Chapter 1: Financial Ratio Method

Peruvian Listed Companies

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Abstract

This document explains in a simple form the principles related to the calculation and interpretation of the financial ratio analysis, the formulas of the different kinds and the importance in the day-to-day analysis done by the market. All the knowledge provided will be applied in analyzing four Peruvian listed companies from different industries (cement extractor and seller, food, beverages and mining). These four companies were selected using a importance analysis, which was highly related to choose the companies with the most relevant and significant operations to the Lima Stock Exchange and the Peruvian industrial sector between 2012 and 2014.

Keywords: Ratio Analysis, Credit risk, emerging markets.

Introduction

The Ratio Analysis or also called Quantitative Analysis compares one figure in one financial statement, taking into account the two main ones, which are the Balance Sheet and the Profits & Loss Statement in order to obtain numbers or also called in this case indexes, that the interpretation provide to us a certain status of the company in certain financial and economic aspects. According to Finch (2008), in his paper Summary of Financial Ratios, the importance of using them is highly related to give dynamism to the analysis of a company financially speaking, due to the fact that this theory provides certain calculations that are basically a picture of the financial health of the business. Besides, indicates how the equity share is developing in the capital market, basically gives information of how good the company's share is doing (Chandra, 2011).

The Financial Ratios Theory

1. Liquidity Ratios

The companies around the world try to obtain a correct and sufficient level of cash in order to maintain their activities under normal circumstances, these indicator to know whether the operations are right or wrong are called the liquidity ratios, normally the liquidity ratios are the most important among the four groups because they provide information about covering the current liabilities of the company. (Bized, 2003)

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1.1. Definition

The liquidity ratios are known as stated in the introduction of this paper, the indicator that provide information regarding two major things, the level of cash a company has in order to cover its normal operations and as well as an indicator of how good is a company fitting the current assets with the current liabilities.

The current ratio that compares the monetary units of current assets a company has and the current liabilities, normally debts that are taken due to the operations of the company done through a year or less time; these two are the most important, basically because the two results qualifies a company like solvent or not. (Bized, 2003)

1.2. Ratios

1.2.1. Working Capital

According to Credit Research Foundation (n.d.) the Working Capital Ratio is the one related to the comparison of the current assets and the current liabilities, the result serves to know if any contingencies and uncertainties can be satisfy without no problem. A company must always have a positive and big Working Capital, this indicates a good solvency level.

Working Capital = Current Assets – Current Liabilities

Formula 1. Working Capital

1.2.2. Acid Test or Quick Ratio

This ratio tries to focus its analysis only in the amount of available cash of the company in order to know how much of its own money the company has in order to pay all the debts with third entities. The main difference with the Current Ratio is the fact that does not include inventory or prepaid expenses, so the ratio will be lower. (Credit Research Foundation, n.d.)

(Current Assets – Inventory)/ Current Liabilities

Formula 2. Acid Test or Quick Ratio

The interpretation of this ratio is the following:

- Acid Test Ratio = 1 means the company has the one monetary unit own per one monetary unit owe.
- Acid Test Ratio < 0 means the company has less than one monetary unit per one monetary unit owe, which means that the company is not in the position of paying the debt using its own money.
- Acid Test Ratio > 1 means the company has more than one monetary unit per one monetary unit owe, which allows the company to pay the debt entirely and have extra liquidity.

1.2.3. Current Ratio

The current Ratio according to (Credit Research Foundation, n.d.) is the one that indicates if a company has more current assets than current liabilities, normally the current assets are cash, marketable securities, accounts receivable and inventories; in the other hand, the current liabilities are formed by the accounts payable, current maturities of long-term debt, accrued income taxes and other accrued expenses that the company has.

Current Ratio = Current Assets / Current Liabilities

The interpretation of this ratio is the following:

- Current Ratio = 1 means the company has one monetary unit own per one monetary unit owe. The current account could cover their short term obligations.
- Current Ratio < 0 means the company has less than one monetary unit per one monetary unit owe, which means that the company is not in the position of paying the debt using its own money.
- Current Ratio > 1 means the company has more than one monetary unit per one monetary unit owe, which allows the company to pay the debt entirely and have extra liquidity.

1.2.4. Cash Ratio

Indicates a view of how much liquidity a company has deducting from the total current assets the receivables and the inventory, basically focus in the level of factual cash to pay the debts of the business. (Credit Research Foundation, n.d.)

Cash Ratio = (Cash Equivalents + Marketable Securities) / Current Liabilities

Formula 4. Cash Ratio

The interpretation of this ratio is the following:

- Cash Ratio = 1 means the company has the one monetary unit own per one monetary unit owe.
- Cash Ratio < 0 means the company has less than one monetary unit per one monetary unit owe, which means that the company is not in the position of paying the debt using its own money.
- Cash Ratio > 1 means the company has more than one monetary unit per one monetary unit owe, which allows the company to pay the debt entirely and have extra liquidity.

1.2.5. Summary of Ratios

Liquidity Ratios Formulas		
Ratio	Formula	
Working Capital	Current Assets – Current Liabilities	
Acid Test or Quick Ratio	(Current Assets – Inventory) / Current Liabilities	
Current Ratio	Current Assets / Current Liabilities	
Cash Ratio	(Cash Equivalents + Marketable Securities) / Current Liabilities	
	Source: Own Elaboration	

2. Debt Ratios

2.1. Definition

To discuss the debt ratios, this document must first introduce the reader to what is a debt, we know that a debt means, in this case, a company owes to an entity a certain amount of money; in this case a company can owe short-term or long-term debt depending the time in which the debt matures. Normally using the debt term is related to a year or less money owed and liability for the ones that exceed this period of time.

According to Loth (n.d.), the approach to the calculation of the financial ratios can be done under three big concepts; the first one is the Liberal, then the Moderate and finally the Conservative. The three are explain next:

Approach	Definition
Liberal	This type of approach tends to establish an analysis that only includes long- term debt, not the current one.
Moderate	Different from the Liberal approach, the Moderate includes certain current aspects, such as the notes payables and the current portion of the long-term debt, which is of course the amount of money that must be paid during the current year.
Conservative	Uses the short-term and long-term debt, in order to have a more general analysis of the entire company's liabilities.

Table 1. Debt Ratios Approaches

2.2. Ratios

2.2.1. Debt Ratio

The Debt Ratio uses the total asset of a company and the total liabilities to know how many times does the company owes in money compared with what is own by it. According to Loth (n.d.) if this ratio gives as a result of the calculation a large percentage the company is more dependent to debts, which means a higher level of leverage to maintain the normal operations.

Debt Ratio = Total Liabilities / Total Assets

Formula 5. Debt Ratio

Another interpretation to the Debt Ratio says that the higher the ratio, the higher the risk of the company, this is an index for potential investors.

2.2.2. Debt to Equity Ratio

This ratio provides another kind of analysis to the leverage situation of a company. This indicator is calculated by using the Total Liabilities of a company and the Shareholder's Equity. The main objective of this ratio is to know how much have the suppliers, lenders and creditors have committed in monetary units contrasts to the amount of monetary units committed by the shareholders, this basically means the real money owe by the company regarding the borrowed money for operations in a regular basis. (Loth, n.d.)

Debt to Equity Ratio = Total Liabilities / Shareholder's Equity

Formula 6. Debt - Equity Ratio

The real answer that this ratio tries to answer is how liability do we owe compared to what we really own. For instance if the result is higher than one, this means that the liabilities are one times the equity.

2.2.3. Capitalization Ratio

To talk about or explain this ratio first we have to discuss what is the capital structure, for purpose of this paper, the capital structure will be the two major components needed to create a company and to maintain the normal activities, this means the Capital given the shareholders and also the long – term debt taken by the business. This ratio is extremely important because it gives a real insight of the company's leverage (knowing the real portion of the capital structure is). (Loth, n.d.)

Capitalization Ratio = Long – Term Debt / (Long – Term Debt + Shareholder's Equity)

Formula 7. Capitalization Ratio

2.2.4. Interest Coverage Ratio

Loth (n.d.) says that this ratio is related to the capability of a company to have sufficient EBIT in order to pay the interest generated due to a loan. The higher the ratio, the more amount of money the business owns to meet interests.

Interest Coverage Ratio = Earnings Before Interest and Taxes (EBIT) / Interest Expenses

Formula 8. Interest Coverage Ratio

Another interpretation of the ratio establishes that if the result is 1.5 or lower than this number, the situation of the company in relation to the interest coverage may be questionable.

2.2.5. Cash Flow To Debt Ratio

Comparison of the company's operating cash flow to its total debt (includes the short – term debt, the portion of the long – term debt that will be paid in the current period and the entire long – term debt that the company holds). The higher the ratio, the better the company's ability to carry all the debt, because this means that the business has more money, liquidity to be more specific, than money owed.

