

# CEMENTO ANDINO S.A: ANÁLISIS FINANCIERO DE UNA EMPRESA LATINOAMERICANA

## CEMENTO ANDINO S.A: FINANCIAL ANALYSIS OF A LATIN AMERICAN COMPANY



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### ABSTRACT

In emerging markets, it is essential to evaluate for a combination of debt and capital in determining the optimal value of a company. Accordingly, Peruvian companies seek to adjust their capital structure to achieve sustainability and be attractive to investors. All this is done, because an investor usually studies the capital structure of a company when deciding whether to invest money in shares. Thus, companies expect to strengthen balance sheets and reduce risks. The challenge for the senior management of the firm is to evaluate the company's development prospects in the domestic market and the issues associated with a strategic alliance with a foreign concern. Therefore, in the case we consider the Modigliani-Miller markets value of a firm is independent theorem from 1959, taking into account the taxes of Peru. According to Modigliani and Miller, in perfect capital markets the value of a firm is independent of its capital structure. For those reasons, the objective of this case study is to analyze and evaluate the optimal value of the company with the combination of debt and capital.

**Keywords:** Debt, Capital, WACC, GDP and Optimal Value.

### RESUMEN

En los mercados emergentes, es esencial evaluar una combinación de deuda y capital para determinar el valor óptimo de una empresa. En consecuencia, las empresas peruanas buscan ajustar su estructura de capital para lograr la sostenibilidad y ser atractivas para los inversionistas. Todo esto se hace, porque un inversor generalmente estudia la estructura de capital de una empresa cuando decide invertir dinero en acciones. Por lo tanto, las empresas esperan fortalecer los balances y reducir los riesgos. El desafío para la alta dirección de la empresa es evaluar las perspectivas de desarrollo de la empresa en el mercado interno y los problemas asociados con una alianza estratégica con una empresa extranjera. Por lo tanto, en el caso que consideremos los mercados de Modigliani-Miller, el valor de una empresa es un teorema independiente desde 1959, teniendo en cuenta los impuestos del Perú. Según Modigliani y Miller, en los mercados de capital perfectos, el valor de una empresa es independiente de su estructura de capital. Por esas razones, el objetivo de este estudio de caso es analizar y evaluar el valor óptimo de la empresa con la combinación de deuda y capital.

**Palabras clave:** Deuda, Capital, WACC, PIB y Valor óptimo.

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## 1. INTRODUCTION

This case study seeks to analyze and evaluate the financial situation of the Peruvian company Cemento Andino S.A. (code ISIN: ANDINBC1), situated in an emerging market between the period 2008 and 2012. Such an analysis will help to develop the valuation of the company in a precise way and understand the implied risks of expanding the business or maintaining their actual growth (considering the prospective international investors). Included in the study is an analysis of the national and international cement industry. Included in the study is an analysis of the national and international cement industry to help students understand the positive evolution of the construction industry and its growth in recent years. In addition, it will consider the effects of the entrance of international competitors such as CEMEX, Cementos Bio Bio and Votorantim Cimentos.

In valuating Cemento Andino it is important to consider the possible merger in the following years with Cementos Lima that could change the real value of the business. In this case the use of accounting methods based on multiples because it could indicate the real value of the company. In addition, the PER method is considered, as it allows analysis of the level of obtained earnings in reference to the stock price. On the other hand, specific methods will be used to relate the capacity of production and consumption to value the company.

Even in the wake of the 2008 financial crisis, Peru has been in a better situation because of significant growth rates on the GDP allowing the country to have financial solvency. However, according to the report of SCOTIABANK in 2011 “there are signals that the mayor risks of the financial European systems are generating a sort of credit crunch in a slow way that it is starting to affect the credit markets in the world, with consequences for money and financial conditions”. According to the risk classificatory Standard & Poor's (S&P) and Fitch the Peruvian sovereign debt has a classification BBB (in 2011), which indicates there is lower solvency risk and indicates the positive credit image of the country. For 2012 and 2013 the growth of Peru was expected to depend on public and private investment. According to the Ministry of Economics and Finances (MEF), public investment will increase about 30% in 2012. Considering the cement industry, the companies are doing projects to increase their productive capacity. It is relevant to highlight that the growth of the construction industry is positive and implies more demand of cement. Cementos Lima is going to increase its production to 4.8 million TM (metric tons).

## 2. ABOUT THE COMPANY

Cemento Andino S.A is a Peruvian company that has more than 60 years in the cement industry. It was founded on April 21 1952 and is part of the Corporative Rizo-Patron that is also owner of Cementos Lima S.A. The audited financial statements, Balance Sheet and Profit and Loss statements can be seen in [Appendix 1.1](#) and [1.2](#). The webpage of the company is: <http://www.Cemento Andino.com.pe/>.

The company has common stocks in the BVL with the code ANDINBC1. The social equity or market capitalization is of S/. 313'320,000 and is represented by 1'200,000 common stocks with a nominal value of S/. 261.10. Until the 25<sup>th</sup> of May 2012 the company had 278,386 stocks in circulation. In Appendix 2.1 it is indicated the evolution of the close price of the stock from May 2011 to April 2012. The used prices are the last market rate of the month and are comparing with the monthly average that considers the different variations of the analyzed periods. The price tendency is bear at the beginning and then it increases from January 2012 until April. The market capitalization is S/. 247'763,540. The value in books is shown on Chart N° 01; its value has increased in 64% from 2007 to the first trimester of 2012.

The price value in books is lower than the market price and there is an increasing tendency of the UPA showing improvement of the company value (for more detail see Appendix 2.2). The dividend distribution rate is 25% and is constant from 2008 to 2011. In 2011 and 2010 the company paid 24.000 billion Peruvian nuevo soles and in 2009 it was paid 18.000 billion soles, less than in 2008 (34.200 billion soles). Appendix 2.3 shows the net income for each analyzed period. In 2009, the first two quarters the company obtained less net incomes than in other periods. To calculate the beta of the company it is considered Damodaran betas for the construction industry. Beta of building materials is 1.50 (see Appendix 2.4). We used the debt / equity ratio of 0.75 and a tax rate of 30% and gives a result of  $= 0.82 * (1 + 0.75 * (1-30\%)) = 1.24$  which is the beta of the company. The debt capital ratio considered was of period 2011. Table 1 indicates the debt-equity from 2007 to 2012 first quarter and indicates the growing trend of debt of Cemento Andino S.A.

**Table 1. Financial Indexes from 2007 to 2012**

Index	2007	2008	2009	2010	2011	2012-1T	Variation
<b>Debt / Equity</b>	0.2324	0.2501	0.3575	0.7266	0.7122	0.7581	
<b>Books value %</b>	137.35	144.49	161.84	184.85	204.21	225.60	64.25%

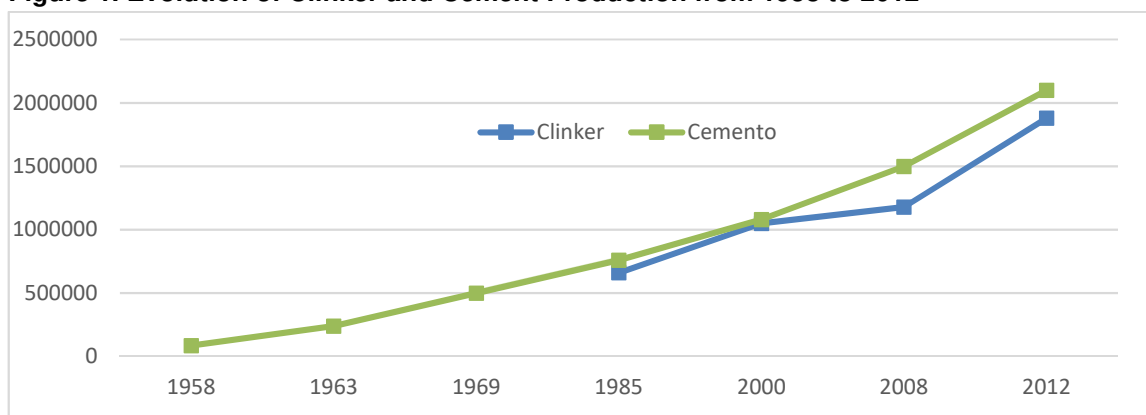
Source: Own elaboration

### 3. DESCRIPTION OF THE BUSINESS

Rizo-Patron Corporation is owner of 87% of the company with its subsidiary Inversiones Andino. This company is in charge of the administration of the company as well as to promote its investment in value titles. The rubric of the company is a society that produces and commercializes clinker, cement and derivate at local and international markets, also to do mining activities, industrials and energy generation. Cemento Andino S.A is in the district of La Union Leticia in the province of Tarma in Junín, (region of Peru). Cemento Andino S.A was created by the social denomination Peru Central S.A. After feasibility studies and engineering studies it was signed a financial contract with Lehman Brothers and Lazard Frères and with suppliers of German machinery. By 1956 its social denomination (company name) changed to Cemento Andino S.A and it is started to construct the factory and its Hydroelectric Central Carpatata. The initial installed capacity was 85,000 TM per year. During the military regime (seventies) the company was confiscated and in

2007 the company was privatized. In 2007 the Peruvian government sold 23.20% of its participation with a stock price of 725 nuevos soles. After the launch of Oven 1, the production capacity of clinker was 1'180,000 TM of clinker and 1'500,000 TM of cement. In 2009 it was launched the amplification project of Oven 4 that will increase the clinker capacity of production to 1'880,000 TM and cement industry to 2'100,000 TM. This project will finish in the first semester of the present year (2012). Next Figure 1 summarizes the evolution of the installed capacity of Cemento Andino S.A. through years.

