



A Financial Statement Analysis on Three Major Construction Companies in the UAE (Arabtec Holding PJSC, Drake & Scull PJSC and Emaar Properties PJSC)

تحليل القوائم المالية لثلاث شركات كبرى في مجال البناء في دولة الإمارات العربية المتحدة (شركة أرابتك القابضة ش.م.ع.، شركة دريك آند سكل انترناشيونال ش.م.ع.، و شركة إعمار العقارية ش.م.ع.)

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Abstract

Financial statement analysis has been carried out with respect to three construction companies that are operating in UAE that are, Arabtec Holding PSJC, Drake & Scull PSJC and Emaar Properties PSJC. In this research, financial ratio analysis has been conducted regarding profitability ratios, liquidity ratios, leverage ratios, activity ratios, cash flow ratios and market ratios. The data was taken from Dubai Financial Market, and the studied years were 2011, 2012 and 2013. The three years were chosen based on the fact that a recovery phase has been under process since 2010 and after the global financial crisis that hit the world in 2008. A detailed analysis has been conducted in respect to the following:

- It is concluded in the study that profitability is the performance indicator of companies. A General profitability trend in the construction industry may be negated by well performed operational activities, which minimizes the direct cost and increases the profitability. EMAAR in the study has proved that well operated assets can bring good profits to the company.
- Liquidity ratios have been analyzed to adjudge the company's capability to meet its current liabilities within existing stream of current assets. Desirable liquidity ratio of (1.5-2 times) is a good indicator of a company's position and the sample chosen companies are meeting the standards of the desirable liquidity ratio.
- Leverage ratios have been studied to observe the debt dependency of the companies. Higher Debt to equity ratio is undesirable and risky, but it is concluded that if one company uses its debt efficiently, it generates good and heavy returns. On the other hand, low debt to equity ratio though desirable and favorable may be proved bad if resources are not utilized well or fall short of needs.
- Activity/Efficiency ratios have been scrutinized to trace the reasons of efficient or in-efficient use of working capital as compared to other companies. Activity/Efficiency ratios with short operating cycle helps the company to keep its money in circulation and earn more profits. Early recovery and conversion always help to overcome the need of cash.
- Cash flows, the life blood to operate in a dynamic Dubai market, have been observed on the three companies from 2011 to 2013 to see the impact of favorable or unfavorable cash flows. The main focus in this research was on operating cash flows. It is concluded that a healthy cash flow, especially operating cash flow, plays an important part in the running of operational activity. Enough cash flow is always attractive and satisfactory for investors and lenders.
- Market trend has also been analyzed to explore the reasons of high market value of shares or low market share price in Dubai Financial Market. Market ratios analysis have provided reasonable answers where consistent dividend issue policy has been adopted.

Based on above, analysis, recommendations and conclusions have been drawn to induce improvements in the operations of the companies that are not performing well comparatively. Upon that, Arabtec Holding PSJC and Drake & Scull PSJC are advised to improve their operating activities.

ملخص

بعون الله تم تحليل القوائم المالية لثلاث شركات كبرى في مجال البناء في دولة الإمارات العربية المتحدة، وهي:

- 1- شركة أربنتك القابضة ش.م.ع.
 - 2- شركة دريك أند سكل انترناشيونال ش.م.ع.
 - 3- و شركة إعمار العقارية ش.م.ع.
- و في هذا البحث قد أجريت تحاليل (النسب المالية) بشأن نسب الربح، ونسب السيولة، ونسب الرافعة المالية، ونسب النشاط، نسب التدفق النقدي، ونسب السوق.
- و قد تم جمع البيانات من سوق دبي المالي، وكانت سنوات الدراسة 2011، 2012 و 2013. و قد تم اختيار هذه السنوات الثلاث على أساس أن هذه السنوات هي فترة الإنتعاش التي بدأت في 2010 بعد الأزمة المالية العالمية في عام 2008. وقد تم إجراء تحليل مفصل يتعلق بما يلي :

