26%	136,141,960	20.26%	71,735,460	10.67%	71,735,960	10.67%	20.26%
Banco Comercial Português, S.A. (BCP) and BCP Pension Fund	64,474,186	9.59%	67,474,186	10.04%	67,474,186	10.04%	67,474,186	10.04%	67,474,186	10.04%	10.04%
HSBC Holdings plc	20,119,288	2.99%									
Bipadosa, S.A.	16,047,380	2.39%	31,870,986	4.74%	44,912,524	6.68%	43,401,650	6.46%			
Caixa Geral de Depósitos, S.A. (CGD) and CDG Pension Fund	13,977,706	2.08%	182,580,468	27.17%			64,669,794	9.62%	64,713,220	9.63%	30.83%
Sr. Ten-Cor. Luís Augisto da Silva, Cinveste					14,049,090	2.09%	26,814,238	3.99%			
Camargo Corrêa Group									221,360,153	32.94%	32.94%
Votorantim Group									142,492,130	21.20%	30.83%
Others	159,996,540	23.81%			139,448,092	20.75%	128,718,392	19.15%	104,224,351	15.51%	
Total	672,000,000		672,000,000		672,000,000		672,000,000		672,000,000		

Source: Company annual reports

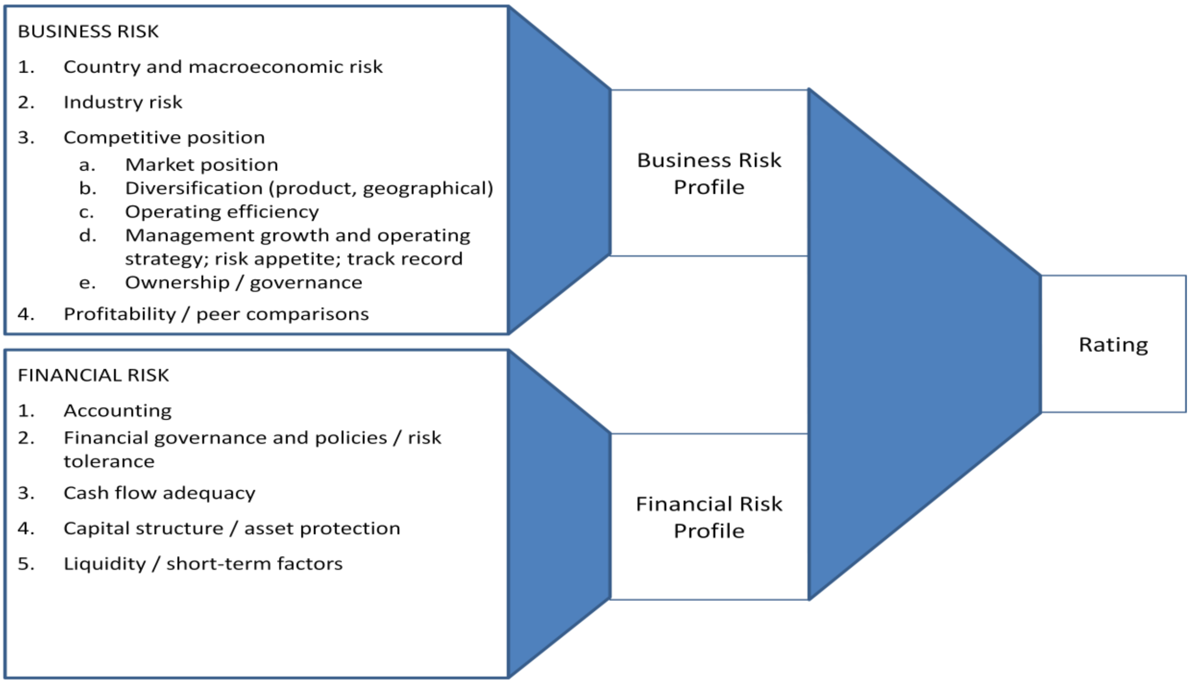
Exhibit 5 Companies Long Term Standard and Poor's Credit Rating

	Cimpor			Lafarge			Holcim			Cemex			HeidelbergCement			Titan			Italcementi			Buzzi Unicem		
	Rating	Watch	Effective	Rating	Watch	Effective	Rating	Watch	Effective	Rating	Watch	Effective	Rating	Watch	Effective	Rating	Watch	Effective	Rating	Watch	Effective	Rating	Watch	Effective
Before 2008	BBB			BBB			BBB+			BBB			BBB-			BBB			BBB+					
2008	BBB	*-	11 Nov.							BBB-		14 Oct.	BB+	*-	24 Oct.	BBB	*-	6 May	BBB+	*-	1 Feb.			
													BB-	*-	21 Nov.	BBB-		24 July	BBB		16 May			
																BBB-	*-	27 Oct.						
																BB+	*-	5 Nov.						
2009	BBB-	*-	29 Jan.	BBB-		21 Jan.	BBB		22 Jan.	BB+	*-	21 Jan.	B+	*-	9 Jan.	BB+		5 Mar.	BBB-		17 Sep.	BBB		13 Nov.
	BBB-		8 May							B-	*-	10 Mar.	B-	*-	6 Mar.									
	BBB-	*-	18 Dec.							B-	*	12 Aug.	B-		24 June									
										B-	*+	27 Aug.	B-	*+	14 Sep.									
										B		8 Oct.	B+		15 Oct.									
2010	BBB-		24 May										BB-		13 Jan.							BBB-		13 Aug.

Source: Bloomberg

Exhibit 6 Standard and Poor's Rating Criteria

[Standard and Poor's credit analysis balances qualitative and quantitative factors and focuses on the long-term. Credit ratings are relative across all rated issuers and should be analyzed together with a group of comparables.]



Source: Standard and Poor's

Exhibit 7.a Standard and Poor's Business and Financial Risk Profile Matrix

[Rating outcomes are shown for guidance purposes only. Actual rating should be within one notch of indicated matrix rating outcomes. In investment grade firms, S&P tends to weight business risk slightly more than financial risk.]

	Financial Risk Profile					
Business Risk Profile	Minimal	Modest	Intermediate	Significant	Aggressive	Highly Leveraged
Excellent	AAA	AA	A	A-	BBB	--
Strong	AA	A	A-	BBB	BB	BB-
Satisfactory	A-	BBB+	BBB	BB+	BB-	B+
Fair	--	BBB-	BB+	BB	BB-	B
Weak	--	--	BB	BB-	B+	B-
Vulnerable	--	--	--	B+	B	CCC+

Exhibit 7.b Standard and Poor's Financial Risk Indicative Ratios (Corporates)

	FFO/Debt (%)	Debt/EBITDA (x)	Debt/Capital (%)
Minimal	greater than 60	less than 1.5	less than 25
Modest	45-60	1.5-2	25-35
Intermediate	30-45	2-3	35-45
Significant	20-30	3-4	45-50
Aggressive	12-20	4-5	50-60
Highly Leveraged	less than 12	greater than 5	greater than 60

Source: Standard and Poor's

Exhibit 8 Debt Structure (values in thousand Euros)

	Financial Instrument	Currency	Issue Date	Interest rate	Repayment Date	31 December 2009		30 September 2010	
						Current	Non-Current	Current	Non-Current
Bonds	Eurobonds	EUR	27 May 04	4.50%	27 May 11		611,129	605,836	
	US Private Placements 10Y	USD	26 June 03	5.75%	36 June 13		97,152		108,075
	US Private Placements 12Y	USD	26 June 03	5.90%	26 June 15		145,464		167,717
						-	853,745	605,836	275,792
Sundry Bank Loans				N.A.		453,440	783,192	567,184	690,827
Other Loans						84	200	68	200