Cash Flow To Debt Ratio = Operating Cash Flow / Total Debt

Formula 9. Cash Flow To Debt Ratio

Debt Ratios Formulas		
Ratio	Formula	
Debt Ratio	Total Liabilities / Total Assets	
Debt to Equity Ratio	Total Liabilities / Shareholder's Equity	
Capitalization Ratio	Long – Term Debt / (Long – Term Debt +Shareholder's Equity)	
Interest Coverage Ratio	Earnings Before Interest and Taxes (EBIT) / Interest Expenses	
Cash Flow to Debt Ratio	Operating Cash Flow / Total Debt	

2.2.6. Summary of Ratios

Source: Own Elaboration

3. **Profitability Ratios**

3.1. Definition

According to Damodaran (2007), the profitability ratios are the one related to the analysis of the generation of value through the company and for the shareholders, in his work Damodaran explains the importance of this ratio that helps an entity to attract potential investors.

3.2. Ratios

3.2.1. ROC or ROE (Return Over Capital or Over Equity)

Equity represents assets less liabilities, or the net investment in the company by equity holders. It is calculated by dividing net profit after tax by equity. (Finch, 2008)

Return On Equity = Net Profit After Tax / Shareholder's Equity

Formula 10. Return On Equity

3.2.2. ROA (Return Over Assets)

This ratio is an attempt to measure the rate of return earned by the company through their operations and is determined by dividing the EBIT by total assets or also instead of using the EBIT, normally companies and analysts use the Net Profit After Taxes, to know how much a company is making due to the assets that possesses.

Return On Assets = EBIT / Total Assets

Formula 11. Return On Assets using the EBIT

Return On Assets = Net Profit After Tax / Total Assets

Formula 12. Return On Assets using the NPAT

3.2.3. Dupont

The Dupont model is related to the measurement of the profitability that a company generates regarding the capital invested by the shareholders, the so called Dupont Model is aims to relate many financial ratios of different kinds in order to explain the impact in the final result, which is the Return On Equity. Figure 1 explains the relationship between many financial ratios and how the ROE gets impacted by the movements in all the accounts. (Groppelli & Eshan, 2000)

We obtain the different mathematic relations between the accounts and the ratios in order to finally obtain the Return on Investment and to analyze the changes that occur in this ratio, depending on the variations of the other results. (Bodie, Kane, & Marcus, 2004)

Dupont: ROE = (Profit Margin)*(Asset Turnover)*(Equity Multiplier) = (Net Profit / Sales)*(Sales/Assets)*(Assets / Equity) = Net Profit /Equity Formula 13. Dupont Formula

3.2.4. Net Margin, Gross Margin and Operative Margin

Finch (2008) talks about the different margins in his paper "Summary of Financial Ratios", according to him these measure are related to the analysis of how much is a company making deducting the investment needed to operate normally. The Margins are explain in table 2, the one that contains the formula and an explanation per ratio.

Margin	Formula	Explanation
Gross Margin	Gross Profit / Sales	Percentage of the sales, that turn into the company's gross margin
EBIT Margin	EBIT / Sales	Percentage of the sales, that turn into the company's EBIT Margin
Net Profit Margin	Net Profit After Tax / Sales	Percentage of the sales that turn into the company's Net Profit Margin, this number provides an idea of how much the organization is generating to make dividends or reinvestment decisions.
		Source: Own Elaboration

3.2.5. Summary of Ratios

The following table show the sumary of the ratios

Profitabilty Ratios Formula	
Ratios	Formula
Return Over Equity	Net Profit After Taxes / Shareholder's Equity
Return Over Assets (using EBIT)	EBIT / Total Assets
Return Over Assets	Net Profit After Taxes / Total Assets
Dupont: ROE	(Profit Margin)*(Asset Turnover)*(Equity Multiplier) = (Net Profit / Sales)*(Sales/Assets)*(Assets / Equity) = Net Profit /Equity
Gross Margin	Gross Profit / Sales

EBIT Margin	EBIT / Sales
Net Profit Margin	Net Profit After Taxes / Sales

Source: Own Elaboration

4. Operating Performance Ratios

4.1. Definition

Also called Activity Ratios are the ones that allows everyone to know how well is the company managing their assets, liabilities and in which level they are obtaining positive results. (Finch, 2008)

4.2. Ratios

4.2.1. Inventory Turnover

According to Finch (2008), the speed with which an organization can sell its stock on average is measured through this ratio, it basically provides a number of periods during a year that specifically mean that all the company's inventory has been sold to a third one. Due to the existence of the storage cost, companies try to have the lowest Inventory Turnover, because it takes less time to sell the entire inventory.

Inventory Turnover = Cost of Goods Sold / Average Stock

Formula 14. Inventory Turnover

4.2.2. Inventory Turnover Period

A variation of the Inventory Turnover that provides the number of days per period to empty the investory.

Inventory Turnover Period = 360 / Inventory Turnover

Formula 15. Inventory Turnover

4.2.3. Receivables Turnover

When companies give credit to its buyers, the liquidity gets affected, in order to maintain the regular activities money given in credit must be converted into actual cash that is why it is important to calculate the number of periods in a year, that a company can exchange their accounts receivables into real liquidity. (Finch, 2008)

Accounts Receivables Turnover = Net Sales Revenue / Average Receivables Balance

Formula 16. Receivables Turnover

4.2.4. Average Collection Period

The amount of days per period to transform receivables into cash and increase the level of liquidity of the company.

Average Collection Period = 360 / Receivables Turnover

Formula 17. Average Collection Period

4.2.5. Payables Turnover

This ratio refers to the time it takes on average for a creditor to be paid. This is calculated by dividing the net sales revenue by the average accounts payables (creditors) balance. (Finch, 2008)

Payables Turnover = Cost of Goods Sold / Average Payables Balance

Formula 18. Payables Turnover

4.2.6. Average Payment Period

As well as the receivables, this ratio provides the number of days a company pays actually, the credit given by suppliers or third ones.

Average Payment Period = 360 / Payables Turnover

Formula 19. Average Payment Period

4.2.7. Asset Turnover

Assets are investments done by companies in order to obtain returns, which are specifically the generation of sales, the asset turnover provides an indicator of how many times a company generates incomes through assets in a year. Normally the fixed assets are the most important kind, when we discuss the sales, that is why this ratio can be calculated using the fixed assets and the total assets of a company. (Finch, 2008)

Fixed Asset Turnover = Sales / Net Fixed Assets

Formula 20. Fixed Asset Turnover

Total Asset Turnover = Sales / Total Assets

Formula 21. Total Asset Turnove

4.2.8. Cash Conversion Cycle or Business Cycle

This metric is related to the amount of time a company needs to do three major things to operate, first the sale of its inventory, the collection of the accounts receivables given to clients and finally the payment of the accounts payable obtained by the suppliers, from these three statements a company turn its operations into money, liquidity. The Business Cycle is the number of days a company a company can benefit from its operations by the cash generated. (Loth, Investopedia, 2010)

Cash Conversion Cycle = DI + DS - DP

Formula 22. Cash Conversion Cycle

Where:

DI: Days of Inventory

DS: Days of Sales (Average days of Collection)

DP: Days Payable (Average days of Payment)

The approach establishes that the shorter the cycle, the more liquid is the company (means that has a better working capital position, to maintain the normal operations). To achieve this, companies must establish strategies to increase the days of payables, which are linked to the amount of time in which it has to pay debts, increase the days of inventory in order to reduce the storage in less periods and to reduce as well the days of sales, in order to collect the money from the clients in a short period of time and maintain a correct level of liquidity. (Urbanic, n.d.)