- تم استنتاج في هذه الدراسة أن النسب الربحية هي مؤشر أداء الشركات. و أنه يمكن إنفاء التحليل العام لمنحى الربحية في مجال البناء إذا كان الأداء جيد في الأنشطة التشغيلية، إلى أنه يقلل من التكلفة المباشرة ويزيد من الربحية. وقد أثبتت شركة إعمار في الدراسة أن إدارة الأصول بشكل جيد تحقق أرباحاً جيدة للشركة.
- و قد تم تحليل نسب السيولة لمعرفة قدرة الشركة على سداد التزاماتها الحالية من ضمن أصولها الجارية. نسبة السيولة من (1.5 إلى 2 مره) هي المرغوب بها و تعد مؤشراً جيداً لأداء الشركة. تم استنتاج من الدراسة أن جميع الشركات الثلاث قادرة على سداد التزاماتها الحالية بمعايير نسب السيولة المرغوب بها.
- وقد تم دراسة نسب الرفع المالي لمراقبة تبعية ديون الشركات. الاعتماد الشركات على الديون بنسبة عالية أمر غير مرغوب فيه ومحفوف بالمخاطر، ولكن قد تم استنتاج أن إذا كانت إحدى الشركات تستخدم ديونها بكفاءة، فإنها تولد عوائد جيدة و عالية. و من ناحية أخرى، قد تكون غير جيدة إذا لم يتم استخدام الموارد بشكل جيد أو تم التقصر من الاحتياجات.
- تم التدقيق على نسب النشاط (تعرف أيضاً بنسب الكفاءة) لتتبع الأسباب إما إذا كان استخدام رأس المال العامل بكفاءة بالمقارنة مع الشركات الأخرى. تساعد نسب الكفاءة و قصر فترة التدوير الشركات في الحفاظ على تداول النقود و تساعد أيضاً في كسب المزيد من الأرباح. و بالإضافة، الإنعاش المبكر وتحويل السريع يساعد دائماً في التغلب على الحاجة النقدية.
- التدفقات النقدية، تعتبر شريان الحياة للعمل في سوق دبي الديناميكي. وقد تم ملاحظة التدفقات النقدية على الشركات الثلاث بين 2011-2013 لرؤية التأثير الإيجابي أو السلبي للتدفقات النقدية. كان التركيز الرئيسي في هذا البحث على التدفقات النقدية التشغيلية. و قد تم استنتاج أن التدفق النقدي الموجب يلعب دوراً هاماً في إدارة النشاط التشغيلي، (خاصة التدفق النقدي التشغيلي)، يعمل التدفق النقدي. الأكتفاء بالتدفق النقدي يعتبر دائماً جذاب و مرضي للمستثمرين والمقرضين.
- كما تم تحليل اتجاه السوق لاستكشاف أسباب ارتفاع/انخفاض القيمة السوقية للأسهم أو سعر السهم في سوق دبي المالي. وقد نص تحليل نسب السوق على إجابات معقولة حيث اعتماد سياسة دفع توزيعات الأرباح بشكل ثابت.

استناداً إلى ما سبق، تم وضع التحليلات و التوصيات و الاستنتاجات للحث على التحسين في أنشطة الشركة التي لا تؤدي بشكل جيد نسبياً. بناء على ذلك، من المستحسن أن شركة أربنتك القابضة ش.م.ع. وشركة دريك أند سكل ش.م.ع. تقوم بالتحسين من الأنشطة التشغيلية الخاصة بهم.

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LIST OF ABBRIVIATIONS:

AED: United Arab Emirates Dirham (Currency)

ARTC: Arabtec Holding PJSC Stock Market Ticker

BOT: Build-Operate-Transfer

CAPEX: Capital Expenditures

CCC: Cash Conversion Cycle

CF: Cash Flow

COR: Cost of Revenue

DFM: Dubai Financial Market PJSC Stock Market Ticker

DPS: Dividends Per Share

DSC: Drake & Scull Construction

DSCR: Debt-Service Coverage Ratio

DSI: Days Sales of Inventory

DSI: Drake & Scull International PJSC Stock Market Ticker

DSO: Days Sales Outstanding

EBIT: Earnings Before Interest & Tax

EPS: Earnings Per Share

EMAAR: Emaar Properties PJSC Stock Market Ticker

IFRS: International Financial Reporting Standards

IPO: Initial Public Offering

ISA: International Standards on Auditing

ISAB: International Standard Accounting Board

ISO: International Organization for Standardization

MEP: Mechanical, Electrical and Plumbing

OHSAS: Occupational Health and Safety Management Systems

OROA: Operating Return on Assets

P/E: Price-Earnings Ratio

PJSC: Private Joint Stock Company

PPP: Public Private Partnerships

ROA: Return on Assets

ROE: Return on Equity

ROI: Return on Investment

RONW: Return on Net Worth

ROOA: Return on Operating Assets

ROTA: Return on Total Assets

UAE: United Arab Emirates

WC: Working Capital

WCT: Working Capital Turnover

CHAPTER 1:

Introduction

CHAPTER 1: INTRODUCTION

A detailed technical financial statement with too many arithmetic and numbers may have mystifying and nerve-wracking effect on investors. But a comprehensive and precise analysis can give an information which can boost number of favorable decisions as if such financial statement were a gold mine of information. A medium of disclosure of information is what everybody knows about “Financial Statement” and a meaningful analysis is always desirable for investors and other stakeholders.

