

Cross Sectional Analysis of Member Stocks of the Mining and Oil Sector of the Philippine Stock Exchange: Prospect for Investment Management

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ABSTRACT

Investment is a prevalent topic among the minds of businessmen and its related fields. The undertaking itself is easy but the basket on where to place the eggs is an entirely different story. The Philippines, with its economy nicknamed a ‘tiger cub’, has numerous growing investment opportunities in different sectors. However, with regards to consideration among the growing industries, the Mining and Oil sector seems to be unbefitting for a venture. Bearing in mind the slow growth and the undesirable image of the industry regarding regulations, environmental, and economic impact, Mining and Oil sector is usually at the bottom part of the list, if not on the list at all.

In this paper, the researchers conducted a study of the financial data of selected Mining and Oil companies in the Philippines, noting how external factors affect these data. It aims to examine the viability of investment and thus help the reader to weigh his options in the given mining and oil companies if financial assets are taken into consideration

Keywords: investment, Philippine stock exchange, mining, financial, viability

INTRODUCTION

The Philippines is the world’s biggest supplier of nickel ore, among the top producers of copper and gold, and the fifth most mineral-rich country in the world for gold, nickel, copper, and chromite (Quintans, 2017). Despite its generally negative connotation in the language of risks and returns, mining is one asset of the Philippines that should be discussed more in a positive light. Being a country blessed with natural resources - with about 30 million hectares of areas deemed as possible sites for metallic minerals, and about 9 million hectares of land areas identified as having high mineral potential - it does not come as a surprise that it is home to the largest copper-gold deposits in the world. The Mining and Geosciences Bureau of DENR has stated that the country has an estimated \$840 billion worth of untapped mineral wealth in 2012 (Quintans, 2017).

It is of no surprise that the industry also has its share in the nationwide economic growth. First, being in the sector of employment, there is an estimated 236,000 workers in 2016 according to MGB. Next, in terms of local and national taxes and royalties, the government generated an amount of Php 25.782 Billion in 2015. Philippines has an estimated amount of \$2.797 Billion exports primarily to Japan, Australia, China, and Canada. More so, the current government’s proactive measures for improvements in terms of quality and sustainability, highlights its potential to become a high risk, high return investment given time.

In addition to the mining industry, the country’s Oil and Petroleum sector is also in the limelight for growth and investment. Despite the frequent changes in market value, the petroleum industry is not likely to deteriorate anytime soon due to the high demand for oil. According to the DOE, the Philippine oil consumption for the past 5 years goes from (in barrels): 346.78k in 2014, 379.91k in 2015 to 433.69k in 2016. This indicates a rise of 8.99% in a year from 2015-2016. This demand is supported by the presence of new competitors in the industry. Before, only a handful of companies are engaged in petroleum business like Petron, Shell, Chevron, and others. But in the year 2017, there has been a boom in the number of

petroleum businesses, raising the number from a mere 741 in December 2008, to 1,019 in the year 2017 (Ludoviche, 2017). It is such an extent that the major companies in the industry experience shrinking in their market share (Olchondra, 2016). Aside from local businesses spurring on growth, there are news about an international oil company eyeing a \$4 billion worth of investment for onshore and offshore oil and gas facility and refinery here in the country (PNA, 2017). The interest of international parties in our sectors provides another point-of-view regarding the achievability of a good return in investment.

This study aims to be of help to prospective investors in the evaluation of the companies in the Mining and Oil sector of the Philippines. The long term goal of this paper is to aid a stakeholder in decision making regarding investments in the mining and oil sector of the country. By taking a look at the data gathered, investors would be guided in determining whether this sector fits their investor profiles and would provide them the option to diversify their investments in the Mining and Oil sector.