4.2.9. Summary of Ratios

Operating Performance Ratios		
Ratios Formulas		
Inventory Turnover	Cost of Goods Sold / Average Stock (Inventory)	
Inventory Period	360 / Inventory Turnover	
Receivables Turnover	over Net Sales Revenue / Average Receivables Balance	
Collection Period 360 / Receivables Turnover		
Payables Turnover	Cost of Goods Sold / Average Payables Balance	

Payment Period	360 / Payables Turnover	
Total Assets Turnover	Sales / Total Assets	
Fixed Assets Turnover	Sales / Net Fixed Assets	
Cash Conversion Cycle	Inventory Period + Collection Period – Payment Period	

Source: Own Elaboration

5. Investment Valuation Ratios

5.1. Definition

In order to obtain certainty for making an investment, normally investors apply many different types of analysis to get an opinion for making a decision. One of these many kinds of tools is the investment valuation ratios, this estimate the attractiveness of a potential or existing business to know whether invest or ignore. The other reason for using these ratios is that in certain circumstances the valuation of the company uses overload information generating a deviation from the real value of a company, but by using information given by the market the analysis becomes more confident. (Loth, 2010)

5.2. Ratios

5.2.1. Market Price Over The Book Value Ratio

The comparison between the price of a company in the market represented by the stock's price and the book value per share. The interpretation of this ratio is how much does a company value in the market compared with its initial nominal value of book value, before issuing the stocks. (Loth, 2010)

Price / Book Value Ratio = Stock Market Price Share / Shareholder's Equity Per Share

Formula 23. Market Price to Book Value

5.2.2. Market Price Over The Cash Flow Ratio

This ratio is also part of the potential investment analysis done by investors in order to make a decision, it provides a metric of how much does a stock is valued in the market compared with the cash flow the company generates on a per share bases. (Loth, 2010)

Price / Cash Flow Ratio = Stock Market Price / Operating Cash Flow Per Share

Formula 24. Market Price to Cash Flow Ratio

5.2.3. Price Over Earnings Ratio

The most representative investment valuation ratio, as all kind of ratios this one has many imperfections, but it is commonly used by analysts and valuation companies to obtain an idea of a company's attractiveness to invest. The interpretation is related to the number of times an investor is paying for a company's stock in the market for every monetary unit of a company's earnings. (Loth, 2010)

Price / Earnings Ratio = Stock Market Price Share / Earnings Per Share (EPS)

Formula 25. Market Price to EPS

5.2.4. Price Over Earnings Over Growth ratio

Also known as the PEG Ratio, it provides information related to the under or overpriced situation of a company by using the current market price of the stock and the projected or potential price through the EPS Growth taken from the company's financial statements. (Loth, 2010)

PEG = Price to Earnings Ratio / Earnings Per Share Growth

Formula 26. PEG Formula

The interpretation is explained in the following chart:

PEG's Value	Interpretation
PEG = 1	This means that the market if correctly valuing a company's share in the market in accordance with the projected earnings growth.
PEG > 1	This means that the market if not valuing correctly the stock, because it is given a false growth to the company's earnings, which means that the stock is overvalued and will fall (short position).
PEG < 1	This means that the market is not valuing correctly the stock, because there is a potential growth of the company's earnings, which means that the stock is undervalued.

Source: Own Elaboration

5.2.5. Price Over Sales Ratio

This financial measure refers to the comparison of the market price and the company's sales. As well as the P/E Ratio, this indicator shows how much an investor is paying for a stock, for every dollar generated through sales. (Loth, 2010)

Price over Sales Ratio = Stock Market Price Share / Net Sales or Revenue Per Share

Formula 27. Price over Sales Ratio

5.2.6. Dividend Yield

The dividend yield is calculated by using the company's annual cash dividend per share divided by the current price of the stock in the market. Normally the rate resulted from the calculation must be taken in an annual basis and presented as an expected return for investors. The dividend yield is also a benchmarking index. (Loth, 2010)

Dividend Yield = Annual Dividend Per Share / Stock Price Per Share

Formula 28. Dividend Yield

5.2.7. Enterprise Value Multiple

The form to calculate this ratio is by dividing the enterprise value and the earnings before interest expenses, taxes, depreciation and amortization also called EBITDA. (Loth, 2010)

The measurement of this kind provides information related to know how long it would take an acquisition to earn enough to pay off its costs. (Loth, 2010)

In order to obtain the enterprise value, analysts can use the following formula:

Enterprise Value = Market Capitalization + Debt + Minority Interest - Cash Equivalents

Formula 29. Enterprise Value

The Multiple uses the following value and the EBITDA in the following calculation:

Enterprise Value Multiple = Enterprise Value / EBITDA

Formula 30. Enterprise Value Multiple

5.2.8. Summary of Formulas

Investment Valuation Ratios		
Ratio	Formula	
Market Price to Book Value	Stock Market Price / Shareholder's Equity Per Share	
Market Price Over The Cash Flow	Stock Market Price / Operating Cash Flow Per Share	
Price Over Earnings Ratio	Stock Market Price Per Share / Earnings Per Share	
Price Over Earnings Over Growth Ratio	Price to Earnings Ratio / Earnings Per Share Growth	
Price Over Sales Ratio	Stock Market Price Per Share / Net Sales or Revenue	

Dividend Yield	Annual Dividend Per Share / Stock Price Per Share	
Enterprise Value	Market Capitalization+ Debt + Minority Interests - Cash	
	Equivalents	
Enterprise Value Multiple	Enterprise Value / EBITDA	

Given all the financial ratios, it is necessary to simply the work of the reader that is the main reason of the following table, that show all the financial ratios developed theoretically in this document.

Ratios	Formula
	Liquidity Ratios
Working Capital	Current Assets – Current Liabilities
Acid Test	(Current Assets – Inventory)/ Current Liabilities
Current Ratio	Current Ratio = Current Assets / Current Liabilities
Cash Ratio	Cash Ratio = (Cash Equivalents + Marketable Securities) / Current Liabilities
	Debt Ratios
Debt Ratio	Debt Ratio = Total Liabilities / Total Assets
Debt To Equity Ratio	Debt to Equity Ratio = Total Liabilities / Shareholder's Equity
Capitalization Ratio	Capitalization Ratio = Long – Term Debt / (Long – Term Debt + Shareholder's Equity)
Interest Coverage Ratio	Interest Coverage Ratio = Earnings Before Interest and Taxes (EBIT) / Interest Expenses
Cash Flow to Debt Ratio	Cash Flow To Debt Ratio = Operating Cash Flow / Total Debt
	Profitability
Return Over Equity	Return On Equity = Net Profit After Tax / Equity
Return Over Assets based on EBIT	Return On Assets = EBIT / Total Assets
Return Over Assets	Return On Assets = Net Profit After Tax / Total Assets
Dupont	Dupont: ROE = (Profit Margin)*(Asset Turnover)*(Equity Multiplier) = (Net Profit / Sales)*(Sales/Assets)*(Assets / Equity) = Net Profit /Equity
Gross Margin	Gross Profit / Sales
Operative Margin	EBIT / Sales
Net Margin	Net Profit After Tax / Sales
	Operating Performance Ratios
Inventory Turnover	Inventory Turnover = Cost of Goods Sold / Average Stock
Inventory Turnover Period	Inventory Turnover Period = 360 / Inventory Turnover
Receivables Turnover	Accounts Receivables Turnover = Net Sales Revenue / Average Receivables Balance
Collection Period	Average Collection Period = 360 / Receivables Turnover
Payables Turnover	Payables Turnover = Cost of Goods Sold / Average Payables Balance

Formulas Developed in this Work

Average Payment Period	Average Payment Period = 360 / Payables Turnover
Fixed Assets Turnover	Fixed Asset Turnover = Sales / Net Fixed Assets
Asset Turnover	Total Asset Turnover = Sales / Total Assets
Cash Conversion Cycle	Cash Conversion Cycle = Inventory Days + Collection Period – Payment Period
	Investment Valuation Ratios
Market Price Over Book Value	Price / Book Value Ratio = Stock Market Price / Shareholder's Equity Per Share
Market Price Over Cash Flow	Price / Cash Flow Ratio = Stock Market Price / Operating Cash Flow Per Share
Price Over Earnings Ratio	Price / Earnings Ratio = Stock Market Price / Earnings Per Share (EPS)
Price / Earnings Over Growth Ratio	PEG = Price to Earnings Ratio / Earnings Per Share Growth
Price Over Sales Ratio	Price over Sales Ratio = Stock Market Price / Net Sales or Revenue Per Share
Dividend Yield	Dividend Yield = Annual Dividend Per Share / Stock Price Per Share
Enterprise Value	Enterprise Value = Market Capitalization + Debt + Minority Interest – Less Cash Equivalents
Enterprise Value Multiple	Enterprise Value Multiple = Enterprise Value / EBITDA

Source: Own Elaboration

Analysis of the four Peruvian companies

As stated in the first part of this document an application of all the financial ratios will be done with the information from five Peruvian companies that are currently significant for the country's economy, in order to select this company, the present work analyzed the most important index that trades in the local stock exchange, this analysis is related with the idea that, if certain investor wishes to know information linked with the economy's development of any country, does not matter which one, can analyze the most important index of the country's stock exchange, because it shows in a particular way how the company is doing and how the results are influencing the economy.

This paper selected four from the most important Peruvian companies that trade in the Lima Stock Exchange and have a great relevance for the sector they belong. In order to apply the financial ratios analysis and finally conclude how each company is doing, regarding the results from 2014 and the year 2012 (comparing both values).

The following analysis takes into account the development of all the financial ratios presented in this document in order to define how each company, Alicorp S.A.A., Volcan Compañía Minera S.A.A., Cementos Pacasmayo S.A.A. and Compañía de Minas Buenaventura S.A.A..