**Figure 1. Evolution of Clinker and Cement Production from 1958 to 2012**

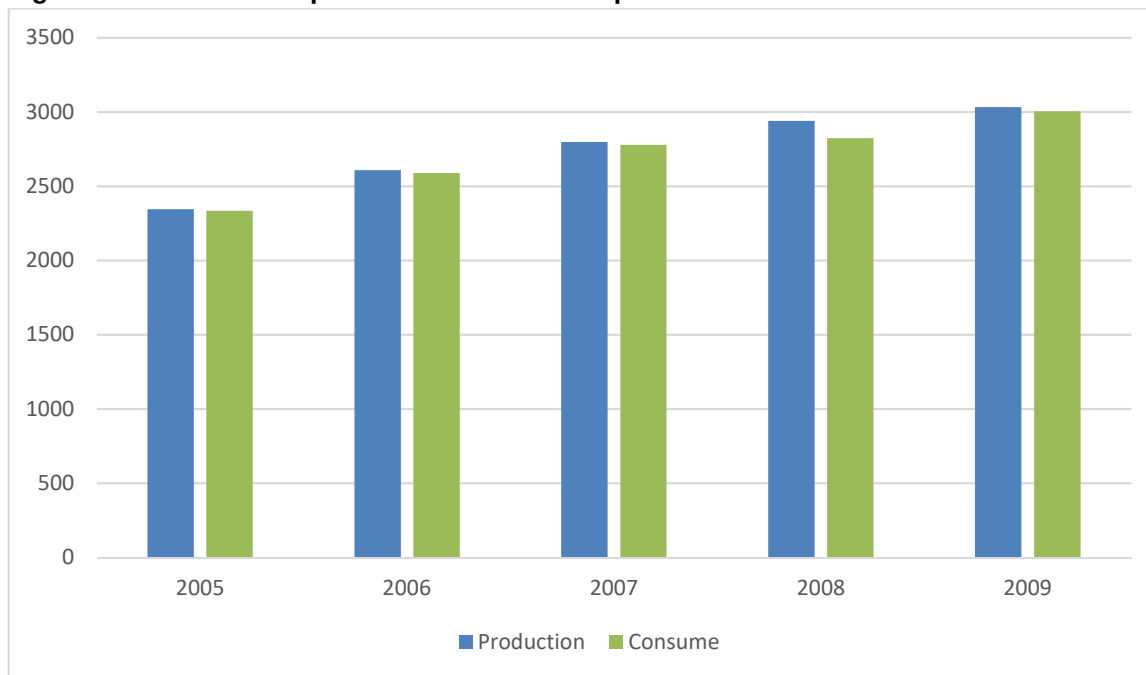


Source: BCP. (2011). *Cemento Andino Renta Variable Local. Reporte de Seguimiento: Servicio de Análisis: Gerencia Central de Gestión de Activos. P. 3.*

#### 4. INDUSTRY DESCRIPTION

According to the Global Cement Report – GCR (Figure 2), which estimates a significant increase of the global cement consumption, in 2008, the world consumption of cement had a variation of 2.4%, in 2009 about 5.9% and for 2010 cement consumption growth was 9.9%. GCR forecasts indicate that consumption in 2012 reached a record of 3,859 TM. China is the biggest consumer of cement worldwide with 1.851 TM, followed by India and the U.S. In 2010, Turkey was the leading exportation country of cement and clinker (sales of 19 TM outpacing China, 17 TM). In the case of import of cement, Bangladesh is first in the ranking with a demand of 12 TM, then Nigeria and then the USA (with 7 TM and 6 TM respectively).

**Figure 2. World cement production and consumption from 2005 to 2009**



Source: Inter-American Cement Federation

Table 2 shows the per capita consumption in some countries of the world from 2006 to 2009. In America, in 2009 Mexico was the country with the highest per capita consumption of cement and in Europe it was Spain. Significantly, in 2006 Spain was the country with the highest consumption (1278 per capita) that in 2009 was surpassed by China (1218 per capita).

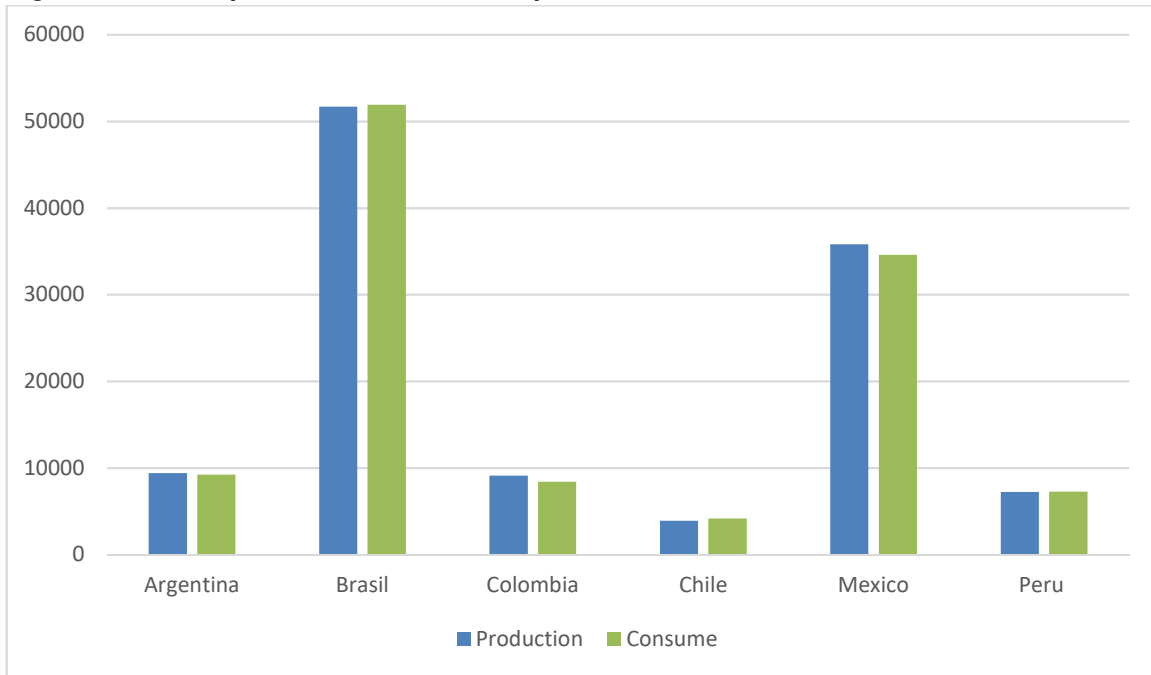
**Table 2. Consumption per capita from 2006 to 2011**

Continent	Country	2006	2007	2008	2009	2010	2011
America	USA	427	381	318	230	259	232
	Mexico	342	347	329	321	314	308
	Brazil	221	240	272	271	288	308
	Chile	262	282	288	243	279	285
	Peru	182	209	241	249	281	314
Europe	Germany	351	333	337	310	301	290
	Spain	1,278	1,266	936	630	536	436
	France	397	399	386	325	313	296

Source: Inter-American Cement Federation

Figure 3 shows the production and consumption of cement in Latin America for period 2009. As seen in the graph, the largest producer and consumer of cement in the region is Brazil, which is 5 times more of what is produced and consumed in Argentina. It also indicates that consumption in Brazil, Chile and Peru exceeds local cement production.

**Figure 3. Cement production and consumption in Latin America**



Source: Inter-American Cement Federation

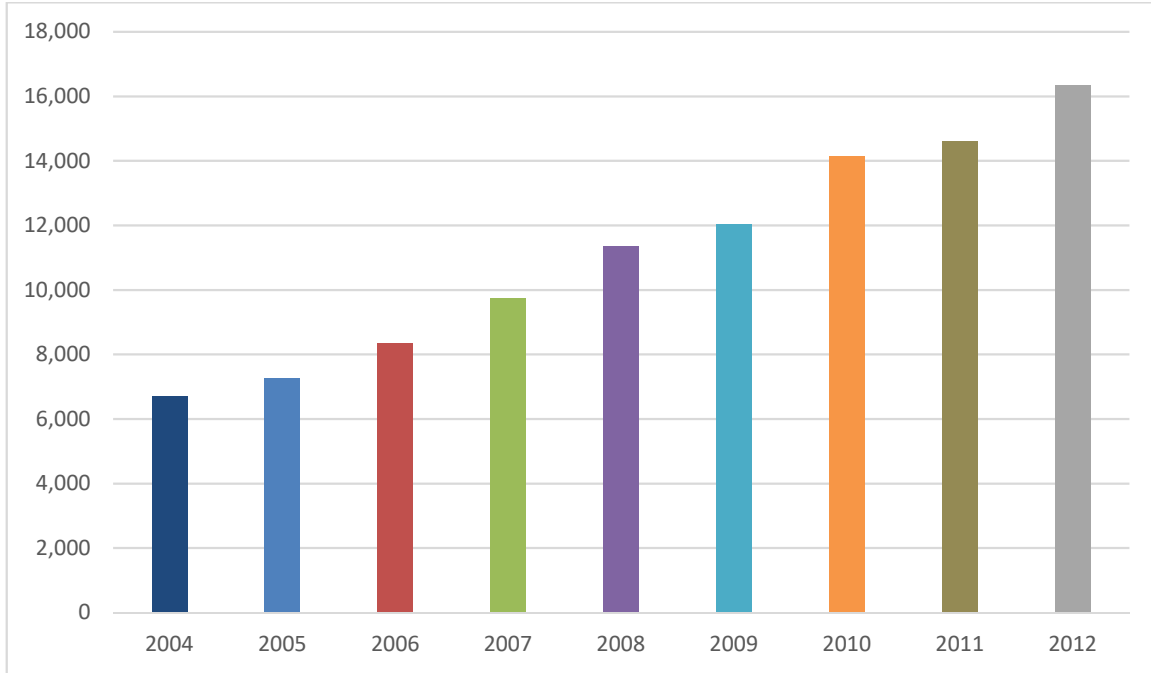
The French company Lafarge is the main cement company worldwide with a production of 142.2 TM and a total turnover of 15.884 million Euros. Then it is followed by Holcim (in sales 15.691 million Euros), Heidelberg Cement, CEMEX, Italcementi and Buzzi Unicem. However, Holcim has the highest cement capacity which is 212 TM were as Lafarge has a capacity of 201 TM.