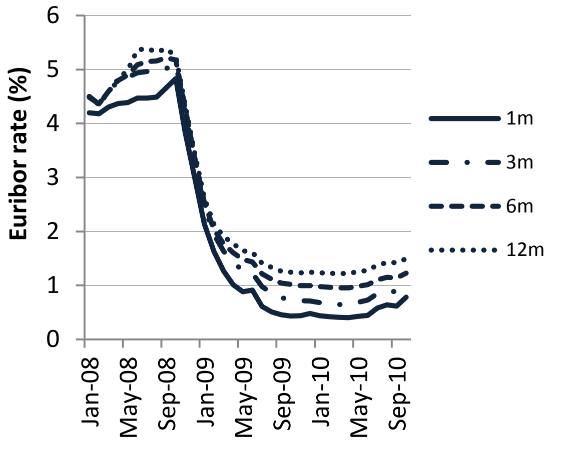
Source: Company annual and interim reports

Exhibit 9 Historical data on European Corporate spreads (CDS 5y)

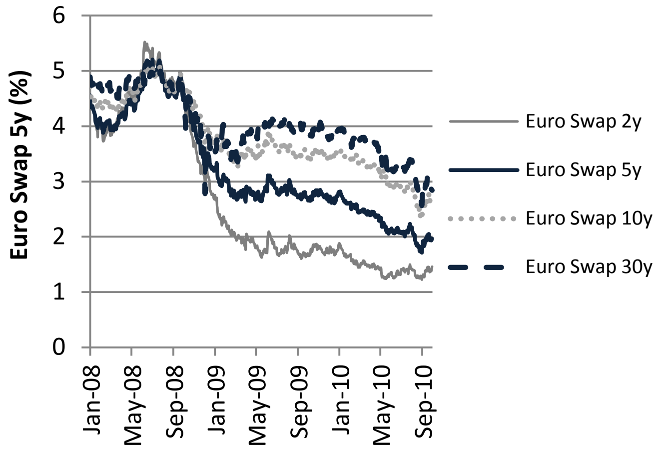
Source: Bloomberg; Markit iTraxx Europe index. The Markit iTraxx Europe index comprises 125 equally weighted credit default swaps on investment grade European corporate entities, distributed among 4 sub-indices: Financials (Senior and Subordinated), Non-Financials and HiVol.

Exhibit 10 Development of Eurozone interest rates

Money market rates in the Eurozone



Interest rates Euro Swap in the Eurozone



Eurozone rates (%)	31 December 2008	31 December 2009	31 March 2010	30 June 2010	30 September 2010
Euribor 1M	2.60%	0.45%	0.43%	0.49%	0.63%
Euribor 3M	2.89%	0.70%	0.70%	0.77%	0.89%
Euribor 6M	2.97%	0.99%	0.99%	1.04%	1.15%
Euribor 12M	3.05%	1.25%	1.26%	1.31%	1.43%
Interest rate Euro Swap 2y	2.68%	1.88%	1.44%	1.37%	1.46%
Interest rate Euro Swap 5y	3.25%	2.81%	2.39%	2.08%	1.97%
Interest rate Euro Swap 10y	3.74%	3.58%	3.28%	2.90%	2.59%
Interest rate Euro Swap 30y	3.57%	3.94%	3.69%	3.23%	2.84%

Source: Bloomberg

Exhibit 11 CIMPOR Evolving Covenant Headroom

Ratios	2008		2009		2010		Limit
	June	December	June	December	June	September	
Net Debt / EBITDA[1]	2.64	2.97	3.02	2.82	2.84	2.65	≤ 3,5
EBITDA / Net Financial Charges	8.39	6.89	6.74	11.26	17.77	15.89	> 5

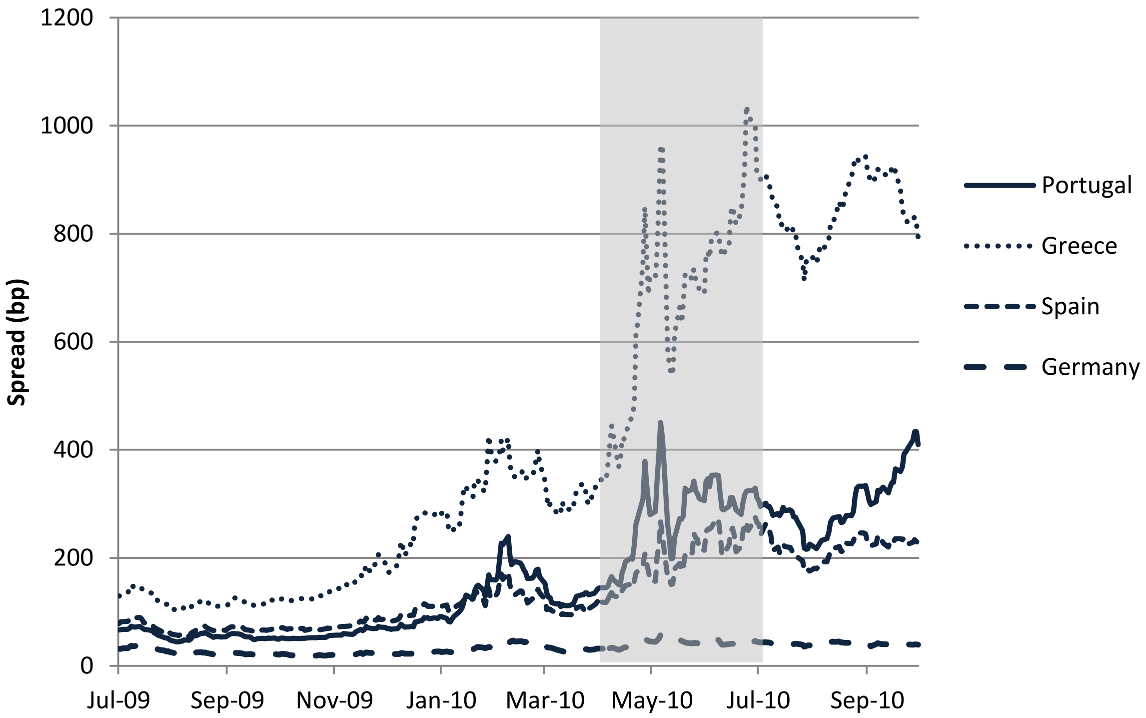
Source: CIMPOR internal data

Exhibit 12 CIMPOR Repayment Schedule

Date	31 December 2009	30 September 2010
Less than 1 year	453,524	1,173,088
2011	930,982	138,034
2012	384,656	268,476
2013	138,478	228,086
2014	6,667	114,017
Following years	176,374	218,226
	2,090,681	2,139,927

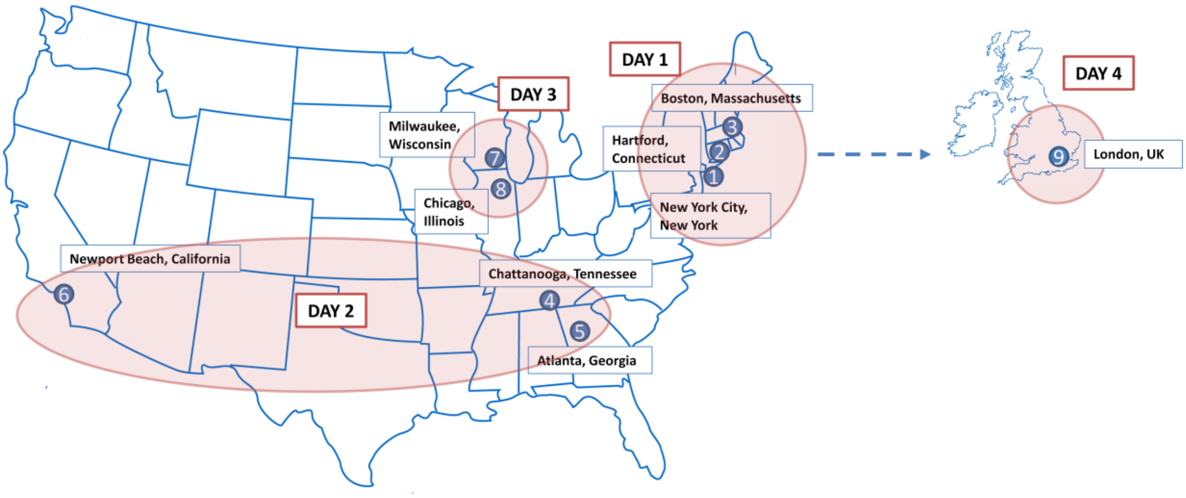
Source: Company annual reports

Exhibit 13 Evolution of Sovereign CDS 5y



Source: Bloomberg

Exhibit 14 U.S. and U.K. Private Placement Roadshow Schedule



Source: CIMPOR internal data

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Case Study under the advisory of
Professor José Neves Adelino

January 2012

Ana Maria Cruz

The Refinancing of Cimpor (B)

On November 19, 2010, Cimpor announced that it had completed its 2010 refinancing plan through a set of financial transactions, which "increased CIMPOR liquidity one Billion euros and extended the average maturity of its liabilities almost two years"[16]. In only two months, the Group completed a total of 19 different transactions, including a EUR 100 million three year fully underwritten commercial paper programme, a EUR 150 million committed backup facility, a EUR 320 million forward start facility alternative to the Eurobond loan, a EUR 110 million club deal loan, and two U.S. Private Placements totaling USD 200 million.