These four companies were selected as it is stated in the introduction of this work because of its relevance for the local stock exchange and because of its importance for the Peruvian economy, Cementos Pacasmayo is one of the biggest cement manufacturer and seller of cement in the country, basically related with all kinds of construction projects, Volcan and Buenaventura are one of the oldest mining companies in the company with the best results in

the benchmark and finally Alicorp and Backus & Johnston are two of the largest food and beverages organizations in the market. The relevance of knowing how well are these companies doing in the current is related to the market's conditions through the 2012, 2013 and 2014 years and how each company got influenced by these contexts.

The 2012 to 2014 period was selected due to the volatility in the Peruvian market, different political, economic and social situations have in fact affected the Peruvian economy's results, that is why it is necessary to understand whether this situation generated any kind of financial problem to the companies chosen to be analyzed in the following pages. The following application shows all the financial ratios by each company.

1. Alicorp S.A.A.

Part of the foods, beverages and housing products industry, Alicorp S.A.A. is one of the largest companies in the country related to this sector and one of the most relevant in the Lima Stock Exchange.

Alicorp S.A.	A. Financial Ra	tios						
Ratios	2014	2013	2012	Operating Performance Ratios				
Liqui	ditv Ratios			Inventory Turnover	5.10 times	5.47 times	4.37 times	
Current Ratio	1.17	1.79	1.76	Inventory Period	71.63 days	66.73 days	83.76 days	
Cash Ratio	0.07	0.08	0.39	Receivables Turnover	6.47 times	6.82 times	7.57 times	
Working Capital	394.10	940.30	962.9	Collection Period	56.39 days	53.49 days	48.36 days	
0 1	millions	millions	millions	Payables Turnover	5.61 times	7.04 times	6.63 times	
Acid Test	0.48	0.89	0.98	Payables Period	65.06 days	51.86 days	55.24 days	
De	bt Ratios			Asset Turnover	0.93 times	3.05 times	0.29 times	
Debt Ratio	43.34 %	34.85 %	31.06 %	Fixed Asset Turnover	3.04 times	3.10 times	0.93 times	
Debt to Equity	136.59 %	86.83 %	63.01 %	Business Cycle	62.96 days	68.35 days	76.88 days	
Capitalization	106 %	99 %	43 %	Investmen	t Valuation R	atios		
Interest Coverage	2.61 times	4.63 times	10.80 times	Market Price over Book Value	89.65 times	14.82 times	4.30 times	
Cash Flow to Debt	8.40 %	8.10 %	9.37 %	Price to Earnings	19.40 times	29.31 times	24.17 times	
Profita	bility Ratios			Earnings Per Share	0.02	0.43	0.41	
Return Over Equity	0.77 %	16.51 %	17.48 %	Price to Earnings Growth	214.83	170.19	35.05	
Return Over Assets (using EBIT)	8.34 %	11.19 %	3.10 %	Price over Sales	0.98 times	1.43 times	1.59 times	
Return Over Assets	0.27 %	7.24 %	9.40 %	Dividend Yield	1.69 %	1.32 %	2.29 %	
Dupont	0.77 %	16.51 %	17.48 %	Enterprise Value	8876	9742.2	7907.28	
Net Margin	0.27 %	6.32 %	7.87 %		millions	millions	millions	
Gross Margin	27.93 %	27.44 %	17.26 %	Enterprise Value Multiple	14.93 times	12.75 times	14.10 times	
Operating Margin	9 %	11.33 %	10.92 %					

2. Volcan Compañía Minera S.A.A.

Related to the mining sector, Volcan is a lime extracting and seller type of company with a large and powerful position in the Peruvian market. As well as the lime extraction and selling, the company also works with other minerals and manufactures industrial products.

Volcan Compañía Minera Financial Ratios							
Ratios	2014	2013	2012				
Liquidity Ratios							
Current Ratio	1.40 times	1.72 times	2.58 times				
Cash Ratio	0.34 times	0.63 times	1.42 times				
Working Capital	717.5	1125.9	1724.2				
	millions	millions	millions				
Acid Test	0.48 times	0.88 times	1.68 times				
Deb	t Ratios						
Debt Ratio	31.58 %	28.44 %	28.97 %				
Debt to Equity	63.47 %	56.18 %	55.60 %				
Capitalization	60 %	59 %	61 %				
Interest Coverage	3.22 times	13.08 times	10.44 times				
Cash Flow to Debt	15.28 %	18.98 %	21.70 %				
Profitab	bility Ratios						
Return Over Equity	3.83 %	12.16 %	16.13 %				
Return Over Assets (using EBIT)	9.34 %	24.85 %	25 %				
Return Over Assets	1.92 %	6.24 %	9.54 %				
Dupont	3.83 %	12.16 %	16.13 %				
Net Margin	5.45 %	14.91 %	17.90 %				
Gross Margin	16.94 %	31.94 %	37.49 %				
Operating Margin	9.15 %	23.04 %	30.31 %				

Operating Performance Ratios						
Inventory Turnover	5.67 times	6.97 times	6.81 times			
Inventory Period	64.39 days	52.34 days	53.74 days			
Receivables Turnover	9.33 times	9.13 times	9.75 times			
Collection Period	39.11 days	39.96 days	37.53 days			
Payables Turnover	3.98 times	3.57 times	4.53 times			
Payables Period	91.80 days	102.38 days	80.85 days			
Asset Turnover	0.99 times	1.08 times	1.18 times			
Fixed Asset Turnover	0.47 times	0.39 times	0.25 times			
Business Cycle	11.70 days	-10.08 days	10.41 days			
Investmen	nt Valuation R	atios				
Market Price over Book Value	3.11 times	4.19 times	10.06 times			
Price to Earnings	19.41 times	12.70 times	22.91 times			
Earnings Per Share	0.04	0.15	0.15			
Price to Earnings Growth	-243.93	88.95	91.37			
Price over Sales	1.71 times	2.12 times	4.71 times			
Dividend Yield	1.53 %	1.77 %	1.71 %			
Enterprise Value	6413.13	7034.10	11463.92			
	millions	millions	millions			
Enterprise Value Multiple	8.31 times	7.39 times	8.86 times			

3. Cementos Pacasmayo S.A.A.

The company produces and sells cement and distributes its products (cement blocks and premixed cement), to all of its customers basically related to the building sector.

Cementos Pacasmayo Financial Ratios							
Ratios 2014 2013 2012							
Liquidity Ratios							
Current Ratio 5.17 9 4.75							
Cash Ratio 2.90 6.20 2.064							

Working Capital	834.7	1261.7	673.6					
	millions	millions	Millions					
Acid Test	3.43	6.52	2.87	Operating Performance Ratios				
Det	ot Ratios			Inventory Turnover 2.20 times 2.34 times 2.94 times				
Debt Ratio	27.26 %	26.46 %	9.04 %	Inventory Period	165.97 days	156.10 days	124.28 days	
Debt to Equity	42.67 %	41.01 %	11.37 %	Receivables Turnover	15.89 times	26.76 times	28.20 times	
Capitalization	47 %	48 %	17 %	Collection Period	22.87 days	13.64 days	12.98 days	
Interest Coverage	13.75 times	10.17 times	12.13 times	Payables Turnover	7.26 times	10.81 times	9.50 times	
Cash Flow to Debt	21.55 %	17.35 %	20.39 %	Payables Period	50.30 days	33.75 days	38.51 days	
Profita	bility Ratios			Asset Turnover 0.38 times 0.40 times 0.49 time			0.49 times	
Return Over Equity	9.83 %	8.27 %	11.07 %	Fixed Asset Turnover	0.60 times	0.49 times	0.84 times	
Return Over Assets (using EBIT)	9.27 %	9.41 %	9.67 %	Business Cycle	138.63 days	135.99 days	98.75 days	
Return Over Assets	6.07 %	5.66 %	7.28 %	Investme	nt Valuation R	atios		
Dupont	9.83 %	8.27 %	11.07 %	Market Price over Book Value	1.59 times	1.97 times	2.22 times	
Net Margin	15.52 %	12.55 %	13.59 %	Price to Earnings	16.06 times	23.52 times	24.38 times	
Gross Margin	41.72 %	42.22 %	39.04 %	Earnings Per Share	0.33	0.27	0.28	
Operating Margin	24.19 %	23.63 %	19.71 %	Price to Earnings Growth	115.99	48.06	60	
				Price over Sales	2.48 times	2.98 times	3.31 times	
				Dividend Yield	3.77 %	1.57 %	1.32 %	
				Enterprise Value	3324.21	3489.86	3716.96	
					millions	millions	millions	
				Enterprise Value Multiple	9.1 times	10 times	13.35 times	

4. Compañía de Minas Buenaventura S.A.A.

Mining company that explores extracts and processes gold, silver, zinc and other minerals. Buenaventura has different mines in Peru, an electric factory and an engineering services company. The majority of the extracted minerals are commercialized in the international market, as commodities.