**5. TENDENCY OF THE SECTOR**

In recent years, the construction sector boom has fueled the growth of consumption and demand for cement in Peru. Significantly, the entry for 2013 of CEMEX and Cempor (explained in the competency profile) to amend the market share of existing firms. Moreover, in 2011 the Peruvian government reduced tariff rates of cement and clinker from 12% to 0% as a policy to reduce the price of both commodities.

By 2010, the GDP of the construction sector grew by 17.40% which was favored by increases in private and public construction. In Figure 4 is shown the amount in million soles of the construction sector to the total GDP. By 2011 the demand for cement increased by 3.90% over the previous year (from 8.406 TM to 8.826 TM).

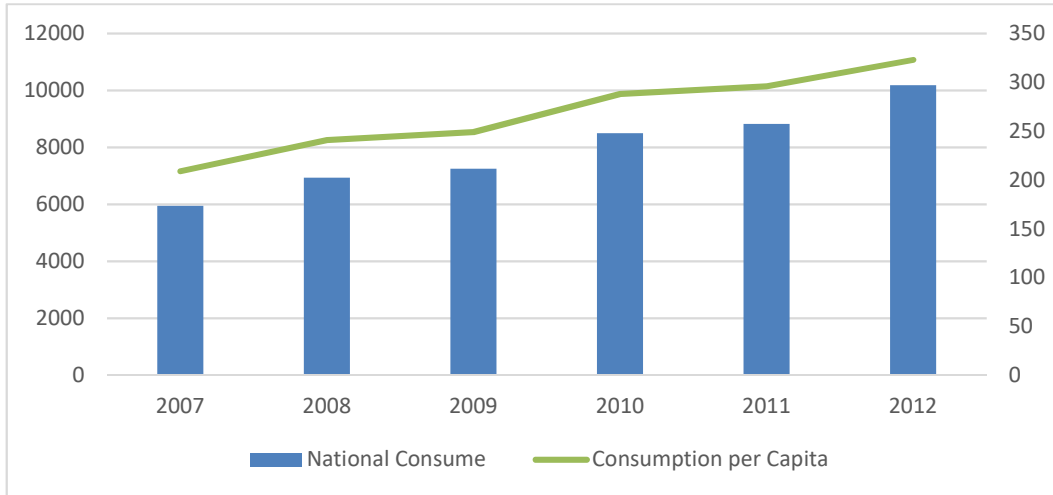
**Figure 4. Construction industry to GDP from 2006 to 2012**



Source: BCRP

On the other hand, imports of gray cement increased from 313 to 432 thousand metric tons per year (2010-2011). As recorded, the per capita consumption of cement in Peru was of 296 kilos / inhabitant. Figure 5 shows the growth in cement consumption in TM and the per capita consumption.

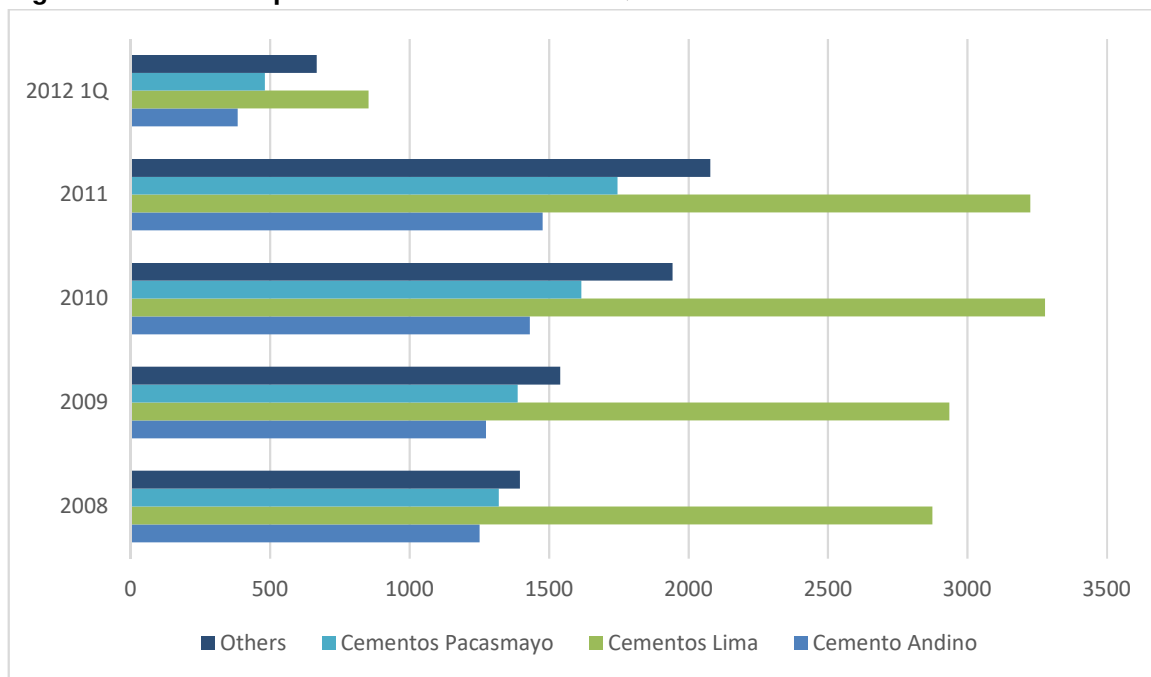
**Figure 5. Cement Consumption from 1975 to 2012**



Source: Cemento Andino S.A. (2011) Annual Memory

Appendix 2.5 indicates the volume production of cement and clinker in Peru from 2008 to 2012-1T (First quarter of 2012). In addition, it is indicated the percentage variation of periods: 2009-2008; 2010-2009 and 2011-2010. Table 2 (Appendix 2.5.1) indicates the cement dispatches of three companies of the industry: Cemento Andino, Cementos Lima, Cementos Pacasmayo and all the local dispatches. The total dispatches of cement were calculated from the average indicated in the Analysis and Discussion of the Management for the mentioned companies to the fourth trimester of 2009 and 2011. Appendix 2.5.2 indicates the same information as percentage. To see in detail the production per company sees Figure 6. Dispatches and production of cement is shown of the first trimester of 2012.

**Figure 6. Cement Shipments from 2008 to 2012-Q1 in Annual TM**



Source: Peruvian regulator SMV<sup>4</sup>.

**COMPETITION**

Currently in the cement sector, there are seven manufacturing companies nationwide. Which are Cemento Andino SA and Cementos Lima SA of Rizo-Patrón Corporation that is concentrated in Lima and the central highlands, in the south Cementos Yura S.A. and Cementos Sur S.A. of Rodríguez Banda Corporation, in the north Cementos Pacasmayo SA and Cementos Selva .SA. of Hochschild Corporation, and Caliza Cemento Inka of Choy family that has its operation in the

<sup>4</sup> Superintendencia del Mercado de Valores



central region. Figure 1 (Appendix 3.1) indicates the market share of the mentioned companies. For more detail see Appendix 4.2 which specifies the market share by geographic segmentation.

CEMEX enter Peru in 2007 importing gray and white cement. CEMEX in 2013 through the company Blue Rock Cement Holdings SA started the project of a cement plant with an initial production of 1 million TM per annum with an investment of 230 million dollars. Also, the Brazilian company Votorantim Cimentos in participation with Cementos Bio Bio (Chile) invested 122.2 million dollars in the company Cempor (representing 59% of the shares). The construction of the plant is expected to culminate in 2013 with a production capacity of 750 thousand tons. The project has a cost of 150 million dollars. Table 3 emphasizes that the Peruvian company Cementos Pacasmayo S. A. A. has the highest ROE; it indicates the good performance for its shareholders in respect of the net income. According to Bloomberg data, Cementos Pacasmayo has the highest market capitalization of the listed Peruvian cement companies of the bourse.

**Table 3. Company valuation and ROE**

Company	Country	Shares outstanding (in millions)	Market capitalization (in millions)	ROE
<b>Cementos Pacasmayo S.A.A</b>	Peru	519.98	3,625.82	17.58%
<b>Cementos Lima S.A. A</b>	Peru	1,185.70	3,343.68	11.26%
<b>Cemento Andino S. A</b>	Peru	0.28	1,188.00	8.23%
<b>Cementos BioBio S. A</b>	Chile	264.22	171,743.66	N. A

Source: Bloomberg and Stock Exchanges – BVL and BVS (2012).