Two weeks after returning from the roadshow, Varela was informed by its private placement intermediaries (RBS and Citi) of the pricing curve demanded by American investors. After negotiations Cimpor agreed to a placement of USD 150 million in long-term notes. The placement consisted in a 10-year bullet issue paying a 6.7% coupon, which compared favorably with the sovereign cost of risk. However, one day later RBS and Citi contacted Varela to inform him that American investors had requested to extend the placement to USD 200 million. The new placement was composed by a 10 year tranche of USD 125 million at the initial coupon of 6.7%, and a 12 year tranche of USD 75 million with a 6.85% coupon. Despite the involving financial environment[17], Cimpor's geographically diversified portfolio and profit resilience throughout the cycle reassured American investors and encouraged them to provide additional funding to the firm.

The announcement of the pricing of the USPP allowed Cimpor to formalize the deals that it had verbally agreed with a set of banks in the previous month. On November 19th the Group celebrated officially the bilateral extension with Santander and the forward start facility with the syndicate of banks. On November 23rd the club deal with BBVA and ING was also formalized followed, one day later, by the closing of the revolving credit facility with RBS and Citibank. Despite the formalization of the deals, all players were still subject to the risk inherent to the due diligence process that would be carried out by the USPP

[16] Announcement in the company's site: Cimpor Refinancing, November 19, 2010.

[17] On September 1, 2011, Standard and Poor's announced that it considered Cimpor to have low exposure to the Portuguese sovereign risk. This announcement finally detached Cimpor's credit rating from Portugal's rating. Cimpor could now be assigned up to six notches above an investment grade sovereign rating, and up to five notches above a speculative grade sovereign rating.

intermediaries during the following month. This risk was only set aside on December 22, 2010, with the end of the due diligence process and the formal closing of the promissory notes.

Now that this refinancing plan had been completed, it was time to start addressing a new round of refinancing. Besides its current funding markets, Cimpor wanted to explore new markets to further diversify its investor base and reduce its exposure to Portuguese banks and investors. By the end of the year, the Group was already contemplating Rule 144A, which allows foreign companies to sell securities in the US market, and was preparing to issue a bond in the Swiss market. These new operations would assure a fresh and even more diversified round of financing.

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Case Study under the advisory of
Professor José Neves Adelino

January 2012

Ana Maria Cruz

TEACHING NOTE

The Refinancing of Cimpor

Critical Issues

This case, which was written primarily for intermediate and advanced corporate finance courses, is about the refinancing of Cimpor, a highly profitable Portuguese cement group that encounters a set of obstacles in its debt restructuring.

The case studies the impact of credit ratings and rating agencies' actions in corporate strategic and financial decision-making process. The case illustrates how credit ratings interact with the market, presenting two clear examples: (1) how the Global Financial Crisis pressured credit rating agencies to downgrade overall heavy construction material firms; (2) how the European Sovereign Crisis and country specific risks affect corporate debt ratings. The case exemplifies how corporate governance issues, such as, hostile takeover bids and changes in shareholder structure, affect credit ratings. A careful case analysis requires students to perform a realistic estimation of the cost of debt, focusing on specific topics, such as, the choice of the best proxy for the risk-free rate and credit spread. Finally, the case illustrates some debt securities typically used by firms when confronted by credit crises and virtually closed credit markets (e.g., bilateral extensions, forward start facilities, private placements).

Pedagogical Objectives

The Refinancing of Cimpor case has four learning objectives:

1. Students must perform a realistic credit rating analysis of Cimpor's business and financial risk profile, determining which ratios matter, how country and industry-specific considerations affect corporate ratings, how external factors affect the optimal capital structure and cash flow adequacy.

2. The case presents a realistic situation of refinancing risk. The internal funds available are not sufficient to cover all fund requirements: growth efficiency-enhancing projects, maturing debt, and dividends. The firm needs to access European capital markets, but macroeconomic events prevent it from doing so, and the firm is forced to adopt approach the American private credit market.

3. The case provides an opportunity for the students to assess market trends (e.g., interest rates, credit spreads, volatility) and their effects on the choice of the optimal capital structure and debt characteristics (e.g., amount of leverage, fixed-floating mix, term/maturity structure). The case requires students to analyze Cimpor's cost

of debt, using Credit Default Swaps as a measure for credit spread, and compelling students to choose between government bonds and swap rates as a proxy for the risk-free rate.

4. The case confronts students with different debt instruments: European Medium Term Notes, Commercial Paper Programmes, debenture bonds, committed backup lines, bilateral loans, forward start facilities, club deals, and private placements. It also points towards the importance of having cash in hand to adequately surpass difficult credit situations.

Case Supplements

The "Refinancing of Cimpor" case has one additional supplement in excel format, containing the data-based exhibits in the case and the data-based tables from this Teaching Note, including the "solution" to the basic quantitative assignment that students are expected to complete as part of case analysis. This excel spreadsheet is restricted to **Instructors Only**.

Discussion Questions

RATINGS AND RATING AGENCIES

1. Describe the fundamentals of credit ratings:

   i. What are credit ratings?
   ii. What are the main credit rating agencies and their respective credit rating scales?
   iii. Who needs credit ratings, and why?
   iv. Identify recent historic events where credit rating agencies were under fire for their actions.

2. Describe Cimpor's business and financial profiles in September 2010. Use Standard and Poor's scoring and rating determination process, available in case Exhibit 6.

3. How would Standard and Poor's evaluate Cimpor's credit rating taking into account the business and financial profile matrix available in Exhibit 7?

4. What are the costs associated with a rating downgrade to speculative-grade?

SOVEREING AND CORPORATE RISK RELATION

5. What is the impact on private firms' credit risk assessment of a downgrade in their home-country's government debt rating? Is it important for private firms to have their country's government debt viewed as a risk free asset?

6. How do you assess Cimpor's exposure to the Portuguese sovereign risk? Do you agree with the implementation of a sovereign ceiling rule? (mention arguments in favor and against such a rule)

DEBT COSTS AND ACCESS TO CAPITAL MARKETS

7. "In spite of increased turbulence, the inverse movement between interest rates and credit spreads allowed for a relative preservation of the levels of funding." How can Cimpor estimate the coupon that it would have to pay if it was able to proceed with a 5-year Eurobond issue in June 2010?

    i. What is the most appropriate proxy for the risk-free rate to use when calculating the credit spread of an investment-grade corporate bond: government bond yields or Euro swap rates?

    ii. Is it appropriate to use the Credit Default Swap (CDS) of a comparable firm to predict the spread of its future debenture bonds? Among the seven peers mentioned throughout the case, which one is most appropriate to use as a comparable for CDS purposes?

    iii. Estimate the expected debt cost of a five-year Cimpor Eurobond emission in the European market at the end of March, June and September 2010. * Requires Bloomberg access.

8. Are 2010 interest cost levels the reason behind Cimpor's difficulties in issuing a new debenture bond?

DEBT SECURITIES AND FINANCIAL INTERMEDIATION

9. Identify and describe each one of the liquidity initiatives taken by the Group in October 2010 and describe the advantages of the U.S. Private Placement.