Buenaventura Financial Ratios							
Ratio	2014	2013	2012				

Liquidity Ratios						
Current Ratio	1.27	1.46	2.30			
Cash Ratio	0.17	0.14	0.69			
Working Capital	387.7	480.7	1157.9			
	millions	millions	millions			
Acid Test	0.77	0.84	1.42			
Deb	ot Ratios					
Debt Ratio	9.06 %	5.15 %	4.03 %			
Debt to Equity	11.25 times	6.11 times	4.67 times			
Capitalization	12 %	9 %	7 %			
Interest Coverage	5.44 times	21.75 times	50.89 times			
Cash Flow to Debt	36.22 %	57.44 %	53.77 %			
Profita	bility Ratios					
Return Over Equity	-2.17 %	-2.96 %	19.90 %			
Return Over Assets (using EBIT)	1.26 %	4.57 %	9.50 %			
Return Over Assets	-1.65 %	-2.35 %	16.03 %			
Dupont	-2.17 %	-2.96 %	19.90 %			
Net Margin	-6.53 %	-8.52 %	43.79 %			
Gross Margin	47.26 %	50.20 %	47.54 %			
Operating Margin	5.29 %	17.09 %	26.98 %			

Operating Performance Ratios					
Inventory Turnover	3.77 times	3.70 times	5.25 times		
Inventory Period	96.81 days	98.57 days	69.65 days		
Receivables Turnover	4.29 times	4.87 times	7.29 times		
Collection Period	84.99 days	74.97 days	50.21 days		
Payables Turnover	2.18 times	2.64 times	4.88 times		
Payables Period	167.14	138.34	75.01		
	days	days	days		
Asset Turnover	0.24 times	0.27 times	1.42 times		
Fixed Asset Turnover	0.65 times	0.80 times	1.42 times		
Business Cycle	14.66 days	35.20 days	44.85 days		
Investmen	t Valuation Ra	atios			
Market Price over Book Value	0.78 times	1.44 times	1.76 times		
Price to Earnings	0 times	8.50 times	11.80 times		
Earnings Per Share	-0.30	-0.42	0.54		
Price to Earnings Growth	0	121.33	10.78		
Price over Sales	2.30 times	2.26 times	5.78 times		
Dividend Yield	0.31 %	2.67 %	1.72 %		
Enterprise Value	25872.11	9600.54	10601.19		
	millions	millions	millions		
Enterprise Value Multiple	16.48 times	8 times	12.37 times		

Interpretation by company

1. Alicorp S.A.A.

The liquidty shown by Alicorp is currently over 1, which means that in terms of the Current Ratio they are not having any problem in covering its short term liabilities, the problems comes to notice when the Acid Test shows a 50 % decrease in the previous figure, which means that the inventory of the company is having certain managing problems, the cash ratio is also at a very poor level. The debt ratios show a very high Debt to Equity figure, which is currently at 1.36 times Alicorp's equity and a reduction in the interest coverage.

The profitability of the company shows an unattractive company, the ROE is currently at 0.77 %, which is lower than the 2013, 16.51 %, in terms of internal value generation, the ROA is currently at 0.27 %, also lower than the 2013, 7.24 %, the last Net Margin published by the company is at 0.27 %, very much lower than the 6.32 % (2013) and the 7.87 % (2012). The Cash Conversion Cycle or also called Business Cycle is at 62.96, which is good and means that the company takes less than three months to transform its inventory, receivable and payables into real liquidity. Finally the Investment Valuation Ratios show that the company is currently trading at 89.65 times its Book Value per share, the PEG is extremely high (over valuated share, with false growth expectation), the PER shows an unattractive recovery period and the current Price to Sales Ratio is at 0.98 times, a very lame level for a company as Alicorp.

2. Volcan Compañía Minera S.A.A.

Volcan is one the most important mining companies in Peru, when analyzing the liquidity of the company, it shows that the current ratio is currently at 1.40 times, which means that the company has near 1.50 times of current assets, to cover its less than a year debt service, a very solid Working Capital, but a less than 0.50 soles per debt unit of Acid Test, this means that the company has a lot of inventory among its current assets, this shows that the company might have a future and potential liquidity problem.

The management of the debt done by Volcan shows a small dependence for debt, this is normal because of its core business (need to cover big investments at a short period of time as normally a mining company does). In terms of operating performance ratios, the results show that the company has a Cash Conversion Cycle of 11.70 days, which is good because they are terminating all its operations in less than a month, the company has shown good collection, inventory and payment policies in order to have a sufficiently good operations management. The stock is showing a very low performance with a Market Price to Book Value of 3.11 times, less than the 4.19 times in 2013 and the 10.06 times in 2012, this means a negative trend for this ratio, in terms of PEG, the company is having a very unattractive recovery period (19.41 times in 2014), overall this investigation can conclude that the market value of company is currently decreasing and it might continue like this, throughout all 2015.

3. Cementos Pacasmayo S.A.A.

In terms of liquidity Cementos Pacasmayo is a company that has an important current ratio, the value is nearly 5 times the short term debt, which means that the company does not have any problem in covering less than a year liabilities, they also present a positive Working Capital and a good Acid Test, the values are in average over 4 times the less than a year liabilities, but it is important to notice the liquidity decrease they had form 2013 to 2014, the 4 indicators are lower than the 2013 value. The debt levels are correct and there is no dependence in terms of asking money to suppliers and financial institutions, the debt to equity is nearly 3, but in terms of

capitalization the company does not have a large debt, the interest are 13 % of the EBIT and can be covered without any problem. The profitability of the company is very good; currently the company is one of the most attractive to invest in, the ROE is at 9.83 % and the Net Margin at 15.52 %, both indicate good and sufficient results for potential investors.

The CCC of Cementos Pacasmayo is currently less than 180 days, which means that this company is not having a problem managing receivables, payments and inventory because they close its entire operation in less than half a year (inventory days at 166 days, collection days at 23 days and payments at 50 days), the three periods show that the company is currently receiving liquidity, then delivers the products and pays its debts. Finally, the stock is doing very well in the market, the company pays dividends that yield at 0.5 %, which is not that profitable, but the stock has a good performance, the PER is low which means a lower recovery period, finally the EV/EBIT shows a sufficient performance level in the market compared with the operational cash flows of Cementos Pacasmayo.

4. Compañía de Minas Buenaventura S.A.A.

This company is also one of the most important in the mining sector, that was one of the many reasons it was chosen for this paper, Buenaventura is currently showing a regular level of liquidity, this is reflected in the Current Ratio, which is slightly above one, but in terms of the Acid Test, the company is lower than one, this of course means that the Buenaventura is not having a good level of liquidity in short terms when the inventory they hold is removed from the formula of calculation, the company must work better into more effective liquidity policies. The debt level of the company is extremely high, as ten times the equity of Buenaventura; this is a major problem in terms of credit future problems, Buenaventura is currently holding a 11.25 times debt to equity ratio, which means that the real money owned by the company is very low and Buenaventura has a large dependence for external resources.

The current profitability of the company is negative, which means that the attractiveness of the mining company is lower due to the reduction of the value generated by them, in terms of ROE the results is -2.17 % and the Net Margin shows a -6.53 % results for the 2014 period, this are highly related to the performance of the company and also related to the fact that the debt service is quiet expensive. The CCC or Business Cycle of Buenaventura is very low, the average is nearly 20 days, and this shows that the company does not need even a month to close all the operations to transform receivables, payments and inventory into a net amount of cash, the inventory days are 100 days, which means that the company needs less than half a year to empty all of its storages, the collection period is 85 days much lower than the 167 payment days, the three indicators show that the company receive first liquidity, then it sells everything and to terminate its cycle pays its debts. Buenaventura's stock has done in terms of trading quite good, but the investment ratios shows that the company is currently losing money and not paying a sufficient or positive EPS, which means that the PER is not applicable and there is not be information about the recovery period of the company, the indicators show a lack performance for the future years of Buenaventura's stock.

Conclusions of the investigation

Among the many financial ways to analyze a company, the use of financial ratios is one the most important tool in order to evaluate the financial situation of a customer, supplier or potential project.

This paper has taken the formulas of many authors and calculated the many financial ratios from four different companies from the Peruvian market, we can conclude that this, also called, indexes are extremely important in order to know how well is a company doing in terms of many aspects, such as the categories of the financial ratios.

In terms of liquidity the different results provide information in order to define whether a company has liquidity to face future cash needs or if the results are generating enough money to cover short term obligations, in terms of debt the financial ratios measure in a very important way the influence of borrowing money in the different aspects of the enterprise, how well can the results cover this obligations and if a company has an unhealthy dependence of debt to carry on with its normal or regular operations.