## 6. INVESTMENT SUMMARY

According to information of Peruvian Central Bank (BCRP), the company has its main projects for the amplification of its cement plant in Junín. The project will be finish by 2012 and it will increase the cement production up to 2.1 million tons per annum. The investment is about 162 million dollars. Moreover “Cemento Andino will do complementary investments: installation of a cement mill, increase the power of its hydroelectrically in Condorcocha, amplification of the capacity of dispatches and in parallel putting into work its central hydroelectric in Carpatata (BCRP. 2012, p.14)”, for periods 2010 to 2011, with an investment of 16.7 million dollars. Table 4 indicates the variation of the construction, machinery and net team account.

**Table 4. Variation of the construction, machinery and net team account between 2010 and 2011**

Cost	Opening balances	Additions	Transfers	Deductions	Ending balances	Annual variation
Sites	29,534	44	0	0	29,578	0.15%
Industrial constructions	116,827	1,456	1,272	-805	118,750	1.65%
Machinery and equipment	687,093	4,448	6,730	0	698,271	1.63%
Transportation units	7,568	0	0	-53	7,515	-0.70%
Furniture and fixtures	2,659	225	0	0	2,884	8.46%
Replacement units	15,290	0	-3,023	0	12,267	-19.77%
Utilities receives	0	6,548	0	0	6,548	100.00%
Works in process	336,551	167,258	-4,979	0	498,830	48.22%
	1,195,522	179,979	-	-858	1,374,643	14.98%

Source: Cemento Andino. (2011). Auditing report. Página 27. Retrieved from: <http://www.smv.gob.pe/ConsultasP8/temp/n2545ueu.b0t.pdf>

By the end of 2005, the investment of the first part of the project the Platanal (central hydroelectric located in the river source of river Cañete) was approved. The new company “Compañía Eléctrica El Platanal S.A.” (CELEPSA) which 60% belongs to Cementos Lima S.A, 30% to Cemento Andino S.A and 10% to Corporación Aceros Arequipa S.A., was formed. For incidental expenses not designed to project Cemento Andino, in December 2010 contributed with an additional investment of 189.5 million dollars (155.4 million soles already invested by December 2009). The company also handed CELEPSA a bail equivalent to 151.7 million soles to ensure obtaining additional financing. As indicated by Apoyo & Asociados “in 2010, CELEPSA paid S /.0.99 million as royalties to Cemento Andino.”

## OTHER INFORMATION OF THE COMPANY

The company issues bonds that were approved by the General Board on 26 March 2009. It was launched the first corporate bond program of the company for U.S. \$ 40,000 or its equivalent in soles. On January 21, 2010 bonuses were awarded for \$ 35 million in the form of Dutch auction. See Appendix indicating the first and third issues. The funds were used to finance CELEPSA (U.S. \$ 15 million) and the rest to replace short-term liabilities. Table 5 details the first corporate bond program.

**Table 5. First Corporate Bond program**

	First	Third
Bonds Issued	\$7,000,000.00	\$28,000,000.00
Rate	3.75%	6.25%
Maturity	22/01/2013	22/01/2018

Source: Own elaboration

Note: The first issue had a maturity of three years and the interest rate is semiannual. The bond matures on January 22, 2013. The third issue is with semi-annual interest rate and the repayment of

principal will be made in ten semi-annual installments from the seventh straight quarter. The bond matures on January 21, 2018.

## **7. LEARNING OUTCOMES**

Through the use of the case, the students will be able to:

1. Recognize the challenges of evaluating a listed company in emerging markets and understand the effects of changing market conditions on the policy and operations of a company.
2. Explore the company's options for expansion including the use of cost of capital strategies.
3. Be able to calculate the growth term in the cost of common stock valuation formula.
4. Identify the strengths and weaknesses of a company, its key priorities and the strategy to attain them.

## **8. QUESTIONS TO SOLVE**

1. Realize a financial analysis with the information in Appendix 1.1 and 1.2. Consider not only ratios, but horizontal and vertical analysis (part of the fundamental analysis) in order to complement the analysis of the stock in the following question.
2. Show close and average Stock Price Evolution for ANDINBC1, this is an aspect of the technical analysis require to evaluate the tendency of a company.
3. Establish market ratios for the periods 2008 to 2012-1Q
4. Show Cemento Andino EBITDA in a graphic.
5. Show Stock Price Evolution from Bolsa de Valores de Lima (BVL) of the companies

## **9. CONCLUSIONS AND RECOMMENDATIONS**

The financial analysis of the company shows increasing and decreasing trends in operating and net margins, indicating some seasonal year to year. In periods 2008 to 2010, the trend is growing, except for 2009 and 2011 whose growth were lower. In the case of the ROE, the result is different considering the effects of two factors: the growing capital debt and the increase in fixed assets that makes the ROE to have a lower result in 2010 and 2011 and even for 2012.

On the other hand, it may indicate a positive correlation (from: Equilibrium Clasificadora de riesgo S.A. 2012. Informa de Clasificación "CEMENTO ANDINO S.A.". retrieving: [www.equilibrium.com.pe/Andino.pdf](http://www.equilibrium.com.pe/Andino.pdf) el 26 de Febrero del 2014) on between sales, cement production and cement consumption in the country, which is explained by the positive relationship between the construction industry and the cement industry. According to the investor financial indicators Cemento Andino S.A should maintain its stocks.

It is necessary to assess the evolution of the share price of ANDINBC1 that indicate random patterns: increasing and decreasing in different periods. This pattern is similar to the operating and net margins. Furthermore, the ratios of expected returns on investment and equity will be low in the early years of investment in fixed assets (industrial buildings, equipment and machinery net) and hence they will have less impact on the profitability of the company.

For valuing the company, it was considered to evaluate the PER (referential), free cash flows and a specific multiple which indicates the relationship between sales, consumption and cement production (Damodaran 2012). The EVA was calculated but was not considered because it destroyed value for the company and decreases from 2008 to 2012. It explains why the exponential increase of fixed assets will decrease the ROI. Market capitalization was considered as referential because they were a point of start to evaluate the company during the considered period. Over time the trend favors a higher business valuation and indicates the stability of the company for the long term.

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## ANNEX

## APPENDIX 1.1. – BALANCE SHEET TO 31ST DECEMBER (Non-audited)

	2008	2009	2010	2011	2012*
<b>CURRENT ASSETS</b>					
Cash and cash equivalents	15,406	24,127	46,371	33,155	86,271
Financial investments	5,554	853	601	170	133
Accounts receivable	15,540	17,228	20,267	32,296	29,597
Inventories	92,765	92,925	124,878	127,621	117,779
Prepaid expenses	1,210	1,153	1,253	4,100	7,123
<b>Total current assets</b>	<b>130,475</b>	<b>136,286</b>	<b>193,370</b>	<b>197,342</b>	<b>240,903</b>
<b>FIXED ASSETS</b>					
Financial investments	104,267	176,206	210,241	280,814	280,814
Industrial construction					
machinery and equipment, net	296,821	341,303	1,152,214	1,295,360	1,336,239
Other net assets	34,373	34,564	38,335	39,393	39,400
<b>Total Fixed assets</b>	<b>435,461</b>	<b>552,073</b>	<b>1,400,790</b>	<b>1,615,567</b>	<b>1,656,453</b>
<b>TOTAL ASSETS</b>	<b>565,936</b>	<b>688,359</b>	<b>1,594,160</b>	<b>1,812,909</b>	<b>1,897,356</b>
	2008	2009	2010	2011	2012*
<b>CURRENT LIABILITIES</b>					
ST banks	56,121	80,215	74,976	106,948	139,926
Accounts payable	16,418	14,268	16,210	21,147	14,946
Income taxes and working participation					
Payable	12,240	9,957	22,259	12,266	22,120
Diverse accounts payable	11,594	9,657	14,997	13,459	770
<b>Total current liabilities</b>	<b>96,373</b>	<b>114,097</b>	<b>128,442</b>	<b>153,820</b>	<b>177,762</b>
<b>LONG TERM DEBT</b>					
<b>FINANCIAL OBLIGATIONS</b>					
Financial leasing			279,504	415,169	456,035
Guarantee fund leasing			-89,866	-139,499	184,700
<b>Total financial obligations</b>			<b>189,638</b>	<b>275,670</b>	<b>640,735</b>
Bonds			98,315	94,395	-
Long term banking loans			-	46,436	-
	15,874	64,514	287,953	416,501	640,735
<b>DEFERRED INCOME TAXES</b>	<b>982</b>	<b>2,668</b>	<b>182,082</b>	<b>183,789</b>	<b>-</b>
<b>Total long-term debt</b>	<b>16,856</b>	<b>67,182</b>	<b>470,035</b>	<b>600,290</b>	<b>640,735</b>
<b>TOTAL LIABILITIES</b>	<b>113,229</b>	<b>181,279</b>	<b>598,477</b>	<b>754,110</b>	<b>818,497</b>
<b>EQUITY</b>					
Capital stock	313,320	313,320	313,320	313,320	313,320
Legal reserve	62,664	62,664	62,664	62,664	62,664
Retained earnings	76,723	131,096	619,699	682,815	702,875
<b>TOTAL EQUITY</b>	<b>452,707</b>	<b>507,080</b>	<b>995,683</b>	<b>1,058,799</b>	<b>1,078,859</b>
<b>TOTAL LIABILITIES AND EQUITY</b>	<b>565,936</b>	<b>688,359</b>	<b>1,594,160</b>	<b>1,812,909</b>	<b>1,897,356</b>

**APPENDIX 1.2 – INCOME STATEMENTS**

Cemento Andino S.A.