Suggested Answers

RATINGS AND RATING AGENCIES

- **Describe the fundamentals of credit ratings:**
    i. What are credit ratings?

There is not a unique definition of credit rating. However all definitions agree that a credit rating reflect a rating agency's *opinion*, and not an investment recommendation, regarding the relative *creditworthiness* of an issuer or a financial instrument, that is, if the issuer will satisfy its financial obligations on time or *default*[18]. Credit rating agencies perform a balanced analysis between quantitative and qualitative factors that results in a *transparent, relative* and *comparable* credit rating across all firms, industries, sovereigns, and instruments.

ii. What are the main credit rating agencies and their respective credit rating scales?

The three largest Credit Rating Agencies (CRA) are Fitch, Moody's and Standard and Poor's. CRAs have two different types of credit ratings: (1) Issuer Ratings – credit ratings that rate the overall creditworthiness of an obligor (also known as counterparty risk rating); (2) Instrument Ratings – rate the credit risk associated with a particular debt security or

[18] Default is the failure to make payments on a timely basis or to comply with other financial obligations, such as debt covenants.

other financial obligation. For the three agencies, issuers and issues ratings use identical symbols and scales, but the definitions are slightly different for each other.

It is important to note that ratings are ordinal scales, and that instrument ratings are always linked to the issuer's corporate rating. CRAs comprise both long-term ratings, for opinions on the creditworthiness of issuers and instruments with a medium or long-term time horizon, and short-term ratings, for short-term financial instruments maturing in less than one year, such as, Commercial Paper (see **Teaching Note Exhibit 1** for each CRA's long-term credit ratings scales and for the correlation matrixes between long- and short-term credit ratings).

iii. Who needs credit ratings, and why?

Credit ratings are useful for the two sides of a financial transaction. On one hand, credit ratings reduce the cost of market access for borrowers who want to show investors that they are creditworthy. On the other hand, credit ratings provide information about issuers and debt securities to investors searching for investment opportunities, preserving investors from incurring in large costs regarding prospective issuers' risk analysis.

Credit ratings are needed because they resolve problems arising from information asymmetries about the credit quality of an issuer or issue. There are two types of information asymmetries tackled by credit ratings: *adverse selection* – investors have less information than insiders, no matter how transparent a company is, and *moral hazard* – when the borrower did not enter the contract in good faith and plans to take unusual risks that can negatively affect investor's payoff. Credit rating agencies continuously monitor issuers and their risks, thereby reducing the risk that investors face.

iv. Identify recent historic events where credit rating agencies were under fire for their actions.

In times of high instability and market downturns, credit rating agencies tend to be heavily criticized for their actions, and for failing to predict crises that were just there, lying ahead of them. Whether too soft, or too harsh, there is always a way to push the blame over to CRAs.

Some well-known events were the collapses of Enron, WorldCom, and Parmalat. Only a few months (or a few days in the case of Enron and Parmalat) before these firms declared bankruptcy, they were considered investment-grade investment grade issuers by the main CRAs. Again in 2007, CRAs reviewed their evaluation of residential mortgage backed securities too late, when it was already evident that investors would incur in massive losses. Following these events, market participants accused ratings agencies of being too soft and of needing to improve their evaluation techniques in order to become once again credible to investors' eyes. However, just a few years later, rating agencies are now being accused of being too harsh with their ratings. After downgrading several European countries and even the U.S. credit, rating agencies are now under open fire from outraged governments that accuse them of stimulating the current financial crisis, instead of helping deter it.

- **Describe Cimpor's business and financial profiles in September 2010. Use Standard and Poor's scoring and rating determination process, available in case Exhibit 6.**

BUSINESS RISK PROFILE

All items and ratios calculated in this question can be found in **Teaching Note Exhibit 2**. Bloomberg values are used unless stated otherwise. Values from companies' financial reports could not be used given the different accounting practices which result in similarly titled metrics which are not comparable.

Country and macroeconomic risk

Sovereign and macroeconomic factors influence risk and should be weighted in the final assessment of a firm's business risk. One way to assess country risk is to look at sovereign debt ratings; however this fails to account for industry specific risks. Cimpor's presence in twelve countries with different macroeconomic trends makes it capable of insulating itself from most country specific risks. Nevertheless it is important to identify the different country and macroeconomic risks the Group faces in emerging and developed markets (it is wrong to assume that Cimpor is mainly affected by Portuguese sovereign risk).

Emerging markets, while advantageous for their optimistic growth prospects and elevated housing and infrastructure needs, expose Cimpor to particular country risks. Some of the most imposing risks are currency depreciation, inflation levels, interest rates and spreads, corruption, government policies, and political unrest which can disturb ordinary functions (e.g., Egypt and Tunisia in the recent past).

In its consolidated markets, Portugal and Spain, the Group encounters country risks mainly related to the sovereign debt crisis which is predicted to prolong the already lengthy industry downturn and affect operational results. The sovereign debt crisis in these countries pressures public infrastructure investments and decreases consumers' confidence and households' cement demand.

Industry risk

Cimpor is exposed to many industry specific risks. Students could mention the following risks, among others: high local competition; price inflexibility; early decision making process, given the large amount of time it takes to develop new facilities, forcing management teams to make decisions before there is an actual increase in demand; sensitivity to energy and raw materials' costs; sensitivity to changes in environmental regulations; high cyclicality as the sector follows closely economic booms, recessions and demographic trends.

Competitive position

Market position

Size is an important factor in the determination of a company's credit rating. The larger the company, the higher its credit rating tends to be. Players with higher market shares usually detain larger customer bases, larger product and geographic diversification, higher competitive position and bargaining power, and lower production costs derived from economies of scale. This tends to cause resilience, protecting cash flow generation especially during times of reduced demand, thereby reducing a company's business risk.

Cimpor is part of the midsize heavy materials group with a cement capacity of 33.5 million tons in 2009 year-end, remaining significantly behind Lafarge, Holcim, Cemex and HeidelbergCement. Despite its smaller size, Cimpor has a leading market position in Portugal, Mozambique and Cape Verde, and stands as the second-largest cement firm of the

Iberian Peninsula and the fourth largest of Brazil. This gives it some advantages in terms of market power in pricing and distribution in these markets, but Cimpor's smaller dimension prevents it from reaching Standard and Poor's highest rating levels.

Diversification of products and geographies

Geographic and product diversification reduces companies' exposure to the cyclicality in the building materials industry. Regarding geographic diversification, the Group is highly diversified. Its revenues are originated in twelve different countries, with emerging markets accounting for approximately *65%* of the firm's total turnover. In terms of product diversification the Group is vertically integrated producing cement, aggregates, and ready-mix concrete, but has a smaller product scope than its peers. In 2009 year-end Cimpor's cement revenues accounted for *76%* of total revenues that compares to an average of only 60% for its peers (average without Cimpor).

Operating efficiency

To analyze operating efficiency students can compute Cimpor's capacity utilization ratio:

$$\text{Capacity Utilization} = \text{Cement Utilization} / \text{Cement Capacity}$$

Cimpor has a capacity utilization rate of *82%* which reflects the fact that the Group is using its resources efficiently when compared to its peers. Moreover, in 2009 and 2010, the Group assigned a large part of its spending budget to improve operational efficiency and reduce production costs of existing facilities.

Management growth and operating strategy; risk appetite; track record

Cimpor has a history of growth through new plant development and profitable M&A. The financial crisis imposed changes in its growth strategy, forcing the Group to cool down its M&A activity and implement cost efficiency measures.

In terms of risk appetite the Group presents a business strategy consistent with a medium risk appetite: it only enters markets with the highest growth prospects, but in normal times it has an aggressive acquisition policy.

Regarding its track record, Cimpor's management team has a very positive track record as it proved capable of maintaining positive results and cutting capital expenditures and costs during the last turbulent industry downturn.

Ownership / governance

Cimpor underwent some major changes in its shareholder structure in the last year which resulted in the entrance of two Brazilian shareholders with over 30% of voting rights each. These shareholders are direct competitors of Cimpor in the Brazilian market which could give rise to possible conflicts of interest. Additionally, the ongoing regulatory investigations in Brazil represent a risk in one of the Group's most promising markets. However, after a careful evaluation of the pros and cons of the new shareholder structure, Standard and Poor's concluded that it had stabilized and could benefit the Group in the future given shareholders' long term interest in the Group.