Griffiths said in his book of “Creative Accounting” which challenges the reliability of financial statements, through exaggerated but interested statement: “Every company in the country is fiddling its profits. Every set of published accounts is based on books which have been gently cooked or completely roasted . . . it is the biggest con trick since the Trojan Horse.” (Griffiths, 1986).

However, “Analytical Procedures” the term used instead of Financial Analysis in ISA (International Standards on Auditing), defines such procedures that includes evaluations of financial information through analysis of plausible relationships among both financial and non-financial data. Analytical procedures also encompass such investigation as is necessary of identified fluctuations or relationships that are inconsistent with other relevant information or that differ from expected values by a significant amount. (International Federation of Accountants, 2015).

Conclusively, a complex, covered with massive amount of numbers in a company’s financial statement may be converted in to a meaning full and associated information for all stakeholders i.e. investors, management, creditors, debtors and auditors. Financial statement analysis is the process of interpretation of the company’s risk and probability by examining their financial information. It is also the study of accounting ratios such as asset utilization ratios, profitability ratios, leverage ratios, liquidity ratios and valuation ratios between different items that are included in the balance sheet.

Furthermore, financial statement analysis is a quantifying process on identifying the potential, past and present performances of a company. Financial statement analysis technically outlines the process of accounting and categorizes the account titles and the amount of money as well. Also, it helps to understand the financial decision that already made and how it does affect the profit or income. However, Balance sheet with

equivalent profit and loss must be well compared to find the strength and weaknesses of the firm. Financial statement analysis shows the health and stability of the company. The information from these statements provides understanding on the operation of the business and able to discover if the management used funds and resources wisely.

Hence, the government, regulatory authorities and private sector use financial statements in assessing the legality of fiscal/financial decisions of the company that whether they are following the right accounting procedures, or they are deciding the correct policies and decisions.

1.1 BACKGROUND/RATIONALE OF THE STUDY

The rationale behind the research is that how financial statement analysis is used by creditors, investors and managers to assess the performances of the company both past and present, and its related potential risks. Moreover, such information acquired from the financial statement analysis is used by creditors in generating reliable information over their loans giving strategy and analyze that whether such loan will be able to repay with interest, hence, investors get an idea in making potential investment that will give a handsome return.

According to the “Accounting Management” website, financial statement analysis is an ***Assessment of the Past Performance***. The performance of the company in the past is a good guideline of the future performances. Investors and creditors use trends of past revenue, cost of goods sold, operating expenses, net income, cash flows and return on investment in evaluating the past performance of the management and potential guidance of future performance. Moreover, financial statement analysis an ***Assessment of the current position***. It presents the company’s present situation regarding the assets of the company and liabilities or debt due against the firm. In addition, financial statement analysis is a ***Prediction of profitability and growth prospects***. It is used by investors in evaluating and forecasting the potential and growth rates in income and making comparison in other investment options. Also, financial statement analysis is a ***Prediction of bankruptcy and failure***. It is a significant tool is determining, anticipating and evaluating bankruptcy and possible failure of the business. Furthermore, financial statement analysis is an ***Assessment of the operational efficiency***. It helps to analyze the company’s management operational efficiency. Moreover, the actual performance

of the company can be used as guide in evaluating the management efficiency by comparing standards set previously and deviation of in between standards.

This research seeks to analyze the financial statements of three local companies listed in Dubai Financial Market (DFM) in the Real Estate and Construction Industry. The analysis helps shareholders, owners, managers, creditors, and perspective investors in making decisions.

According to the “Accounting Management” website, financial statement analysis is important for **shareholders** and owners of the company, which gives them relevant information to use it as their basis on making decisions that if they will remain their shareholdings or sell them out. Financial statement analysis is important to the **management** of the company. They are accountable for decision making, developing plans and policies of the company, and evaluation of performances and effectiveness of their action in achieving the company’s goals. **Creditors** use financial statement analysis as important tool in making decisions whether they will allow the company to take loans with higher interest rates. For **prospective investors** that have excess funds for profitable investment opportunities, financial statement analysis is significant. They use the provided useful information for their investment decision making regarding whether to invest or not to the share of a specific company. By analyzing the three top companies in the Real Estate and Construction Industry, Arabtec Holding PJSC, Drake & Scull PJSC and Emaar Properties PJSC, one can see the trend and rate of success in the potential market of the UAE.