FOR THE FINISH YEARS UNTIL 31st DECEMBER

(In thousands of Nuevos Soles, except amounts of earnings per share)

	2008	2009	2010	2011	2012*
<b>Net revenues</b>	378,928	378,783	434,017	445,039	115,407
<b>Costs of sales</b>	-185,616	-196,602	-231,447	-261,734	-79,523
<b>Depreciation and amortization</b>	-40,918	-42,230	-37,963	-36,225	
<b>Gross profit</b>	152,394	139,951	164,607	147,080	35,884
<b>Sales expenses</b>	-2,512	-2,268	-2,641	-2,773	-769
<b>Administrative expenses</b>	-21,777	-20,415	-26,880	-25,982	-6,981
<b>Operating income</b>	128,105	117,268	135,086	118,325	29,146
<b>Income (expenses), net:</b>					
<b>Financial incomes</b>	945	131	1,017	293	1,186
<b>Financial expenses</b>	-5,161	-4,200	-9,711	-11,769	-3,787
<b>Exchange rate difference</b>	-913	472	169	5,247	1,589
<b>Diverse, net</b>	1,334	2,595	2,192	11,235	
	-3,795	-1,002	-6,333	5,006	-1,012
<b>Earnings before income taxes</b>	124,310	116,266	128,753	123,331	28,134
<b>Income taxes</b>	-47,608	-43,893	-39,266	-36,215	-8,074
<b>Net income</b>	76,702	72,373	89,487	87,116	20,060
<b>Other results</b>	-	-	-	-	-
<b>Total comprehensive income</b>	76,702	72,373	89,487	87,116	20,060

\* Non-audited financial information

**APPENDIX 2.1. – EVOLUTION OF ANDINBC1 FROM MAY 2011 TO APR 2012**



Source: Own elaboration

**APPENDIX 2.2 – MARKET ORIENTED RATIOS FROM 2008 TO 2012**

MARKET ORIENTED RATIOS	2008	2009	2010	2011	2012-1T
UPA	0.153	0.195	0.235	0.227	0.2445
P/UPA	5,322.77	2,952.43	3,344.62	3,800.32	3,415.35
PAYOUT RATIO	25%	25%	25%	25%	25%
BOOK VALUE PER SHARE	1.13	1.13	1.13	1.13	1.13
PRICE TO BOOK VALUE	722.04	512.36	699.06	765.55	742.07
MARKET PRICE	812.64	576.65	786.78	861.61	835.19

Source: Own elaboration



**APPENDIX 2.3 – NET INCOME PER QUARTERS FROM 2008 TO THE FIRST QUARTER OF 2012**

PERIOD	2008	2009	2010	2011	2012-1T
FIRST QUARTER	19,813	13,946	20,243	21,192	20,060
SECOND QUARTER	18,527	15,078	25,640	19,736	
THIRD QUARTER	21,872	22,211	26,614	21,642	
FOURTH QUARTER	16,489	21,137	23,588	51,459	

Source: Bolsa de Valores de Lima. Cemento Andino S.A.

**APPENDIX 2.4 – CALCULATION OF THE COMPANY BETA**

$$\text{UNLEVERED BETA} = \frac{1.50}{1.84} = 0.82$$

$$\text{RE – LEVERAGED BETA} = 0.82 \times 1.53 = 1.25$$

Source: Own elaboration

**APPENDIX 2.5 - CLINKER AND CEMENT PRODUCTION FOR PERIODS 2008-2012 FIRST QUARTER**

YEAR	PRODUCTION		% VARIATION OF THE PRODUCTION	
	CLINKER	CEMENT	CLINKER	CEMENT
2008	1,163	1,253		
2009	1,170	1,278	0.55%	2.06%
2010	1,176	1,440	0.52%	12.64%
2011	1,169	1,484	-0.59%	3.08%
2012-1T	271	388		

Source: Own elaboration

**APPENDIX 2.5.1 – CEMENT SHIPMENTS IN MT PER YEAR**

YEAR	ANNUAL CEMENT SHIPMENTS IN METRIC TONES				
	CEMENTO ANDINO	CEMENTOS LIMA	CEMENTOS PACASMAYO	OTHER CEMENT COMPANIES	PERU
2008	1,251	2,875	1,320	1,396	6,842
2009	1,274	2,935	1,388	1,540	7,137
2010	1,431	3,278	1,616	1,943	8,268
2011	1,477	3,225	1,746	2,078	8,526
2012-1T	384	853	482	667	2,386

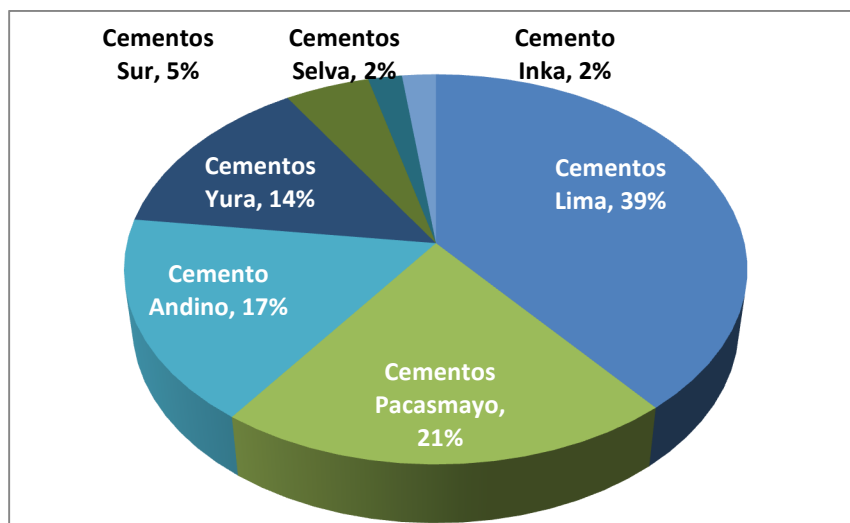
Source: Own elaboration

**APPENDIX 2.5.2 – PERCENTAGE OF CEMENT SHIPMENTS IN PERU**

YEAR	PERCENTAGE OF CEMENT COMPANIES CEMENT SHIPMENTS				
	CEMENTO ANDINO	CEMENTOS LIMA	CEMENTOS PACASMAYO	OTHER CEMENT COMPANIES	PERU
2008	18%	42%	19%	20%	100%
2009	18%	41%	19%	22%	100%
2010	17%	40%	20%	23%	100%
2011	17%	38%	20%	24%	100%
2012-1T	16%	36%	20%	28%	100%

Source: Own elaboration

**APPENDIX 3.1. – MARKET SHARE OF PERUVIAN CEMENT COMPANIES IN 2011**



Source: Own elaboration

### APPENDIX 3.2 – MILLION TONNES OF CEMENT CONSUMPTION AND MARKET SHARE IN NORTHERN, CENTRAL AND SOUTHER REGION

NORTHERN REGION					
PLANT	2008	2009	2010	2011	MKT. SHARE
C. PACAS	1,322	1,397	1,616	1,748	20%
C. SELVA	157	160	195	196	2%
IMPORTS	47	39	39	44	0.50%
<b>TOTAL</b>	<b>1,526</b>	<b>1,596</b>	<b>1,850</b>	<b>1,988</b>	<b>23%</b>

Source: ASOCEM, INEI, ADUANET (SUNAT)

CENTRAL REGION					
PLANT	2008	2009	2010	2011	MKT. SHARE
C. LIMA	2,937	2,935	3,278	3,225	37%
C. ANDINO	1,251	1,275	1,434	1,483	17%
CALIZA INCA	60	63	97	110	1%
IMPORTS	172	101	275	388	4%
<b>TOTAL</b>	<b>4,420</b>	<b>4,374</b>	<b>5,084</b>	<b>5,206</b>	<b>59%</b>

Source: ASOCEM, INEI, ADUANET (SUNAT)

SOUTHERN REGION					
PLANT	2008	2009	2010	2011	MKT. SHARE
C. YURA	927	1,008	1,159	1,265	14%
C. SUR	123	246	433	450	4%
<b>TOTAL</b>	<b>1,050</b>	<b>1,254</b>	<b>1,592</b>	<b>1,715</b>	<b>18%</b>