Profitability /peer comparisons

Profitability and cash flow stability support a company's debt service and allow the firm to repay debt through cash flows earlier in time. This makes firms more attractive to internal and external investors, facilitating fund raising activities and reducing refinancing risk.

The metrics most typically used to evaluate profitability are EBITDA margins (EBITDA/Sales) or return on capital employed [EBIT/(Total assets – Current Liabilities)]. In 2009, as rival companies were struggling to maintain profitability, Cimpor presented an impressive EBITDA margin of *29%* against a peer average of *21%*. Additionally it presented a return on capital employed of *9.1%* compared to a peer average of *6.2%*.

These remarkable results were mainly due to Cimpor's focus on emerging markets and to the fact that it was not exposed to the free-falling 2009 U.S. market, unlike all other cement firms considered as peers.

FINANCIAL RISK PROFILE

Accounting characteristics

Accounting characteristics are not differentiating factors among comparable cement firms. All of the firms used as comparables prepare their annual reports and accounts and other accounting documents in compliance with applicable accounting standards in the countries where they operate.

Financial governance/policies and risk tolerance

There are three main financial policy elements that students could consider to assess Cimpor's risk tolerance: financial liquidity, financial leverage, and shareholder distributions (the Group's liquidity and financial leverage are discussed below).

Regarding its financial leverage and liquidity Cimpor has an aggressive Debt/Capital and an adequate, but in need of improving, financial liquidity (see below in the capital structure and liquidity analysis).

Concerning shareholder distributions, Cimpor announced a stable dividend policy, which was revised downward during the industry contraction. To analyze the dividend policy students should compare the Group's payout ratio with that of its peers. Calculating Payout ratio = Dividends/Net Income (around *52%*), it can be seen that Cimpor distributes a sizable dividend when compared to some of its peers.

Cash flow adequacy

Cash flow analysis is the most critical element when deciding a company's credit rating.

There are three main metrics that could be used to measure operating performance: Free Cash Flow to Debt ratio, Funds from Operations to Debt ratio, and coverage ratios.

a) Cimpor has a FCF of €684 M and therefore a FCF to debt of *33%*. This ratio is above the industry average of *9%*, proving that Cimpor has an adequate cash flow generation when compared to its peers. (Note: the Exhibit uses the Bloomberg's value for FCF which adopts the following definition: FCF = Cash Flow from operations – Capital Expenditures, therefore not matching the value for free cash flow presented in Cimpor's or other companies' annual reports).

b) According to Standard and Poor's, FFO/Debt is a more reliable ratio than FCF. Funds from operations (FFO) was first designed for real estate investment trusts (REITs) to correct for the understatement of real estate operating performance in GAAP, given GAAP's automatic depreciation system. FFO is equal to Net income + Gains (losses) from sales of property + Depreciation, amortization and provisions + deferred income taxes + other non-cash expenses. At 2009 year-end Cimpor presented the second-best FFO/Debt ratio among comparable firms (*25.3%*).

c) The higher a firm's interest coverage ratios[19] (EBIT/interest expense and EBITDA/interest expense), the lower the risk associated with principal and interest payments. In a period of low interest rates, as was the case by the end of 2009, coverage ratios tended to improve across all firms, becoming less informative than in normal times. Nevertheless, the Group presents a higher than average EBIT and EBITDA interest coverage ratio proving that its cash flow is sufficient to support the debt burden.

<u>Capital structure</u>

A company's leverage is usually negatively correlated with its credit rating. The reason is that highly leveraged companies face a higher risk of not being able to meet interest and principal payments. Companies should find the optimal amount of leverage that provides enough flexibility to seize the investment opportunities that arise, while allowing for an efficient cost of debt and a desirable credit rating.

The most common leverage ratios are Debt/EBITDA and Debt to Capital. While Cimpor presents a Debt/EBITDA ratio below the industry average (*3.5x* against an average of *4.1x*), it presents an aggressive Debt/Capital ratio of *52.2%*. Nevertheless, Cimpor's capital structure is supported by its cash flow generating capacity and by its low earnings volatility.

Note: Back in 1958, Modigliani and Miller demonstrated empirically that in a world without taxes, default risk or asymmetries of information a firm's value is not affected by capital structure. When introducing bankruptcy risk and taxes into the initial model they concluded that debt would bear extra benefits from tax savings and extra costs from bankruptcy risk, therefore affecting value. Rating agencies do not support Modigliani and Miller's initial view of the world, as do they not accept their proposition that the value of a firm is independent from its capital structure. Rating agencies assume that as the level of debt increases, default risk will go up and credit rating will go down, thereby increasing the cost of debt.

<u>Liquidity / short-term factors</u>

Liquidity is generally used to predict short-term ratings. A firm is liquid if it has the necessary instruments in place to satisfy all its obligations maturing in less than one year. Students can apply a quantitative approach and calculate a liquidity ratio such as the current ratio (current assets/current liabilities), but they should also perform a more qualitative analysis. A more qualitative analysis should focus on the importance of other factors such as undrawn backup lines, the firm's Commercial Paper Program, and other immediate internal sources of liquidity such as cash and cash equivalents.

Cimpor presents an adequate current ratio, higher than most of its peers (*1.45x*). In addition the Group has over €750 million of unused bank back-up facilities that can be used to meet

[19] There are many different types of coverage ratios. With the data available on case Exhibit 3, students can only compute these two interest coverage ratios.

occasional cash needs; a Commercial Paper program with a €435 million ceiling and an EMTN program with a €2.5 billion ceiling that diversify the Group's funding sources and allow it to access capital market swiftly when needed; also cash and cash equivalents of €401.4 million, in September 2010.

Notwithstanding its available short-term lines, Cimpor has a large amount of debt maturing over the next 12 months (around €1.2 billion). To maintain an appropriate liquidity buffer Cimpor needs to ensure the refinancing of its near-term debt maturities and avoid using its cash to fund growth projects and dividends to shareholders.

- **How would Standard and Poor's evaluate Cimpor's credit rating taking into account the business and financial profile matrix available in Exhibit 7?**

After a careful analysis of the Group's business and financial profiles students should combine all those characteristics and narrow down a possible range of ratings using Standard and Poor's matrix available in case **Exhibit 7**.

Cimpor has a satisfactory business profile. The main rating constraints faced by the company are its limited size compared to some of its peers and its still large exposure to the Portuguese and Spanish end-markets. These constraints rule out an excellent and strong business profile. Given Cimpor's profitability, efficiency, and geographically diverse portfolio, Standard and Poor's attributes the third strongest business profile measure, that is, a satisfactory business profile.

Cimpor has a significant financial risk profile. Applying S&P's financial risk indicative ratios, Cimpor's FFO/Debt and Debt/EBITDA are commensurate with a significant level of financial risk, while its Debt/Capital ratio points towards an aggressive financial profile. Taking into account the Group's superior cash flow generation and capacity to support its debt service, the most adequate financial profile would be the one with significant financial risk.

Using the matrix to combine these profiles we can see that the Group should have a rating within one notch of the "BB+" rating. Given the Group's resilience to the crisis and excelling business profile when compared to its peers, it should be granted the topmost position available within the three possible ratings, that is, a "BBB-" rating, one notch above the "BB+" rating.

- **What are the costs associated with a downgrade to speculative-grade?**

Credit quality provides companies increased financial flexibility to access credit markets and obtain attractive costs of funding. Financial flexibility is essential to support a company's strategic plan and to allow it to seize investment and growth opportunities as they arise. In times of generalized financial distress, like the ones following the 2008 credit market collapse, investors tend to become more averse to risk and less willing to accept risk in return for a higher yield. In such moments, falling into speculative-grade grounds would send a negative signal to investors, reducing Cimpor's investor base or even impeding its access to international credit markets (refinancing risk).