Review of Literature

Financial ratios are mathematical equations derived from information presented in a company's financial statement. Company leaders, investors, and lenders should have a good understanding on how these values are calculated. Novinson (2008) set that financial ratio analysis supplies information on a company's profitability, efficiency, and ability to pay its debts. He added that financial ratios are beneficial when the financial analyst can use and apply them to any business regardless of the level of expertise. Nicholson (2006) concluded that many financial ratios are used to evaluate investments. He also added that generally, investors look at ratios in order to determine the profitability of a company and the value of its shares. However, financial ratios can also be used to evaluate operations, liquidity, and leverage.

Financial ratios are essential in identifying the indices that influence the financial performance of the companies. It can be a guide for users to make investment and to make other economic decisions (Aydeniz, 2009; Gardiner, 1995). Hall and Weiss' (1967) raised that there is a positive relationship between company size and profitability that was established while Stekler (1964) also used the company size to predict profitability. Another financial performance study conducted by Kosa et al. (1992) found that during the period of low performance, the company had to make some adjustments in their strategies and techniques in order to minimize costs and improve their performance. Hill and Perry (1996) inspected the financial performance by using liquidity ratio, profitability ratio, and debt ratios which concluded that high performance companies have high liquidity ratios. It was also revealed that the liquidity ratio was significant in company's performance and stock return evaluation (Içerli and Akkaya, 2006; Edg and Bayraktaroğlu, 2007, while Korkmaz and Karaka, 2013) and also proved that company performance improves the rate of cash dividends.

Erdogan, E. et al., (2015) studied the importance of financial ratios on company's financial performance. They concluded that there was a significant relationship between company performance, company size, and current ratio, but have significantly negative relationship with leverage. Lakonishok et al. (1994) conducted a research between financial indicators and stock return of listed companies. The results revealed that companies with higher stock book value have higher stock return versus those with lower stock book value. Fama and French (1995) concluded that there is a relationship between company size and book value to market value and stock return in addition to profitability.

Pazarskis et al. (2011) also showed that massive number of the financial ratios used in the study revealed decline in several business functions company's performance. Kılıç (2012) indicated that company size, profitability, ownership diffusion, and auditor size have a statistical significant positive association with the level of financial ratio voluntary disclosure. Pandey et al. (2013) stated that liquidity and solvency position levels were unacceptable and there was little relationship between financial variables adopted in the study. Sultan (2014) concluded that return on equity ratio was a broad measure of company's profitability. In Malhotra et al. (2009)'s investigation, they manifested that the assumption of data envelopment analysis identifies companies' performing efficiently and those otherwise.

In the process of company evaluation and establishing the financial performance of companies, various financial indicators such as financial ratios are considered. It is also significant to identify parameters that influence the financial performance of companies that is imperative for those who are involved such as investors, competitors, and other external users in order to make investment and other decisions (Aydeniz, 2009; Gardiner, 1995). Yu et al. (2013) investigated the relationship of company operating efficiency and performance which revealed that companies with good profitability ratios have a good level of efficiency. Companies normally operate with efficient capacity to produce a required output level (Cummins, J. et. al. 2000). Agyei-Mensah (2014) revealed that the higher the level of ownership concentration, the lower the quality of financial ratios disclosed. The results also showed that there is a statistically significant positive relationship between board composition and the quality of financial ratio disclosure.

Objectives of the study

This study primarily aims to aid a stakeholder in decision-making regarding investments in the mining and oil sector of the Philippines. The mining and oil sector is a segment of the country focused on the utilization of the natural resources of the land for profit maximization. Further, it sought answer to the following questions: 1) How do you determine the financial stability of the mining and oil companies in the Philippines? 2) What is the forecast of the financial situation of the given companies for 4 years, for the years 2018 up to 2021? 3) Which company would the investors place their investment in terms of financial stability?

METHODOLOGY

The researchers made use of a descriptive type of research to cast light on current issues involved in the industry of Mining and Oil through a process of data. The study is conducted in the Lyceum of the Philippines - Laguna. The respondents of this research are publicly-listed entities in the Mining and Oil sector of the Philippines. This table provides their corresponding ticker codes which will be used in the succeeding illustrations throughout this research.