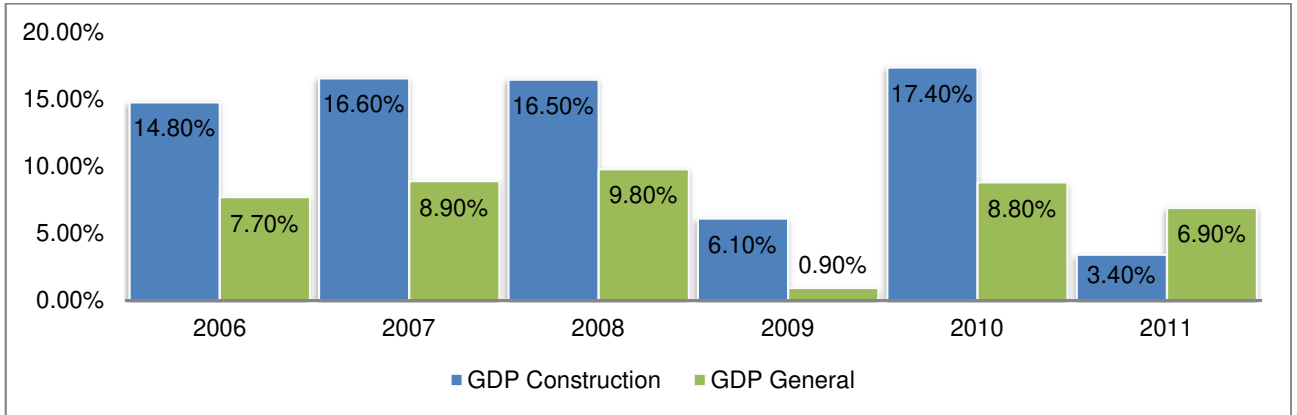
Source: ASOCEM, INEI, ADUANET (SUNAT)

### APPENDIX 4 – GROWTH IN FIXED ASSET ACCOUNT CEMENT COMPANIES FROM 2008 TO 2011

PERIOD	2008	2009	2010	2011			
<b>NET PROPERTY, PLANT AND EQUIPMENT</b>			VAR		VAR		VAR 2008-2011
<b>CEMENTOS LIMA</b>	672,459	764,508	13.69%	1,834,438	139.95%	2,030,368	201.93%
<b>CEMENTOS PACASMAYO</b>	393,808	432,495	9.82%	686,893	58.82%	867,966	120.40%
<b>CEMENTO ANDINO</b>	296,821	341,303	14.99%	1,152,214	237.59%	1,295,360	336.41%

Source: Own elaboration

**APPENDIX 5 – GENERAL AND CONSTRUCTION GDP EVOLUTION FROM 2006 TO 2011**



Source: Own elaboration

## **TEACHING NOTES<sup>5</sup>**

### **CEMENTO ANDINO S.A: FINANCIAL ANALYSIS OF A LATIN AMERICAN COMPANY**

#### **CASE STUDY SUMMARY**

In emerging markets is essential to evaluate for a combination of debt and capital in the optimal value of the company. In this case, Peruvian company seeks to adjust its capital structure to achieve sustainability and become attractive to investors. All this in terms of financial needs because an investor, usually studies the capital structure of a company when evaluating invest their money in shares. Thus, the companies expect to strengthen balance sheets and reduce risks.

#### **LEARNING OUTCOMES**

1. Recognize the challenges of evaluating a listed company in emerging markets and understand the effects of changing market conditions on the policy and operations of a company.
2. Explore the company's options for expansion including the use of cost of capital strategies.
3. Be able to calculate the growth term in the cost of common stock valuation formula.
4. Identify the strengths and weaknesses of a company, its key priorities and the strategy to attain them.

#### **SUGGESTED TEACHING STRATEGIES**

There are various ways to teach this case study. One strategy is to review the financial information of the company, considering the financial statements of each period and using ratio analysis, supplemented by the vertical and horizontal analysis to determine composition and trends of accounting accounts. This will identify the most relevant accounts. Another strategy is to start by analyzing the evolution of the share price, as well as the behavior of framerate market or stock market index and the risk-free rate in the Peruvian market, which it can be obtained from the website of Superintendencia de Banca y Seguros ([www.sbs.gob.pe](http://www.sbs.gob.pe)).

Besides, this case study seeks to analyze and evaluate the financial situation of the Peruvian company Cemento Andino S.A. (code ISIN: ANDINBC1), situated in an emerging market between the period 2008 and 2012. Such an analysis will help to develop the valuation of the company in a precise way and understand the implied risks (considering the prospective international investors). Include in the study is an analysis of the national and international cement industry. It will be also important to understand the positive evolution of the construction industry and its growth in recent years. In addition, it will be considered the effects of the entrance of international competitors such as CEMEX, Cementos Bio Bio and Votorantim Cimentos.

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<sup>5</sup> Assistant: Celeste Gaspar and Miguel Alegre from Esan University

In valuating Cemento Andino it is important to consider the possible merger in the following years with Cementos Lima that could change the real value of the business. In this case the use of accounting methods based on multiples because it could indicate the real value of the company. In addition, the PER method is considered, as it allows analysis of the level of obtained earnings in reference to the stock price. On the other hand, specific methods will be used to relate de capacity of production and consumption to value the company.

Even in the wake of the 2008 financial crisis, Peru has been in a better situation because of significant growths rates on the GDP allowing the country to have financial solvency. However, according to the report of SCOTIABANK in 2011 “there are signals that the mayor risks of the financial European systems are generating a sort of credit crunch in a slow way that it is starting to affect the credit markets in the world, with consequences for money and financial conditions”. According to the risk classificatory Standard & Poor's (S&P) and Fitch the Peruvian sovereign debt has a classification BBB (in 2011), which indicates there is lower solvency risk and indicates the positive credit image of the country. For 2012 and 2013 the growth of Peru was expected to depend on public and private investment. According to the Ministry of Economics and Finances (MEF), public investment will increase about 30% in 2012.

Considering the cement industry, the companies are doing projects to increase their productive capacity. It is relevant to highlight that the growth of the construction industry is positive and implies more demand of cement. Cementos Lima is going to increase its production to 4.8 million TM (metric tons).

**ANSWER THE FOLLOWING QUESTIONS:**

1. Realize a financial analysis with the information in Appendix 1.1 and 1.2. Consider not only ratios, but horizontal and vertical analysis (part of the fundamental analysis) in order to complement the analysis of the stock in the following question
2. Show close and average Stock Price Evolution for ANDINBC1, this is an aspect of the technical analysis require to evaluate the tendency of a company.
3. Establish market ratios for the periods 2008 to 2012-1Q
4. Show Cemento Andino EBITDA in a graphic.
5. Show Stock Price Evolution from Bolsa de Valores de Lima (BVL) of the companies ([www.bvl.com.pe](http://www.bvl.com.pe)).

## APPENDIXES AND SOLUTION

## APPENDIX 1.1. – HORIZONTAL ANALYSIS OF CEMENTO ANDINO S.A. BALANCE SHEET FROM 2009 TO 2012

	09/08	10/09	11/10	12*/11
<b>CURRENT ASSETS</b>				
Cash and cash equivalents	56.61%	92.20%	-28.50%	160.21%
Financial investments	-84.64%	-29.54%	-71.71%	-21.76%
Accounts receivable	10.86%	17.64%	59.35%	-8.36%
Inventories	0.17%	34.39%	2.20%	-7.71%
Prepaid expenses	-4.71%	8.67%	227.21%	73.73%
<b>Total current assets</b>	<b>4.45%</b>	<b>41.89%</b>	<b>2.05%</b>	<b>22.07%</b>
<b>FIXED ASSETS</b>				
Financial investments	68.99%	19.32%	33.57%	0.00%
Industrial construction				
machinery and equipment, net	14.99%	237.59%	12.42%	3.16%
Other net assets	0.56%	10.91%	2.76%	0.02%
<b>Total Fixed assets</b>	<b>26.78%</b>	<b>153.73%</b>	<b>15.33%</b>	<b>2.53%</b>
<b>TOTAL ASSETS</b>	<b>21.63%</b>	<b>131.59%</b>	<b>13.72%</b>	<b>4.66%</b>
<b>CURRENT LIABILITIES</b>				
ST banks	42.93%	-6.53%	42.64%	30.84%
Accounts payable	-13.10%	13.61%	30.46%	-29.32%
Income taxes and working participation				
Payable	-18.65%	123.55%	-44.89%	80.34%
Diverse accounts payable	-16.71%	55.30%	-10.26%	-94.28%
<b>Total current liabilities</b>	<b>18.39%</b>	<b>12.57%</b>	<b>19.76%</b>	<b>15.56%</b>
<b>LONG TERM DEBT</b>				
<b>FINANCIAL OBLIGATIONS</b>				
Financial leasing			48.54%	9.84%
Guarantee fund leasing			55.23%	-232.40%
<b>Total financial obligations</b>			<b>45.37%</b>	<b>132.43%</b>
Bonds			-3.99%	-
Long term banking loans			0.00%	-
	306.41%	346.34%	44.64%	53.84%
<b>DEFERRED INCOME TAXES</b>	<b>171.69%</b>	<b>6724.66%</b>	<b>0.94%</b>	<b>-</b>
<b>Total long-term debt</b>	<b>298.56%</b>	<b>599.64%</b>	<b>27.71%</b>	<b>6.74%</b>
<b>TOTAL LIABILITIES</b>	<b>60.10%</b>	<b>230.14%</b>	<b>26.00%</b>	<b>8.54%</b>
<b>EQUITY</b>				
Capital stock	0.00%	0.00%	0.00%	0.00%
Legal reserve	0.00%	0.00%	0.00%	0.00%
Retained earnings	70.87%	372.71%	10.18%	2.94%
<b>TOTAL EQUITY</b>	<b>12.01%</b>	<b>96.36%</b>	<b>6.34%</b>	<b>1.89%</b>
<b>TOTAL LIABILITIES AND EQUITY</b>	<b>21.63%</b>	<b>131.59%</b>	<b>13.72%</b>	<b>4.66%</b>

2012\* Note: is none-audited financial information until the 31st March (first quarter)