The financial ratios are also used in other situations, for instance are a valid way of deciding if a company that is trading in the market, is doing well or not, just to see how the market perceives its development, measure like the PER, the PEG, dividend Yield and the Enterprise Value Multiple give guidance to potential investors to see is their profits are going up, down or when are they going to obtain back their initial investment.

Another aspect to discuss in this conclusions is the importance of the Cash Conversion Cycle, a measure that explains the amount of time a company needs to cash their entire operation, this meaning that the receivables are all collected, the debts are all paid and the inventory is empty, a simple number that states perfectly to know how well is a company managing this three types of operations (collection policies, payment policies and inventory management).

It is also important to conclude that the financial ratios are of course important in order to have a more detailed observation of the company's results and development through an entire period of a set of periods, but it is important to benchmark them, because it is true that the theory says that certain ratio can be evaluated comparing it with for instance a number, but the real question is, for company's managers and owners as well for the future investors, how well is the company performing compared to the industry or other companies. The need to benchmark these results with the industry average of perhaps with the ratios from the direct competitor are recommendations given by important authors and this paper is not going to do the opposite, this investigation has not provided any kind of benchmark, but it is crucial to have an optimum financial ratios analysis to do it so, for any strategic decision to be made in the future.

Finally, when investors have given their money to the company, normally they are going to expect earnings or also called profits, if the founders of the company want to check how well is the company doing in order to satisfy this need of them, the profitability ratios are the ones that will provide information about the value generation for the company's owners. The indexes obtained from mixing the results stated in the P&L Statement and the Financial Situation Statement are simple to analyze and to define if a company is doing well or not in terms of financial attractiveness (for the current owners and the potential ones).

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Annexes: Financial Information used in the calculation of the ratios (vertical analysis included)

- 1. Alicorp S.A.A
- 1.1. Financial Situation Statement

Alicorp SAA (ALICORC1 PE) - Standardized							
In Millions of PEN except	FY 2012	FY 2013	FY 2014				
Assets							
+ Cash & Near Cash Items	496.1	92.9	122.4				
Assets %	11.6	1.6	1.8				
+ Short-Term Investments	0.4	4.7	31.1				
Assets %	0.0	0.1	0.5				
+ Accounts & Notes Receivable	746.6	959.8	982.0				
Assets %	17.4	16.3	14.5				
+ Inventories	754.3	790.3	987.5				
Assets %	17.6	13.4	14.6				
+ Other Current Assets	231.9	284.1	616.5				
Assets %	5.4	4.8	9.1				

Total Current Assets	2,229.2	2,131.7	2,739.5
Assets %	52.1	36.2	40.4
+ LT Investments & LT Receivables	196.9	271.6	327.6
Assets %	4.6	4.6	4.8
+ Net Fixed Assets	1,326.8	1,876.9	2,062.4
Assets %	31.0	31.8	30.4
+ Gross Fixed Assets	2,312.9	3,004.9	
Assets %	54.1	51.0	
- Accumulated Depreciation	986.1	1,127.9	
Assets %	23.0	19.1	
+ Other Long-Term Assets	525.7	1,614.0	1,653.8
Assets %	12.3	27.4	24.4
Total Long-Term Assets	2,049.4	3,762.6	4,043.8
Assets %	47.9	63.8	59.6
Total Assets	4,278.7	5,894.3	6,783.3
Assets %	100.0	100.0	100.0

Liabilities & Shareholders' Equity			
+ Accounts Payable	531.7	679.0	1,005.9
Total Liab & Equity %	12.4	11.5	14.8
+ Short-Term Borrowings	581.1	292.2	1,125.2
Total Liab & Equity %	13.6	5.0	16.6
+ Other Short-Term Liabilities	153.5	220.3	214.3
Total Liab & Equity %	3.6	3.7	3.2
Total Current Liabilities	1,266.3	1,191.4	2,345.4
Total Liab & Equity %	29.6	20.2	34.6
+ Long-Term Borrowings	747.7	1,762.2	1,814.8
Total Liab & Equity %	17.5	29.9	26.8
+ Other Long-Term Liabilities	155.8	574.6	470.6
Total Liab & Equity %	3.6	9.7	6.9
Total Long-Term Liabilities	903.5	2,336.8	2,285.4
Total Liab & Equity %	21.1	39.6	33.7
Total Liabilities	2,169.8	3,528.3	4,630.8
	1	1	1

50.7	59.9	68.3
0.0	0.0	0.0
0.0	0.0	0.0
6.8	8.8	13.4
0.2	0.1	0.2
854.6	854.6	854.6
20.0	14.5	12.6
1,247.5	1,502.6	1,284.5
29.2	25.5	18.9
2,108.9	2,366.0	2,152.4
49.3	40.1	31.7
4,278.7	5,894.3	6,783.3
100.0	100.0	100.0
	50.7 0.0 0.0 6.8 0.2 854.6 20.0 1,247.5 29.2 2,108.9 49.3 4,278.7 100.0	50.7 59.9 0.0 0.0 0.0 0.0 6.8 8.8 0.2 0.1 854.6 854.6 20.0 14.5 1,247.5 1,502.6 29.2 25.5 2,108.9 2,366.0 49.3 40.1 4,278.7 5,894.3 100.0 100.0

Source: Adapted from Bloomberg

1.2. Profit and Loss Statement

Alicorp SAA (ALICORC1 PE)				
In Millions of PEN	FY 2012	FY 2013	FY 2014	
Revenue	4,473.7	5,822.0	6,284.7	
Revenue %	100.0	100.0	100.0	
- Cost of Revenue	3,254.4	4,224.3	4,529.3	
Revenue %	72.7	72.6	72.1	
Gross Profit	1,219.3	1,597.7	1,755.4	
Revenue %	27.3	27.4	27.9	
+ Other Operating Income	7.4	69.9	35.5	
Revenue %	0.2	1.2	0.6	
- Operating Expenses	738.1	1,008.0	1,225.3	
Revenue %	16.5	17.3	19.5	

Operating Income	488.7	659.6	565.6
Revenue %	10.9	11.3	9.0
- Interest Expense	45.2	142.4	216.6
Revenue %	1.0	2.4	3.4
- Foreign Exchange Losses (Gains)	-26.3	121.5	81.3
Revenue %	-0.6	2.1	1.3
- Net Non-Operating Losses (Gains)	9.8	-32.9	224.2
Revenue %	0.2	-0.6	3.6

- Foreign Exchange Losses (Gains)	-26.3	121.5	81.3
Revenue %	-0.6	2.1	1.3
- Net Non-Operating Losses (Gains)	9.8	-32.9	224.2
Revenue %	0.2	-0.6	3.6
Pretax Income	460.0	428.6	43.5
Revenue %	10.3	7.4	0.7
- Income Tax Expense	149.8	123.2	24.1
Revenue %	3.3	2.1	0.4
Revenue %			
- L(G) on inflation			
Revenue %			
Income Before XO Items	310.2	305.4	19.4
Revenue %	6.9	5.2	0.3
- Extraordinary Loss Net of Tax	-41.2	-63.5	0.5
Revenue %	-0.9	-1.1	0.0
- Minority Interests	-0.8	0.8	1.6
Revenue %	0.0	0.0	0.0
Net Income	352.2	368.1	17.3
Revenue %	7.9	6.3	0.3
- Total Cash Preferred Dividends	0.0	0.0	0.0

Net Inc Avail to Common Shareholders	352.2	368.1	17.3
Abnormal Losses (Gains)	0.0	0.0	256.9
Tax Effect on Abnormal Items	0.0	0.0	-77.1
Normalized Income	311.1	320.8	197.6
Basic EPS Before Abnormal Items	0.36	0.36	0.23
Basic EPS Before XO Items	0.36	0.36	0.02
Basic EPS	0.41	0.43	0.02
Basic Weighted Avg Shares	854.6	854.6	854.6
Diluted EPS Before Abnormal Items	0.36	0.36	0.23
Diluted EPS Before XO Items	0.36	0.36	0.02
Diluted EPS	0.41	0.43	0.02

Source: Adapted from Bloomberg

2. Volcan Compañía Minera

2.1. Financial Situation Statement

Volcan Cia Minera SAA (VOLCABC1 PE)				
In Millions of PEN	FY 2012	FY 2013	FY 2014	
Assets				
+ Cash & Near Cash Items	1,467.3	754.0	519.7	
Assets %	21.7	9.3	5.8	
+ Short-Term Investments	76.7	231.6	96.9	
Assets %	1.1	2.8	1.1	
+ Accounts & Notes Receivable	292.8	391.3	248.7	
Assets %	4.3	4.8	2.8	
+ Inventories	303.1	302.7	587.9	
Assets %	4.5	3.7	6.6	
+ Other Current Assets	674.6	1,017.1	1,076.2	
Assets %	10.0	12.5	12.0	
Total Current Assets	2,814.6	2,696.7	2,529.4	