Table 1. Ticker code of the respondents

Name of the Company	Ticker Code
Apex Mining Co. Inc	APX
Atlas Consolidated Mining and Development Corporation	AT
Century Peak Metals Holdings Corporation	CPM
Global Ferronickel Holdings Inc.	FNI
Lepanto Consolidated Mining Company	LC
Lepanto Consolidated Mining Company	LCB
Nickel Asia Corporation	NIKL
Philex Mining Corporation	PX
PXP Energy Corporation	PXP
Semirara Mining and Power Corporation	SCC

The researchers used ratio analysis to be able to compare and contrast the performance of companies of different sizes. This is useful because it helps in trend analysis and highlights important data

in a simpler form. Users of the data may be able to judge the company just by looking at their financial ratios instead of reading the various financial statements.

RESULTS AND DISCUSSION

The data used in this chapter are obtained from the Philippine Stock Exchange, and likewise, the respective financial statements of the listed companies for the years 2013 to 2017. The figures are then used in the computation of ratios, and their analysis.

Table 2. Summary of Financial Ratios

	APX	AT	CPM	LC	NIKL	PX	PXP	SCC
P/E RATIO (TTM)	26.56	-	-	-	-	18.24	-	5.33
P/E RATIO (INCLUDING EXTRAORDINARY ITEMS)	28.31	-8.39	-50.2	-	-	18.15	-630	9.08
PRICE TO BOOK RATIO	3.08	0.43	0.55	1.55	-	1.27	22.42	4.04
PRICE TO CASH FLOW RATIO	9.91	15.13	8.33	34.9	-	8.67	-	8.45
Total Debt to Total Equity								
2017	64.74	75.56	-	1.83	10.12	45.19	-	48.68
2016	0	0	0	0	0	0	0	0
2015	0	0	0	0	0	0	0	0
2014	0	0	0	0	0	0	0	0
2013	0	0	0	0	0	0	0	0
average	12.95	15.11	0	0.366	2.024	9.038	0	9.736
RETURN ON EQUITY								
2017	7.01	-5.05	-1.98	-10.7	9.81	7.26	-6.28	39.36
2016	0	0	0	0	0	0	0	0
2015	0	0	0	0	0	0	0	0
2014	0	0	0	0	0	0	0	0
2013	0	0	0	0	0	0	0	0
average	1.402	-1.01	-0.4	-2.15	1.962	1.452	-1.256	7.872
DIVIDEND YIELD	-	-	-	-	0.02	0.007	-	0.04
PRICE TO GROWTH	-8.6	-3.07	12.65	-1.04	-7.21	-	-3.05	448.2

Price to Earnings Ratio

The average trailing price to earnings ratio is 17.31. The trailing P/E ratio of Semirara Mining and Energy Corporation (SCC) is below the average and therefore has the cheapest stock. Apex Mining Co, Inc. (APX) has the most expensive stock out of the three companies whose ratio falls above the average trailing P/E ratio. In general, a high P/E ratio indicates that investors expect higher earnings. However, it is not necessarily a better investment than one with a lower P/E ratio, as a high P/E ratio may indicate that the stock is overvalued; hence, a company with a low P/E ratio may indicate that the stock is undervalued.

Price to Earnings Ratio (after extraordinary items)

The extraordinary items consist of gains or losses included on a company's income statement from events which are unusual and infrequent in nature. It is a one-time charge or income and is not expected to recur in the future. Apex Mining Co, Inc. (APX), PHILEX Mining Corporation (PX), and Semirara Mining and Energy Corporation (SCC) have positive P/E ratios after extraordinary items. APX and SCC gained 1.75 and 3.75 respectively whereas PX losses 0.09 after extraordinary items.

Price to Book Ratio

The price to book ratio that the stocks of Atlas Consolidated Mining and Development Corporation (AT) and Century Peak Metals Holdings Corporation (CPM) are undervalued. Accordingly, if a company's P/B ratio is high compared to others in its industry, then the stocks may be overvalued. If the P/B ratio is low compared to others in its industry, then the stocks may be undervalued. Most of the companies evaluated are overvalued, PXP Energy Corporation (PXP) having the highest P/B ratio and Atlas having the lowest P/B ratio.