Source: Own elaboration

## APPENDIX 1.2. – VERTICAL ANALYSIS OF CEMENTO ANDINO S.A. BALANCE SHEET FROM 2008 TO 2012

	2008	2009	2010	2011	2012*
<b>CURRENT ASSETS</b>					
Cash and cash equivalents	2.72%	3.51%	2.91%	1.83%	4.55%
Financial investments	0.98%	0.12%	0.04%	0.01%	0.01%
Accounts receivable	2.75%	2.50%	1.27%	1.78%	1.56%
Inventories	16.39%	13.50%	7.83%	7.04%	6.21%
Prepaid expenses	0.21%	0.17%	0.08%	0.23%	0.38%
<b>Total current assets</b>	<b>23.05%</b>	<b>19.80%</b>	<b>12.13%</b>	<b>10.89%</b>	<b>12.70%</b>
<b>FIXED ASSETS</b>					
Financial investments	18.42%	25.60%	13.19%	15.49%	14.80%
Industrial construction					
machinery and equipment, net	52.45%	49.58%	72.28%	71.45%	70.43%
Other net assets	6.07%	5.02%	2.40%	2.17%	2.08%
<b>Total Fixed assets</b>	<b>76.95%</b>	<b>80.20%</b>	<b>87.87%</b>	<b>89.11%</b>	<b>87.30%</b>
<b>TOTAL ASSETS</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>
<b>CURRENT LIABILITIES</b>					
ST banks	9.92%	11.65%	4.70%	5.90%	7.37%
Accounts payable	2.90%	2.07%	1.02%	1.17%	0.79%
Income taxes and working participation					
Payable	2.16%	1.45%	1.40%	0.68%	1.17%
Diverse accounts payable	2.05%	1.40%	0.94%	0.74%	0.04%
<b>Total current liabilities</b>	<b>17.03%</b>	<b>16.58%</b>	<b>8.06%</b>	<b>8.48%</b>	<b>9.37%</b>
<b>LONG TERM DEBT</b>					
<b>FINANCIAL OBLIGATIONS</b>					
Financial leasing			17.53%	22.90%	24.04%
Guarantee fund leasing			-5.64%	-7.69%	9.73%
<b>Total financial obligations</b>			<b>11.90%</b>	<b>15.21%</b>	<b>33.77%</b>
Bonds			6.17%	5.21%	0.00%
Long term banking loans			0.00%	2.56%	0.00%
	2.80%	9.37%	18.06%	22.97%	33.77%
<b>DEFERRED INCOME TAXES</b>	<b>0.17%</b>	<b>0.39%</b>	<b>11.42%</b>	<b>10.14%</b>	<b>0.00%</b>
<b>Total long-term debt</b>	<b>2.98%</b>	<b>9.76%</b>	<b>29.48%</b>	<b>33.11%</b>	<b>33.77%</b>
<b>TOTAL LIABILITIES</b>	<b>20.01%</b>	<b>26.33%</b>	<b>37.54%</b>	<b>41.60%</b>	<b>43.14%</b>
<b>EQUITY</b>					
Capital stock	55.36%	45.52%	19.65%	17.28%	16.51%
Legal reserve	11.07%	9.10%	3.93%	3.46%	3.30%
Retained earnings	13.56%	19.04%	38.87%	37.66%	37.04%
<b>TOTAL EQUITY</b>	<b>79.99%</b>	<b>73.67%</b>	<b>62.46%</b>	<b>58.40%</b>	<b>56.86%</b>
<b>TOTAL LIABILITIES AND EQUITY</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>

2012\* Note: is none-audited financial information until the 31st March (first quarter)

Source: Own elaboration



**APPENDIX 1.3. – HORIZONTAL ANALYSIS OF CEMENTO ANDINO S.A. INCOME STATEMENT FROM 2009 TO 2012**

	09/08	10/09	11/10	12*/11
<b>Net revenues</b>	-0.04%	14.58%	2.54%	-74.07%
<b>Costs of sales</b>	5.92%	17.72%	13.09%	-69.62%
<b>Depreciation and amortization</b>	3.21%	-10.10%	-4.58%	-100.00%
<b>Gross profit</b>	-8.17%	17.62%	-10.65%	-75.60%
<b>Sales expenses</b>	-9.71%	16.45%	5.00%	-72.27%
<b>Administrative expenses</b>	-6.25%	31.67%	-3.34%	-73.13%
<b>Operating income</b>	-8.46%	15.19%	-12.41%	-75.37%
<b>Income (expenses), net:</b>	0.00%	0.00%	0.00%	0.00%
<b>Financial incomes</b>	-86.14%	676.34%	-71.19%	304.78%
<b>Financial expenses</b>	-18.62%	131.21%	21.19%	-67.82%
<b>Exchange rate difference</b>	-151.70%	-64.19%	3004.73%	-69.72%
<b>Diverse, net</b>	94.53%	-15.53%	412.55%	-100.00%
	-73.60%	532.04%	-179.05%	-120.22%
<b>Earnings before income taxes</b>	-6.47%	10.74%	-4.21%	-77.19%
<b>Income taxes</b>	-7.80%	-10.54%	-7.77%	-77.71%
<b>Net income</b>	-5.64%	23.65%	-2.65%	-76.97%
<b>Other results</b>	0.00%	0.00%	0.00%	0.00%
<b>Total comprehensive income</b>	-5.64%	23.65%	-2.65%	-76.97%

2012\* Note: is none-audited financial information until the 31st March (first quarter)

Source: Own elaboration

**APPENDIX 1.3. – VERTICAL ANALYSIS OF CEMENTO ANDINO S.A. INCOME STATEMENT FROM 2008 TO 2012**

	2008	2009	2010	2011	2012*
<b>Net revenues</b>	100.00%	100.00%	100.00%	100.00%	100.00%
<b>Costs of sales</b>	-48.98%	-51.90%	-53.33%	-58.81%	-68.91%
<b>Depreciation and amortization</b>	-10.80%	-11.15%	-8.75%	-8.14%	0.00%
<b>Gross profit</b>	40.22%	36.95%	37.93%	33.05%	31.09%
<b>Sales expenses</b>	-0.66%	-0.60%	-0.61%	-0.62%	-0.67%
<b>Administrative expenses</b>	-5.75%	-5.39%	-6.19%	-5.84%	-6.05%
<b>Operating income</b>	33.81%	30.96%	31.12%	26.59%	25.25%
<b>Income (expenses), net:</b>	0.00%	0.00%	0.00%	0.00%	0.00%
<b>Financial incomes</b>	0.25%	0.03%	0.23%	0.07%	1.03%
<b>Financial expenses</b>	-1.36%	-1.11%	-2.24%	-2.64%	-3.28%
<b>Exchange rate difference</b>	-0.24%	0.12%	0.04%	1.18%	1.38%
<b>Diverse, net</b>	0.35%	0.69%	0.51%	2.52%	0.00%
	-1.00%	-0.26%	-1.46%	1.12%	-0.88%
<b>Earnings before income taxes</b>	32.81%	30.69%	29.67%	27.71%	24.38%
<b>Income taxes</b>	-12.56%	-11.59%	-9.05%	-8.14%	-7.00%
<b>Net income</b>	20.24%	19.11%	20.62%	19.57%	17.38%
<b>Other results</b>	0.00%	0.00%	0.00%	0.00%	0.00%
<b>Total comprehensive income</b>	20.24%	19.11%	20.62%	19.57%	17.38%

2012\* Note: is none-audited financial information until the 31st March (first quarter)

Source: Own elaboration

**APPENDIX 2.1. – EVOLUTION OF ANDINBC1 FROM MAY 2011 TO APR 2012**



Source: Own elaboration

**APPENDIX 2.2 – MARKET ORIENTED RATIOS FROM 2008 TO 2012**

Market oriented ratios	2008	2009	2010	2011	2012-1T
<b>UPA</b>	0.153	0.195	0.235	0.227	0.2445
<b>P/UPA</b>	5,322.77	2,952.43	3,344.62	3,800.32	3,415.35
<b>Payout ratio</b>	25%	25%	25%	25%	25%
<b>Book value per share</b>	1.13	1.13	1.13	1.13	1.13
<b>Price to book value</b>	722.04	512.36	699.06	765.55	742.07
<b>Market price</b>	812.64	576.65	786.78	861.61	835.19

2012\* Note: is none-audited financial information until the 31st March (first quarter)

Source: Own elaboration

**APPENDIX 2.3 – NET INCOME PER QUARTERS FROM 2008 TO THE FIRST QUARTER OF 2012**

Period	2008	2009	2010	2011	2012-1T
First Quarter	19,813	13,946	20,243	21,192	20,060
Second Quarter	18,527	15,078	25,640	19,736	
Third Quarter	21,872	22,211	26,614	21,642	
Fourth Quarter	16,489	21,137	23,588	51,459	

2012\* Note: is none-audited financial information until the 31st March (first quarter)