SOVEREING AND CORPORATE RISK RELATION

- **What is the impact on private firms' credit risk assessment of a downgrade in their home-country's government debt rating? Is it important for private firms to have their country's government debt viewed as a risk free asset?**

In standard corporate finance, government debt is usually seen as a risk free asset in advanced markets. In countries such as the US, the government is able to print money to repay its debt. In large European countries, governments are not allowed to print Euros; however they are able to raise taxes to repay obligations from issued bonds. In these economies corporate firm's credit risk depends mainly on their creditworthiness, and not on home-country risks which can be seen as negligible given the high sovereign credit ratings.

However, in emerging markets and in developed markets in times of financial distress, market observers fear that governments might default on their debt instruments and sovereign debt ceases to be seen as a risk free asset. In such cases, a borrower's credit risk depends not only on its creditworthiness, but also on the financial health of its home-country, thereby incorporating an element of sovereign risk in its corporate debt spread.

- **How do you assess Cimpor's exposure to the Portuguese sovereign risk? Do you agree with the implementation of a sovereign ceiling rule? (mention arguments in favor and against such a rule)**

Cimpor was able to detach itself from the Portuguese sovereign risk. There are three main points that students can mention. Firstly, only 19% of Cimpor's revenues are originated in Portugal. In addition, of the remaining revenues, 65% are originated in emerging economies that are experiencing entirely different macroeconomic conditions than those of western markets. Secondly, the Group's majority is no longer detained by Portuguese investors. Since February 2010, the two largest shareholders, detaining over 50% of the Group's equity, are Brazilian. Thirdly, the liquidity enhancing operations contracted in 2010 were all agreed with non-Portuguese banks, proving that Cimpor's refinancing is not dependent on Portuguese banks, which are highly vulnerable to sovereign developments. Therefore, the Group's solid credit profile and international diversification makes it, for the most part, independent of Portugal's macroeconomic developments.

A sovereign ceiling rule implies that the sovereign rating caps all other ratings in the country. The case of Cimpor proves that sovereign risk, while capable of strongly influencing a firm, should not constitute a binding constraint to the firm's credit rating. In a time of crisis, taxation policies and fiscal austerity programs will affect Cimpor directly, mainly through a reduction of government spending in public infrastructure and a reduction of households' cement demand. However, given the Group's strong international profile, a sovereign default would not imply a subsequent mandatory corporate default. (In the article "Sovereign influence does not constitute ratings ceiling" in June 3, 2002, Standard and Poor's officially considered the term sovereign ceiling to be "misleading and inappropriate").

Note: On September 1st 2011, Standard and Poor's qualified Cimpor's risk as having "low exposure" to the Portuguese sovereign risk. Cimpor's rating can be up five or six "notches" above Portugal's, depending on the country being speculative or investment-grade.

DEBT COSTS AND ACCESS TO CAPITAL MARKETS

- **"In spite of increased turbulence, the inverse movement between interest rates and credit spreads allowed for a relative preservation of the levels of funding." How can Cimpor estimate the coupon that it would have to pay if it was able to proceed with a 5-year Eurobond issue in June 2010?**

Before-Tax Cost of debt = Risk-free Rate + Default Spread

i. **What is the most appropriate proxy for the risk-free rate to use when calculating the credit spread of an investment-grade corporate bond: government bond yields or Euro swap rates?**

In traditional finance books, treasury bonds have been used as a proxy for the risk-free rate. However recent studies show that government bonds are no longer the best proxy for the risk-free interest rate, pointing towards interest swap rates[20] as a superior estimate of the risk-free rate when pricing corporate debt. After the introduction of the Euro, the European interest rate swap market presented a strong growth mainly driven by hedging and arbitrage activity, and by the fragmentation of European government securities. Thus, the market became highly liquid, in fact, it is today one of the most liquid financial markets in the world.

However, choosing the most appropriate proxy of the risk-free rate is not a straightforward process: it depends on the credit quality and on the maturity of the corporate bond. (1) For higher credit quality borrowers it is more common to quote prices in terms of a spread over the swap curve, than for lower, speculative-grade issuers; (2) For short-term rates, EONIA[21] swap rates are considered the preeminent benchmark, given their greater liquidity. For some long-term maturities, the swap market is not as liquid as some government securities, such as the German government futures contracts.

Recent empirical results, using five-year corporate bonds for investment-grade firms, support the swap curve as the risk-free reference curve. Houweling and Vorst (2002) and Blanco, Brennan and Marsh (2003) demonstrated that CDS prices are very similar to corporate bond spreads when the risk-free rate is proxied by the swap rate instead of an alternative government bond yield. Their results defend that for investment-grade firms, government bonds are no longer considered by market players to be the reference risk-free rate, and that swap rates should be used instead.

NOTE: There is still not a market consensus for the risk-free component of credit spreads, so students might defend a position in favor of government bonds. If a student chooses to use a government bond he should choose a 5-year maturity to match the maturity of the corporate bond, and select the German bund given its lower rate and increased liquidity. Some of the arguments that may support this choice are: (1) the general perception that in advanced economies, government bonds are risk-free assets; (2) higher liquidity and wide range of maturities, which facilitates trading and the construction of yield curves. When defending the use of a government bond students should also provide some arguments against the use of swap rates: (1) swap rates contain credit risk, contrary to what is assumed

[20] Interest rate swaps are contracts between two parties to exchange fixed-rate payments for floating-rate payments based on the LIBOR or EURIBOR, over a pre-determined period of time. In IRS only the net cash flows are paid (the notional principle on which the interest payments are calculated is not exchanged).
21 EONIA: euro overnight index average rate

for government bonds. This credit risk arises from the fact that swap are bilateral agreements and therefore there is some counterparty risk; and from the fact that the floating leg is linked to the LIBOR or EURIBOR rate, which are not risk-free rates, forcing the swap contract to be higher than the risk-free rate.

ii. Is it appropriate to use the Credit Default Swap (CDS) of a comparable firm to predict the spread of its future debenture bonds? Among the seven peers mentioned throughout the case, which one is most appropriate to use as a comparable for CDS purposes?

To estimate the cost of debt of rated firms it is common to use a typical default spread on bonds with that rating or to use the credit default swap[22] of a comparable firm with the same rating. Therefore, when using a comparable CDS as a proxy for Cimpor's possible spread, students should choose a peer with the same credit rating as Cimpor ("BBB-"). Choosing a firm with the same credit rating as Cimpor is of upmost importance given the inverse relation between ratings and spreads. A company with a lower credit quality will have a higher risk of defaulting and therefore a higher CDS rate, and should not be used as a comparable for CDS purposes. In September 2010, Lafarge, Italcementi and Buzzi Unicem were the only firms with the same credit rating as Cimpor, "BBB-" (see case **Exhibit 5**). Therefore students should suggest these three firms as the ones with comparable CDS spreads.

iii. Estimate the expected debt cost of a five-year Cimpor Eurobond emission in the European market at the end of March, June and September 2010. * Requires Bloomberg access.

The expected coupon is equal to the 5-year Euro swap plus a comparable firm's 5-year CDS. The 5-year Euro swap rate is given in case **Exhibit 10**, however students have to access Bloomberg to get the data on the CDS's for March, June and September 2010 for one of the three comparable firms chosen in the previous question. After accessing Bloomberg students should conclude that Lafarge should be used as a comparable as the Italcementi and Buzzi Unicem do not have CDS available for these dates. As a result, students should use Lafarge's 5-year CDS for March, June and September 2010. (To obtain these values type in LAFARGE CDS EUR SR 5Y CORP, select the option Px Table and search the appropriate dates). The Swap and CDS rates, and the corresponding coupon can be seen in **Teaching Note Exhibit 3**.