Price to Cash Flow Ratios

The table indicates that the company with the highest and lowest P/CF ratio are Lepanto Cons Mining (LC) and Century Peak Metals Holdings Corporation (CPM) respectively. A high P/CF ratio indicates that the company is trading at an overvalued range; hence, a smaller P/CF ratio is generally preferred. Price to cash flow ratio is useful if there is significant fluctuation in EPS and P/E ratio.

Debt to Equity Ratio

The table summary shows the total debt to equity ratios of the companies over the last five years. The table indicates that Atlas (AT), Apex (APX), Semirara (SCC), and Philex (PX) are taking on more debt than the other companies are and relative to this, the companies could potentially generate more earnings than the other companies could. The company with the highest and lowest debt-to-equity ratio are AT and CPM, respectively. Investors rarely want to purchase the stock of a company with extremely low debt ratios. A debt ratio of zero would indicate that the firm does not finance increased operations through borrowing at all, which limits the total return that can be realized and passed on to shareholders. Therefore, it is true that there are risks associated with having too little debt.

Return on Equity Ratios

The table summary shows the return on equity ratios of the companies over the last five years. 50% of the companies have positive return on equity ratio and the other 50% have negative return on equity ratio. The company who has the highest ratio among the companies who have positive returns is Semirara Mining and Energy Corporation, whereas Lepanto Cons Mining has the lowest ratio of -2.22. The increasing ROEs of APX and SCC suggest that the companies are increasing its ability to generate profit without needing as much capital.

Dividend Yield

Dividend yield shows how much a company pays out in dividends relative to its price per share. The table indicates that the company with the highest dividend yield is SCC who doubled the dividend yield of NIKL.

Price to Growth

This ratio shows the stock's value while considering the companies' earnings growth into account. The table indicates that the company with the highest price to growth ratio is SCC.

Summary of Ratio analysis

Price ratios are good indicators of how much an investor can expect to invest in a company. Typically, a higher ratio over the years means better for investors. In the table of the TTM, only APX, PX, and SCC have positive values on the P/E Ratio, meaning investors would gain a better leverage if they invest among these companies. The price to book ratio can be used for firms with positive book values and negative earnings, since negative earnings render price-to-earnings ratios useless and there are fewer companies with negative book values than companies with negative earnings. The table above indicates that the company with the highest value is PXP. The relationship between the debt to equity ratio and return on equity ratio should be considered. If the shareholder's equity goes down, then ROE goes up. A high level of debt can artificially boost ROE.

Table 3. Analysis of Forecasted Data (up to 2021)

	YEAR	APX	AT	CPM	LC	NIKL	PX	PXP	SCC
Price Today	2018	1.7	4.64	1.65	0.151	6.11	6.12	15.5	31.6
Forecast Sales	2021	5119.81	6898.5	729.35	45.82	21951.4	9132.05	-12.09	43817.9
Average PM	2021	-	50.21%	2.33%	-30.20%	21.83%	4.79%	-	29.20%
Forecast Net Income	2021	6.65%	359.63	17.03	-13.84	4792.2	437.6	127.26%	12794.54
Forecast Book Value	2021	8125.37	38301.8	3061.16	5683.05	38733.8	27331.8	479.55	53301.7
Average PE	2021	63.062	35.674	-32.824	119.692	13.808	93.446	-	2.988
Average PS	2021	4.172	1.502	8.598	8.79	2.178	4.7	101.406	0.872
Average PB	2021	3.032	0.60456	0.688	2.21	1.334	1.9	74.466	0.974
Forecast #shares (M)	2021	13778.353	2105.971	2820.33	38900.9	15831.778	4950.944	1700	2274.464
Forecast price (NI)	2021	-1.56	6.09	-0.2	-0.04	4.18	8.26	-0.92	16.81
Forecast price (sales)	2021	1.55	4.92	2.22	0.01	3.02	8.67	-0.53	16.8
Forecast price (BV)	2021	1.79	11	0.75	0.032	3.26	10.49	6.81	22.83
Forecast price (AVG)	2021	0.59	7.34	0.92	0.1	3.49	9.14	1.79	18.81