Assets %	41.7	33.1	28.3
+ LT Investments & LT Receivables	103.1	50.8	0.3
Assets %	1.5	0.6	0.0
+ Net Fixed Assets	1,686.9	2,880.7	3,713.2
Assets %	25.0	35.4	41.6
+ Gross Fixed Assets	2,886.8	4,326.1	5,426.3
Assets %	42.8	53.1	60.7
- Accumulated Depreciation	1,199.9	1,445.4	1,713.1
Assets %	17.8	17.7	19.2
+ Other Long-Term Assets	2,142.3	2,520.7	2,689.8
Assets %	31.8	30.9	30.1

Total Long-Term Assets	3,932.2	5,452.2	6,403.3
Assets %	58.3	66.9	71.7
Total Assets	6,746.8	8,148.8	8,932.7
Assets %	100.0	100.0	100.0
Liabilities & Shareholders' Equity			
+ Accounts Payable	476.5	703.1	682.1
Total Liab & Equity %	7.1	8.6	7.6
+ Short-Term Borrowings	388.9	588.2	936.0
Total Liab & Equity %	5.8	7.2	10.5
+ Other Short-Term Liabilities	225.0	279.4	193.9
Total Liab & Equity %	3.3	3.4	2.2
Total Current Liabilities	1,090.4	1,570.8	1,811.9
Total Liab & Equity %	16.2	19.3	20.3
+ Long-Term Borrowings	1,565.3	1,729.3	1,884.6
Total Liab & Equity %	23.2	21.2	21.1
+ Other Long-Term Liabilities	576.5	723.3	792.1
Total Liab & Equity %	8.5	8.9	8.9
Total Long-Term Liabilities	2,141.8	2,452.6	2,676.7
Total Liab & Equity %	31.7	30.1	30.0
Total Liabilities	3,232.2	4,023.4	4,488.7

Total Liab & Equity %	47.9	49.4	50.2
+ Total Preferred Equity	0.0	0.0	0.0
Total Liab & Equity %	0.0	0.0	0.0
+ Minority Interest	0.0	0.0	0.0
Total Liab & Equity %	0.0	0.0	0.0
+ Share Capital & APIC	3,274.3	3,993.0	4,565.4
Total Liab & Equity %	48.5	49.0	51.1
+ Retained Earnings & Other Equity	240.4	132.4	-121.3
Total Liab & Equity %	3.6	1.6	-1.4
Total Equity	3,514.6	4,125.5	4,444.1
Total Liab & Equity %	52.1	50.6	49.8
Total Liabilities & Equity	6,746.8	8,148.8	8,932.7
Total Liab & Equity %	100.0	100.0	100.0

Source: Adapted from Bloomberg

2.2. Profit and Loss Statement

Volcan Cia Minera SAA (VOLCABC1 PE)				
In Millions of PEN	FY 2012	FY 2013	FY 2014	
Revenue	3,107.8	3,143.2	2,959.6	
Revenue %	100.0	100.0	100.0	
- Cost of Revenue	1,942.6	2,139.3	2,458.1	
Revenue %	62.5	68.1	83.1	
Gross Profit	1,165.3	1,003.9	501.4	
Revenue %	37.5	31.9	16.9	
+ Other Operating Income	171.8	150.4	528.1	
Revenue %	5.5	4.8	17.8	
- Operating Expenses	395.1	430.0	758.7	
Revenue %	12.7	13.7	25.6	

Operating Income	942.0	724.2	270.8
Revenue %	30.3	23.0	9.2
- Interest Expense	90.3	55.4	84.2
Revenue %	2.9	1.8	2.8
- Foreign Exchange Losses (Gains)	3.2	2.2	-6.1
Revenue %	0.1	0.1	-0.2
- Net Non-Operating Losses (Gains)	-26.3	-24.8	-19.0
Revenue %	-0.8	-0.8	-0.6
Pretax Income	874.8	691.5	211.7
Revenue %	28.1	22.0	7.2
- Income Tax Expense	318.4	222.9	50.3
Revenue %	10.2	7.1	1.7
Revenue %			
- L(G) on inflation			
Revenue %			

Income Before XO Items	556.3	468.6	161.3
Revenue %	17.9	14.9	5.5
- Extraordinary Loss Net of Tax	0.0	0.0	0.0
Revenue %	0.0	0.0	0.0
- Minority Interests	0.0	0.0	0.0
Revenue %	0.0	0.0	0.0
Net Income	556.3	468.6	161.3
Revenue %	17.9	14.9	5.5
- Total Cash Preferred Dividends	0.0	0.0	0.0
Net Inc Avail to Common Shareholders	556.3	468.6	161.3
Abnormal Losses (Gains)	0.0	0.0	0.0
Tax Effect on Abnormal Items	0.0	0.0	0.0
Normalized Income	556.3	468.6	161.3
Basic EPS Before Abnormal Items	0.15	0.15	0.04
Basic EPS Before XO Items	0.15	0.15	0.04
Basic EPS	0.15	0.15	0.04
Basic Weighted Avg Shares	3,803.4	3,179.4	3,865.9
Diluted EPS Before Abnormal Items	0.15	0.15	0.04
Diluted EPS Before XO Items	0.15	0.15	0.04
Diluted EPS	0.15	0.15	0.04

Source: Adapted from Bloomberg

3. Cementos Pacasmayo S.A.A.

3.1. Financial Situation Statement

Cementos Pacasmayo SAA (CPACASC1 PE)							
In Millions of PEN FY 2012 FY 2013 FY 2014							
Assets							
+ Cash & Near Cash Items	69.8	977.0	580.5				
Assets %	2.9	31.4	17.9				
+ Short-Term Investments	404.0	0.0	0.0				
Assets %	16.9	0.0	0.0				
+ Accounts & Notes Receivable	41.2	51.4	104.9				
Assets %	1.7	1.7	3.2				
+ Inventories	278.1	334.5	324.1				
Assets %	11.7	10.7	10.0				
+ Other Current Assets	60.3	56.5	25.3				
Assets %	2.5	1.8	0.8				
Total Current Assets	853.4	1,419.4	1,034.8				

Assets %	35.8	45.6	31.9
+ LT Investments & LT Receivables	34.9	36.1	13.0
Assets %	1.5	1.2	0.4
+ Net Fixed Assets	1,394.8	1,537.1	2,061.0
Assets %	58.5	49.4	63.6
+ Gross Fixed Assets	1,744.0	1,941.3	2,528.9
Assets %	73.2	62.3	78.0
- Accumulated Depreciation	349.1	404.2	468.0
Assets %	14.6	13.0	14.4
+ Other Long-Term Assets	100.2	122.0	132.1
Assets %	4.2	3.9	4.1
Total Long-Term Assets	1,529.9	1,695.2	2,206.1
Assets %	64.2	54.4	68.1
Total Assets	2,383.3	3,114.5	3,240.9
Assets %	100.0	100.0	100.0

Liabilities & Shareholders' Equity			
+ Accounts Payable	80.3	62.6	134.1
Total Liab & Equity %	3.4	2.0	4.1
+ Short-Term Borrowings	22.9	0.0	0.0
Total Liab & Equity %	1.0	0.0	0.0
+ Other Short-Term Liabilities	76.6	95.0	66.0
Total Liab & Equity %	3.2	3.1	2.0
Total Current Liabilities	179.8	157.7	200.1
Total Liab & Equity %	7.5	5.1	6.2
+ Long-Term Borrowings	192.6	824.0	883.6
Total Liab & Equity %	8.1	26.5	27.3
+ Other Long-Term Liabilities	116.9	123.4	86.5
Total Liab & Equity %	4.9	4.0	2.7
Total Long-Term Liabilities	309.5	947.4	970.1
Total Liab & Equity %	13.0	30.4	29.9
Total Liabilities	489.2	1,105.1	1,170.2

Total Liab & Equity %	20.5	35.5	36.1		
+ Total Preferred Equity	0.0	0.0	0.0		
Total Liab & Equity %	0.0	0.0	0.0		
+ Minority Interest	60.9	78.6	78.1		
Total Liab & Equity %	2.6	2.5	2.4		
+ Share Capital & APIC	1,140.4	1,138.3	1,135.8		
Total Liab & Equity %	47.9	36.5	35.0		
+ Retained Earnings & Other Equity	692.8	792.6	856.8		
Total Liab & Equity %	29.1	25.4	26.4		
Total Equity	1,894.1	2,009.5	2,070.7		
Total Liab & Equity %	79.5	64.5	63.9		
Total Liabilities & Equity	2,383.3	3,114.5	3,240.9		
Total Liab & Equity %	100.0	100.0	100.0		
Source: Adapted from Bloomberg					