- **Are 2010 interest cost levels the reason behind Cimpor's difficulties in issuing a new debenture bond?**

The increase in spreads was compensated by low market interest rates, and therefore the funding costs practiced in the market were not prohibitive (as it can be seen by the coupon rates obtained in the previous question and available in **Teaching Note Exhibit 3**). However, in the aftermath of the financial crisis and in the midst of a growing European sovereign debt crisis, investors became more averse to risk and the European debt market virtually closed. In addition, in April 2010, Portugal's poor growth perspectives and high fiscal deficits and public debt, influenced Standard and Poor's to downgrade the country credit rating by two notches, from "A+"to "A-", with a negative outlook. This downgrade allied with a shift in investors' risk appetite given the changes in global financial market

[22] A Credit Default Swap is a contract that protects the protection buyer against the risk of a credit event by a company or a sovereign.

conditions since 2007, further hampered Portuguese private firms' access to foreign capital. In the case of Cimpor, the Group's name, Cimpor – Cimentos de Portugal, allowed for an immediate association to the country and led to instant labeling. The firm's access to capital markets and the terms of their debt emissions no longer depended solely on its creditworthiness, but also on investors' views about Portugal. As a result, the Group was forced to adapt its refinancing plan, abandoning the initial desire to issue Eurobonds.

DEBT SECURITIES AND FINANCIAL INTERMEDIATION

- **Identify and describe each one of the liquidity initiatives taken by the Group in October 2010 and describe the advantages of the U.S. Private Placement.**

Extension of bilateral loans and transformation into commercial paper: Extending loans is a common system of refinancing bank debt in times when credit availability is low. Cimpor and Santander agreed to extend the Group's loans, thereby protecting the firm from negotiating an entirely new loan in a market with very low credit availability. In addition the Group converted the loan into Commercial Paper to the benefit of Santander, as this is a more flexible instrument, tradable in the money market[23].

Committed Facilities or Revolving Credit[24]: these are credit facilities where the lending institution defines the terms and conditions, allowing borrowers to gain access to an amount of money up to the available credit limit. Cimpor obtained a committed backup facility with RBS and Citibank in exchange for appointing them as financial intermediaries in the future U.S. Private Placement.

Forward Start Facility for bonds: FSF for bonds is a facility under which lenders commit in advance to provide financing to repay an existing facility at its maturity. This instrument is very popular in times of high uncertainty about availability of funds. In this case a consortium of four banks agreed to repay € 320 million of the maturing €600 million Eurobond. This action involved appointing the syndicate of banks as bookrunners for a future debt issuance.

Club deals: Club deals are small syndicated loans, that is, loans offered by a small group of lenders. In the case BBVA and ING agreed to renegotiate an existing club deal with Cimpor, providing €110 million in funds to the company.

Private Placement[25]: A private placement consists in the sale of debt securities to a small number of institutional investors. Typical investors are large banks, mutual funds, insurance companies and pension funds. In highly instable times, when public markets are virtually closed, access to this source of capital proves to be greatly important. In the case, Cimpor is relying on the U.S. private market to obtain medium to long-term funding and increase its average debt maturity profile. As a result, the Group is negotiating with insurance companies, which are typically long term lenders.

[23] In December 2008 several Commercial Paper emissions were admitted to trading in the Portuguese stock market (Euronext Lisbon). This enabled banks to use Commercial Paper emissions with an adequate rating as collateral for credit operations with the ECB.
[24] http://www.investopedia.com/terms/r/revolvingcredit.asp#axzz1g9T7zD8i (accessed December 7, 2011)
[25] http://www.investopedia.com/terms/p/privateplacement.asp#axzz1g9T7zD8i (accessed December 7, 2011)

Suggested Classroom Teaching Plan

The following case analysis and class discussion is organized by discussion topic

1. Ratings and Rating agencies (40 minutes)

(5 minutes) Briefly describe the Refinancing of Cimpor, the heavy construction materials industry, and the two-year timeline which led Cimpor up to November 2010.

(15 minutes) Discuss ratings and rating agencies and their role in the economy.

(20 minutes) Review the methodologies underlying corporate credit analysis and address questions about their accuracy, applying these topics to the Refinancing of Cimpor case.

2. Sovereign and Corporate Risk Relation (10 minutes)

In light of the European sovereign debt crisis, discuss the relation between sovereign and corporate debt ratings.

3. Debt Costs and Access to Capital Markets (10 minutes)

Discuss how debt costs and access to capital markets may be affected in a world of information asymmetries, where Modigliani and Miller's position does not hold.

4. Debt Securities and Financial Intermediation (20 minutes)

Discuss what debt instruments are commonly used during debt crisis, considering the role of banks, and public and private credit markets.

Exhibit TN–1 Long- and Short-term rating categories for the three largest rating agencies

(A1) Moodys's Long-term Global Scale (for issuers and financial obligations)

	Score	Capacity to meet financial commitments
Investment Grade	Aaa	Obligations/Issuers rated Aaa are judged to be of the highest quality, with minimal credit risk
	Aa	Obligations/Issuers rated Aa are judged to be of high quality and are subject to very low credit risk
	A	Obligations/Issuers rated A are considered upper-medium grade and are subject to low credit risk
	Baa	Obligations/Issuers rated Baa are subject to moderate credit risk. They are considered medium grade and as such may possess certain speculative characterisctics
Speculative grade	Ba	Obligations/Issuers rated Ba are judged to have speculative elements and are subject to substantial credit risk
	B	Obligations/Issuers rated B are considered speculative and are subject to high credit risk
	Caa	Obligations/Issuers rated Caa are judged to be of poor standing and are subject to very high credit risk
	Ca	Obligations/Issuers rated Ca are highly speculative and are likely in, or very near, default, with some prospects of recovery of principal and interest
	C	Obligations/Issuers rated C are the lowest rated class and are typically in default, with little prospect for recovery of principal or interest.
*	Moody's appends numerical modifiers 1, 2, and 3 to each generic rating classification from Aa through Caa. The modifier 1 indicates that the obligation ranks in the higher end of its generic rating category; the modifier 2 indicates a mid-range ranking; and the modifier 3 indicated a ranking in the lower end of that generic rating category.	

(A2) Moody's Long-term and Short-term risk correlation matrix

	Aaa	Aa1	Aa2	Aa3	A1	A2	A3	Baa1	Baa2	Baa3	Ba1	Ba2	Ba3	B1	B2	B3	Caa1	Caa2	Caa3	Ca	C
P-1	■	■	■	■	■	■	■														
P-2						■	■	■	■												
P-3									■	■											
NP											■	■	■	■	■	■	■	■	■	■	■

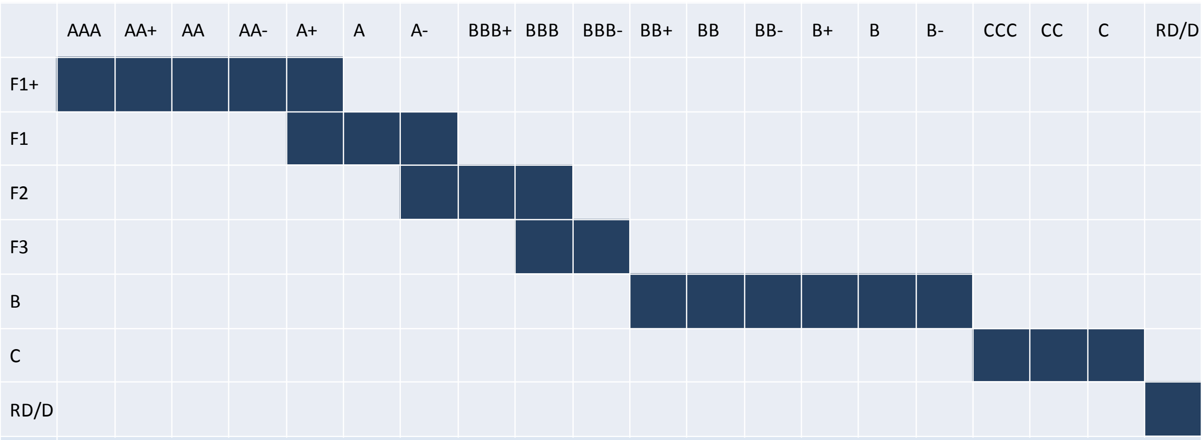
P-1	Issuers (or supporting institutions) rated Prime -1 have superior ability to repay short-term debt obligations.
P-2	Issuers (or supporting institutions) rated Prime-2 have a strong ability to repay short-term debt obligations.
P-3	Issuers (or supporting institutions) rated Prime-3 have an acceptable ability to repay short-term obligations.
NP	Issuers (or supporting institutions) rated Not Prime do not fall within any of the Prime rating categories.