Projected Return	-	58.10%	-44.00%	-35.84%	-42.92%	49.33%	-88.47%	-40.47%
	65.09%							
Annualize	3	-	16.50%	-17.57%	-13.75%	-17.05%	14.30%	-51.32%
		25.59%						-15.88%

In relation to the preceding table, companies AT (Atlas Cons. Mining and Dev't Corp.) and PX (Philex Mining Corporation) are predicted to have a desirable outcome in terms of their projected return from today's investment to the year 2021 projecting to increase at least 50% from today's price. Stock prices may change simultaneously due to factors that affect the company's profits and economic standing. Though there are certain areas of forecasted data for these two companies that are out shone by other companies also with positive ratings, AT and PX gave appeasable estimates that substantially projects the good standing of the company in terms of financial predicament.

Considering the average price margins of each company, AT is the highest, assuming that it will have at least a high return of 50.21%, followed by SCC (Semirara Mining and Power Corporation) with 29.20%, then NIKL (Nickel Asia Corporation) with 21.83%, PX with 4.79%, and CPM (Century Peak Metals Holdings Corporation) with 2.33% which all shows a positive price margin. Only AT and PX has met the margins with a forecast price (AVG) of 7.34 and 9.14, respectively.

CONCLUSION

The primary aim of this research is to aid investors in decision making when considering the mining and oil industry as an investment prospect. According to the research conducted, it can be concluded that Semirara (SCC) is a good investment based on the price-earnings ratio analysis since it has the lowest ratio. In terms of price to book ratio, Century Peak (CPM) is most preferable for the investors as compared to others. For Price to Cash Ratio analysis, Century (CPM) and Semirara (SCC) is the more preferable company. In the analysis of debt to equity ratio, company having the lowest ratio is not necessarily a good indicator since it means that the company does not finance increased operations through borrowing which limits the total return that can be realized and passed on to shareholders. Atlas (AT), Apex (APX), Semirara (SCC), and Philex (PX) is preferable as to debt to equity ratio. On the other hand, the company having the highest price to growth is Semirara (SCC).

Overall, with the ratio analysis of the data provided, Semirara (SCC) is the most highly recommended company.

Recommendation

Based on the company information given above, it is advised for the investors to research more about the companies they are eyeing on investing, especially when it comes to the money they are planning to entrust. The number one requirement for the investors is to know thoroughly the companies they are interested to invest in to have a deeper understanding of the industry that they are operating. In addition to the industry knowledge, the company's free float must also be given utmost importance, since for the potential investors, it offers insight into the company's stock volatility. Companies NIKL and AT are the most volatile in the data given because a small free float tends to be more volatile due to the limited number of shares that can be bought or sold in the event of major trading. For the same reason, companies FNI and LC with larger free floats are generally less volatile.

While researching prominent facts about the industries, the researchers became aware of the factors that will help in cost-benefit analysis for decision making. Thus, potential investors are advised to weigh the impact of the financial status of a prospect company and to put equal importance on forecasts as with the current company performance. It's important to keep in mind that even though historical data is used as

an indication of things to come, it's what happens in the future that may impact the investment for better Researchers were also advised to have more methodological work when it comes to determining the status of the industry and delve in gathering additional quantitative data aside from ratios and forecasting, in order to have a more solid basis for decision-making purposes.

Given the changes in the economic and political status of the country, it is possible that the mining and oil industry be subject to circumstances which may cause its profitability to lower by certain percentages. Thus, a full analysis considering probable variables are needed in order to quantify these changes and formulate a more accurate answer to the objectives given

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