Source: Own elaboration

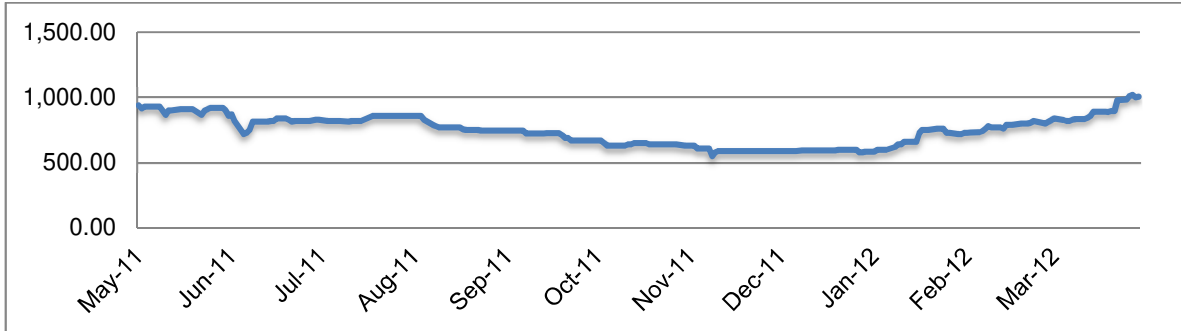
## **APPENDIX 2.4 – CALCULATION OF THE COMPANY BETA**

$$\text{UNLEVERED BETA} = \frac{1.50}{1.84} = 0.82$$

$$\text{RE – LEVERAGED BETA} = 0.82 \times 1.53 = 1.25$$

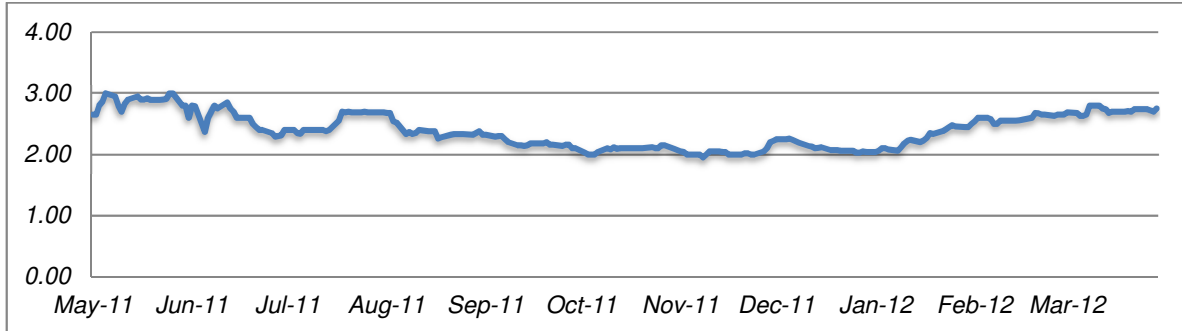
*Source: Own elaboration*

**APPENDIX 3.1 – EVOLUTION OF ANDINBC1 (CEMENTO ANDINO)**



Source: BVL

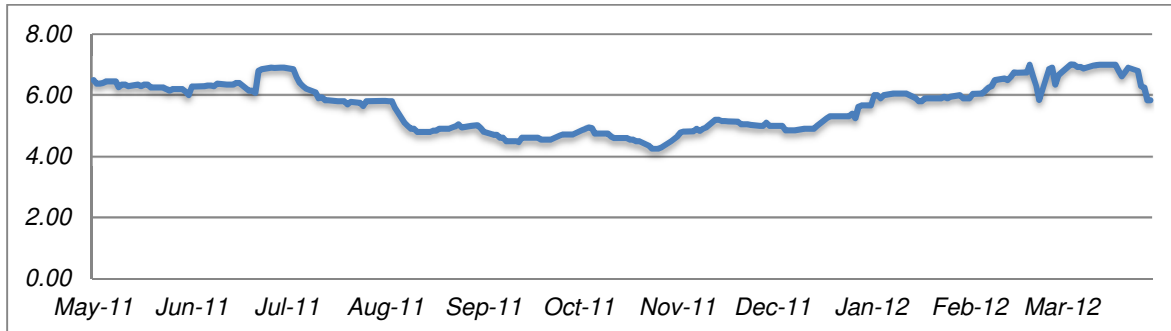
### APPENDIX 3.2 – EVOLUTION OF CPACASC1 (CEMENTOS PACASMAYO)



Source: BVL



### APPENDIX 3.3 – EVOLUTION OF CEMLIMC1 (CEMENTOS LIMA)



Source: BVL

## GLOSSARY

**Balance Sheet:** A financial statement that summarizes a company's assets, liabilities and shareholders' equity at a specific point in time. These three balance sheet segments give investors an idea as to what the company owns and owes, as well as the amount invested by the shareholders.

**BCRP:** Banco Central de Reserva del Perú, Central Reserve Bank of Perú.

**Bloomberg:** A major global provider of 24-hour financial news and information including real-time and historic price data, financials data, trading news and analyst coverage, as well as general news and sports. Its services, which span their own platform, television, radio and magazines, offer professionals analytic tools.

**Bond:** A bond is a debt investment in which an investor loans money to an entity (typically corporate or governmental) which borrows the funds for a defined period of time at a variable or fixed interest rate. Bonds are used by companies, municipalities, states and sovereign governments to raise money and finance a variety of projects and activities. Owners of bonds are debt holders, or creditors, of the issuer.

**Book value per share:** A financial measure that represents a per share assessment of the minimum value of a company's equity. More specifically, this value is determined by relating the original value of a firm's common stock adjusted for any outflow (dividends and stock buybacks) and inflow (retained earnings) modifiers to the amount of shares outstanding.

**BVL:** Bolsa de Valores de Lima, Lima Stock Exchange.

**Capital Structure:** A mix of a company's long-term debt, specific short-term debt, common equity and preferred equity. The capital structure is how a firm finances its overall operations and growth by using different sources of funds. Debt comes in the form of bond issues or long-term notes payable, while equity is classified as common stock, preferred stock or retained earnings. Short-term debt such as working capital requirements is also considered to be part of the capital structure

**Clinker:** Portland cement clinker is ground to a fine powder and used as the binder in many cement products. A little gypsum is sometimes added. It may also be combined with other active ingredients or chemical admixtures to produce other types of cement

**Close Price:** The final price at which a security is traded on a given trading day. The closing price represents the most up-to-date valuation of a security until trading commences again on the next trading day.

**Code ISIN (International Securities Identification Number):** Its structure is defined in ISO 6166. Securities for which ISINs are issued include bonds, commercial paper, stocks and warrants. The ISIN code is a 12-character alpha-numerical code that does not contain information characterizing financial instruments but serves for uniform identification of a security at trading and settlement.

**Common stocks:** A security that represents ownership in a corporation. Holders of common stock exercise control by electing a board of directors and voting on corporate policy.

**Dividend:** A dividend is a distribution of a portion of a company's earnings, decided by the board of directors, to a class of its shareholders. Dividends can be issued as cash payments, as shares of stock, or other property.

**EBITDA:** Is essentially net income with interest, taxes, depreciation, and amortization added back to it, and can be used to analyze and compare profitability between companies and industries because it eliminates the effects of financing and accounting decisions.

**Emerging markets:** A nation's economy that is progressing toward becoming advanced, as shown by some liquidity in local debt and equity markets and the existence of some form of market exchange and regulatory body.

**EPS (Earning per Share):** The portion of a company's profit allocated to each outstanding share of common stock. Earnings per share serve as an indicator of a company's profitability.

**EVA (Economic Value Added):** A measure of a company's financial performance based on the residual wealth calculated by deducting cost of capital from its operating profit (adjusted for taxes on a cash basis).

**GDP (Gross Domestic Product):** The monetary value of all the finished goods and services produced within a country's borders in a specific time period. Though GDP is usually calculated on an annual basis, it can be calculated on a quarterly basis as well. GDP includes all of private and public consumption, government outlays, investments and exports minus imports that occur within a defined territory. Put simply, GDP is a broad measurement of a nation's overall economic activity.

**Junín:** is a region in the central highlands and westernmost Amazonia of Perú. Its capital is Huancayo.

**Market Price:** The current price at which an asset or service can be bought or sold. Economic theory contends that the market price converges at a point where the forces of supply and demand meet. Shocks to either the supply side and/or demand side can cause the market price for a good or service to be re-evaluated.

**MEF:** Ministerio de Economía y Finanzas, Ministry of Economics and Finances

**Net Income:** A company's total earnings (or profit). Net income is calculated by taking revenues and adjusting for the cost of doing business, depreciation, interest, taxes and other expenses. This number is found on a company's income statement and is an important measure of how profitable the company is over a period of time. The measure is also used to calculate earnings per share.

**Nominal Value:** The nominal value of a security, such as a stock or bond, remains fixed for the duration of its life. What fluctuates is the security's market value, which may be markedly different from its nominal value.

**PER:** The Price-to-Earnings Ratio or P/E ratio is a ratio for valuing a company that measures its current share price relative to its per-share earnings.

**ROE:** The amount of net income returned as a percentage of shareholders equity. Return on equity measures a corporation's profitability by revealing how much profit a company generates with the money shareholders have invested.

**ROI:** A performance measure used to evaluate the efficiency of an investment or to compare the efficiency of a number of different investments. ROI measures the amount of return on an investment relative to the investment's cost. To calculate ROI, the benefit (or return) of an investment is divided by the cost of the investment, and the result is expressed as a percentage or a ratio.

**Stocks:** A type of security that signifies ownership in a corporation and represents a claim on part of the corporation's assets and earnings.

**TM:** Tonelada métrica, Metric Ton.

**WACC:** The weighted average cost of capital (WACC) is calculation of a firm's cost of capital in which each category of capital is proportionately weighted. All sources of capital, including common stock, preferred stock, bonds and any other long-term debt, are included in a WACC calculation. A firm's WACC increases as the beta and rate of return on equity increase, as an increase in WACC denotes a decrease in valuation and an increase in risk.