3.2. Profit and Loss Statement

Cementos Pacasmayo SAA (CPACASC1 PE)						
In Millions of PEN	FY 2012	FY 2013	FY 2014			
Revenue	1,169.8	1,239.7	1,242.6			
Revenue %	100.0	100.0	100.0			
- Cost of Revenue	713.1	716.2	724.1			
Revenue %	61.0	57.8	58.3			
Gross Profit	456.8	523.4	518.4			
Revenue %	39.0	42.2	41.7			
+ Other Operating Income	7.7	8.3	10.5			
Revenue %	0.7	0.7	0.8			
- Operating Expenses	233.9	238.7	228.4			
Revenue %	20.0	19.3	18.4			

Operating Income	230.5	293.0	300.5
Revenue %	19.7	23.6	24.2
- Interest Expense	23.0	34.3	26.6
Revenue %	2.0	2.8	2.1
- Foreign Exchange Losses (Gains)	0.7	48.4	14.8
Revenue %	0.1	3.9	1.2
- Net Non-Operating Losses (Gains)	-22.5	-24.4	-7.1
Revenue %	-1.9	-2.0	-0.6
Pretax Income	229.3	234.7	266.3
Revenue %	19.6	18.9	21.4
- Income Tax Expense	73.7	82.4	77.5
Revenue %	6.3	6.6	6.2
Revenue %			
- L(G) on inflation			
Revenue %			

Income Before XO Items	155.6	152.3	188.8
Revenue %	13.3	12.3	15.2
- Extraordinary Loss Net of Tax	0.0	0.0	0.0
Revenue %	0.0	0.0	0.0
- Minority Interests	-3.4	-3.4	-4.0
Revenue %	-0.3	-0.3	-0.3
Net Income	159.0	155.6	192.8
Revenue %	13.6	12.6	15.5
- Total Cash Preferred Dividends	0.0	0.0	0.0
Net Inc Avail to Common Shareholders	159.0	155.6	192.8
Abnormal Losses (Gains)		0.0	-3.7
Tax Effect on Abnormal Items			1.1

Normalized Income	159.0	155.6	190.2
Basic EPS Before Abnormal Items	0.28	0.27	0.33
Basic EPS Before XO Items	0.28	0.27	0.33
Basic EPS	0.28	0.27	0.33
Basic Weighted Avg Shares	570.1	582.0	582.0
Diluted EPS Before Abnormal Items	0.28	0.27	0.33
Diluted EPS Before XO Items	0.28	0.27	0.33
Diluted EPS	0.28	0.27	0.33

Source: Adapted from Bloomberg

4. Compañía de Minas Buenaventura S.A.A.

4.1. Financial Situation Statement

Cia de Minas Buenaventura SAA (BUENAVC1 PE)Total Current Assets2,051.31,515.31,798.6Assets %17.511.912.9

In Millions of PEN	FY 2012	FY 2013	FY 2014	+ LT Investments & LT Receivabl
Assets				Assets %
+ Cash & Near Cash Items	476.6	143.4	234.0	+ Net Fixed Assets
Assets %	4.1	1.1	1.7	Assets %
+ Short-Term Investments	139.1		11.0	+ Gross Fixed Assets
Assets %	1.2		0.1	Assets %
+ Accounts & Notes Receivable	654.5	729.9	839.3	- Accumulated Depreciation
Assets %	5.6	5.7	6.0	Assets %
+ Inventories	416.2	491.4	447.9	+ Other Long-Term Assets
Assets %	3.6	3.9	3.2	Assets %
+ Other Current Assets	364.9	150.5	277.4	Total Long-Term Assets
Assets %	3.1	1.2	2.0	Assets %
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+ LT Investments & LT Receivables		78.5	112.8
Assets %		0.6	0.8
+ Net Fixed Assets	2,895.2	4,238.3	5,112.9
Assets %	24.7	33.3	36.7
+ Gross Fixed Assets	5,068.7	7,089.4	8,176.3
Assets %	43.3	55.7	58.7
- Accumulated Depreciation	2,173.4	2,851.1	3,063.4
Assets %	18.6	22.4	22.0
+ Other Long-Term Assets	6,766.0	6,892.0	6,901.3
Assets %	57.8	54.2	49.6
Total Long-Term Assets	9,661.2	11,208.8	12,127.1
Assets %	82.5	88.1	87.1
Total Assets	11,712.5	12,724.1	13,925.7
Assets %	100.0	100.0	100.0

Liabilities & Shareholders' Equity			
+ Accounts Payable	509.4	798.5	757.0
Total Liab & Equity %	4.3	6.3	5.4

Total Liab & Equity %	13.6	15.6	19.5
+ Total Preferred Equity	0.0	0.0	0.0
Total Liab & Equity %	0.0	0.0	0.0

+ Short-Term Borrowings	29.7	31.8	327.7
Total Liab & Equity %	0.3	0.2	2.4
+ Other Short-Term Liabilities	354.4	204.3	326.1
Total Liab & Equity %	3.0	1.6	2.3
Total Current Liabilities	893.4	1,034.6	1,410.9
Total Liab & Equity %	7.6	8.1	10.1
+ Long-Term Borrowings	442.8	623.7	934.0
Total Liab & Equity %	3.8	4.9	6.7
+ Other Long-Term Liabilities	257.2	331.7	367.9
Total Liab & Equity %	2.2	2.6	2.6
Total Long-Term Liabilities	700.1	955.4	1,301.8
Total Liab & Equity %	6.0	7.5	9.3
Total Liabilities	1,593.4	1,990.0	2,712.7

+ Minority Interest	669.6	813.9	888.2
Total Liab & Equity %	5.7	6.4	6.4
+ Share Capital & APIC	2,479.5	2,715.5	2,893.9
Total Liab & Equity %	21.2	21.3	20.8
+ Retained Earnings & Other Equity	6,970.0	7,204.8	7,430.9
Total Liab & Equity %	59.5	56.6	53.4
Total Equity	10,119.1	10,734.1	11,213.0
Total Liab & Equity %	86.4	84.4	80.5
Total Liabilities & Equity	11,712.5	12,724.1	13,925.7
Total Liab & Equity %	100.0	100.0	100.0

Source: Adapted from Bloomberg

Profit and Loss Statement

Cia de Minas Buenaventura SAA (BUENAVC1 PE)

Operating Income	1,112.5	581.8	174.9	
Revenue %	27.0	17.1	5.3	

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4.2.

In Millions of PEN	FY 2012	FY 2013	FY 2014
Revenue	4,123.5	3,404.8	3,308.3
Revenue %	100.0	100.0	100.0
- Cost of Revenue	2,163.1	1,695.6	1,744.9
Revenue %	52.5	49.8	52.7
Gross Profit	1,960.4	1,709.2	1,563.4
Revenue %	47.5	50.2	47.3
+ Other Operating Income	43.7		38.8
Revenue %	1.1		1.2
- Operating Expenses	891.6	1,127.4	1,427.3
Revenue %	21.6	33.1	43.1

- Interest Expense	21.9	26.7	32.1
Revenue %	0.5	0.8	1.0
- Foreign Exchange Losses (Gains)	-4.5	19.4	24.0
Revenue %	-0.1	0.6	0.7
- Net Non-Operating Losses (Gains)	-1,239.8	290.6	18.0
Revenue %	-30.1	8.5	0.5
Pretax Income	2,335.0	245.0	100.8
Revenue %	56.6	7.2	3.0
- Income Tax Expense	376.1	233.8	187.4
Revenue %	9.1	6.9	5.7
Revenue %			
- L(G) on inflation			
Revenue %			
Income Before XO Items	1,959.0	11.2	-86.7
Revenue %	47.5	0.3	-2.6
1			

- Extraordinary Loss Net of Tax	0.0	226.7	88.3
Revenue %	0.0	6.7	2.7
- Minority Interests	153.2	74.4	41.0

Revenue %	3.7	2.2	1.2
Net Income	1,805.7	-289.9	-216.0
Revenue %	43.8	-8.5	-6.5
- Total Cash Preferred Dividends	0.0	0.0	0.0
Net Inc Avail to Common Shareholders	1,805.7	-289.9	-216.0
Abnormal Losses (Gains)		0.0	0.0
Tax Effect on Abnormal Items		0.0	0.0
Normalized Income	1,805.7	-63.2	-127.6
Basic EPS Before Abnormal Items	7.10	-0.25	-0.50
Basic EPS Before XO Items	7.09	-0.25	-0.50
Basic EPS	7.09	-1.14	-0.85
Basic Weighted Avg Shares	254.2	254.2	254.2
Diluted EPS Before Abnormal Items	7.10	-0.25	-0.50
Diluted EPS Before XO Items	7.09	-0.25	-0.50
Diluted EPS	7.09	-1.14	-0.85
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Source: Adapted from Bloomberg