Source: Moody's 2011

(B1) Fitch Corporate Ratings Criteria

	Score	Capacity to meet financial commitments
Investment Grade	AAA	Highest credit quality
	AA	Very high credit quality
	A	High credit quality
	BBB	Good credit quality
Speculative grade	BB	Speculative
	B	Highly speculative
	CCC	Substancial credit risk
	CC	Very high levels of credit risk
	C	Exceptionally high levels of credit risk
	RD	Restricted default (experienced an uncured payment default on a financial obligation)
	D	Default (has entered bankruptcy filings or has ceased business)
*	Ratings from “AA” to “B” may be modified by the addition of a plus (+) or a minus (-) sign to show relative standing within the major rating categories.	

(B2) Fitch Long-term and Short-term risk correlation matrix



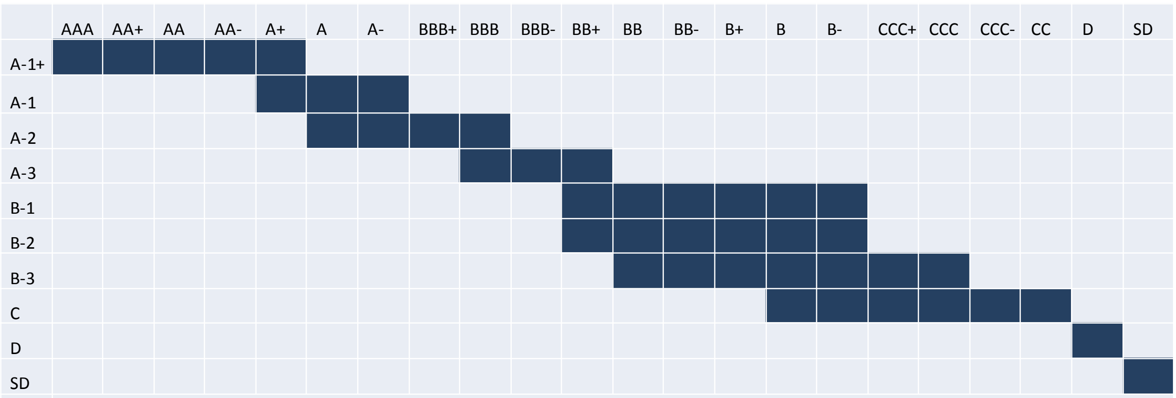
F1	Highest short-term credit quality: Indicates the strongest intrinsic capacity for timely payment of financial commitments; may have an added “+” to denote any exceptionally strong credit feature
F2	Good short-term credit quality: Good intrinsic capacity for timely payment of financial commitments
F3	Fair short-term credit quality: The intrinsic capacity for timely payment of financial commitments is adequate
B	Speculative short-term credit quality: Minimal capacity for timely payment of financial commitments, plus heightened vulnerabilty to near term adverse changes in financial and economic conditions
C	High short-term default risk: Default is a real possibility
RD	Restricted Default: Indicates an entity that has defaulted on one or more of its financial commitments, although it continues to meet other financial obligations. Applicable to entity ratings only.
D	Default: Indicated a broad-based default event for an entity, or default of a short-term obligation

Source: Fitch Ratings 2011

(C1) Standard and Poor's Corporate Ratings Criteria

	Score	Capacity to meet financial commitments
Investment Grade	AAA	Extremely strong capacity to meet financial commitments.
	AA	Very strong capacity to meet financial commitments
	A	Strong capacity to meet financial commitments, but somewhat susceptible to adverse economic conditions and changes in circumstances
	BBB	Adequate capacity to meet financial commitments, but more subject to adverse economic conditions
Speculative grade	BB	Less vulnerable in the near-term but faces major ongoing uncertainties to adverse business, financial and economic conditions
	B	More vulnerable to adverse business, financial and economic conditions but currently has the capacity to meet financial commitments
	CCC	Currently vulnerable (within one year) and dependent on favorable business, financial and economic conditions to meet financial commitments
	CC	Currently highly vulnerable
	C	A bankruptcy petition has been filed or similar action taken, but payments of financial commitments are continued
	D	Payments default on financial commitments
	SD	Selective default
*	D and SD ratings are not prospective, unlike other rating scores. They are only used when a default actually has ocurred.	
**	Ratings from "AA" to "CCC" may be modified by the addition of a plus (+) or a minus (-) sign to show relative standing within the major rating categories.	

(C2) Standard and Poor's Long-term and Short-term risk correlation matrix



A-1	The obligor's capacity to meet its financial commitment on the obligation is strong. Within this category, certain obligations are designed with a plus sign (+). This indicates that the obligor's capacity to meet its financial commitment on these obligations is extremely strong.
A-2	A short-term obligation that is somewhat more susceptible to the adverse effects of changes in circumstances and economic conditions than obligations in higher rating categories. However the obligor's capacity to meet its financial commitment on the obligation is satisfactory.
A-3	A short-term obligation that exhibits adequate protection parameters. However, adverse economic conditions or changing circumstances are more likely to lead to a weakened capacity of the obligor to meet its financial commitment on the obligation.
B	A short-term obligation that has significant speculative characteristics. The obligorcurrently has the capacity to meet its financial commitment on the obligation; however, it faces major ongoing uncertainties that could lead to inadequate capacity to meet its financial commitment on the obligation. This category is divided into "B-1", "B-2" and "B-3".
C	A short-term obligation that is vulnerable to nonpayment and depends on favorable business, financial, and economic conditions for the obligor to meet its financial commitment on the obligation.
D	The same as the long-term rating definition.
SD	The same as the long-term rating definition.

Source: Standard and Poor's 2008

Exhibit TN–2 Business and Financial Ratios

Ratio Analyisis (in percentage unless stated otherwise)	Lafarge	Holcim	Cemex	Heidelberg Cement	Italcementi	Buzzi Unicem	Titan	Cimpor
Business Profile Metrics								
Emerging Markets/Revenues	51%	49%	52%	36%	39%	51%	36%	65%
Cement Revenues/Revenues	64%	60%	49%	48%	73%	60%	70%	76%
Average Cement Revenues/Revenues	***60%***							
Capacity Utilization Ratio	70%	65%	67%	72%	74%	60%	N.A.	82%
EBITDA Margin	22%	22%	18%	17%	21%	20%	24%	***29%***
Average EBITDA Margin	21%							
Return on Capital Employed	7.4%	6.8%	3.0%	5.0%	6.4%	6.3%	8.7%	***9.1%***
Average Return on Capital Employed	***6.2%***							
Financial Profile Metrics								
Payout ratio	53%	N.A.	N.A.	35%	175%	54%	31%	***52%***
FCF/Debt	10%	7%	13%	4%	13%	-7%	21%	***33%***
Average FCF/Debt	***9%***							
FFO/Debt	14.9%	23.0%	8.2%	10.0%	22.8%	23.4%	26.5%	***25.3%***
EBITDA interest coverage (x)	4.0	5.9	1.9	2.6	8.5	4.5	5.2	8.9
Average EBITDA/Interest Expense (x)	4.7							
EBIT interest coverage (x)	2.8	3.6	0.8	1.5	4.1	2.7	3.4	5.6
Average EBIT/Interest Expense (x)	2.7							
Debt/EBITDA (x)	4.6	4.0	5.9	4.6	3.0	3.3	3.0	***3.5***
Average Debt/EBITDA (x)	***4.1***							
Debt/Capital	49%	45%	45%	44%	40%	40%	41%	***52%***
Current ratio (x)	1.10	1.16	1.15	1.26	1.52	1.81	0.97	***1.45***

Exhibit TN–3 Estimated Debt Costs

	31 March 2010	30 June 2010	30 September 2010
Euro Swap 5y	2.39%	2.08%	1.97%
Lafarge CDS 5y	1.97%	3.62%	3.06%
Coupon	4.36%	5.71%	5.03%

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The ideas contained in the Teaching note Suggested Answers are not original from the author. The information sources for each question are quoted below.

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