1.2 STATEMENT OF THE RESEARCH PROBLEM

The history study of investment and performance of the investors, investment outcomes must be assessed during the end of investment term to know the maximum scope, which business is performing sufficiently well in connection to operations, capital investment (Equity), how to invest and finance (Leverage), misuse of financial resources (Operational Cash Flow & Working Capital), and quality of capital control. With small companies, performance evaluation and ranking of companies are not essential due to low volume and limited investment diversification. However, the quality of capital turnover got more complicated as diversification of investments and investment volumes rise and arrival of new corporate partnership approaches like joint stock companies. Therefore, the need emerges for developing of new manner of assessing the

performance of businesses and companies; hence, ranking became necessary. The questions are that “How to evaluate the companies’ performance precisely based on data available?”, “Is the data available reliable?” or “Does the data depicts a clear picture by providing accurate and precise guide line to companies?”. Consequently, results were obtained by analyzing three top joint stock construction companies in the UAE.

In the limitation it is discussed every company uses different accounting methods and accounting periods, so results of ratio analysis may be affected. It is further said that classification in diversified companies are difficult for comparison, but other studies conclude that a reliable source of data with authenticity from highly professional personnel may provide the basis for reliable results followed by creative decision making.

Financial statements helps investors and organizations by giving a bird eye view of the performance and financial position of the company at a specific date. However, financial statements’ information is only coherent to finance and accounting professionals. Investors, the common people, are unaware of financial complexities in the financial statements’ figures as they only provide quantitative data. In the investors’ perspective, these are only figures rather than comprehensive information. In order to have a meaningful information hidden under the figures, financial ratio analysis is an aid tool for explanation as financial ratios help investors and organizations in decision making. In the research, a solution will be evolved that whether investors’ decisions are linked to the result of the financial ratios.

1.3 STATEMENT OF THE RESEARCH QUESTIONS

1. How did the sample companies perform in terms of profitability during the study period?
2. How leverage policy has been adopted by the three sample companies and how financing is helping them in running their activities for last closed three financial years?
3. Which of the sample company having better capital management and what the reason that one company is better than the other in working capital management for the period under study?

4. Does the phrase, “Cash Is the Life Blood of a Business” apply on sample companies and how well they are utilizing and obtaining their cash to meet their requirements for the period under study?
5. Is market behavior regarding the sample chosen companies is affected? What type of policy the sample companies should adopt to gather investor confidence based on analysis of study period?

1.4 OBJECTIVES OF THE RESEARCH

Based on the statement of the research questions, the main objective of the research is as follows:

- To conduct a ratio analysis on three selected companies from the top construction companies in the UAE market in order to evaluate decision making process based on the analysis.
- To contribute in the literature by providing additional research on ratio analysis in the field of construction industry to provide a clear picture of three chosen construction companies which may help to bring improvement by taking relevant actions.
- To convey awareness in potential investors who wanted to invest but are reluctant in making their decisions due to lack of knowledge and information for decision making in the Dubai construction market.
- To evaluate how ratio analysis of three sample chosen companies help in competitive decision making to improve operations and functions.
- To highlight the sample chosen companies’ existing situation and provide suggestions and recommendations based on ratio analysis in respect of:
 - a) Profitability
 - b) Solvency
 - c) Working Capital Management
 - d) Market Share Prices
 - e) Operational Efficiency
- To provide a pathway to other construction companies in the construction industry for their decision making.

1.5 LIMITATIONS OF THE STUDY

Financial statement analysis is a significant useful tool; however, it has its limitations. Therefore, financial statement analysis has weak point, which requires to check ratios and financial information comparability. Moreover, financial statement analysis is significant to obtain data for developing plans and policies of the company and in decision making as well, but it is necessitated to consider limitations. Usually, investors try to understand how much cash the company will make in the future, relative to the amount of capital deployed. Hence, analysts possibly will adjust ("recast") the financial statements by adjusting the underlying assumptions to assist this computation. For instance, misclassification of operating lease directly affect the balance sheet with respect to assets and liabilities, which affects the financial statement ratios. "Recasting financial statements requires a solid understanding of accounting theory." (White et al. 1997). Projection of interest/discount rate is obligatory to have a future value, but such manipulation may hide the current condition. Moreover, different accounting methods may change the outlook of financial health. On the other hand, different conclusion withdraw by analysts may be conflicting. Also, as financial analysts' perspectives are different, they can have different conclusions on the same data, and they may convey conflicting information on the same findings.

According to the "Accounting Management" website, financial statement analysis limitations clarify that financial statement analysis should not end to itself alone as numerous factors affect the relevant ratio computation and create further difficult differentiation. Primarily, financial statement analysis can ***mislead the user***. The quality of financial data is based on the quality of the preparation of financial statements. Error in decision-making will occurred if financial statements preparation is incorrect. Also, financial statement analysis is ***not useful for planning***. The data from financial statements may not be applicable in corporate planning because statements constructed based from historical financial data. It is also a ***quantitative aspect***. Financial statement analysis only presents quantitative information about the financial matter of the company which is a failure in providing important qualitative information use for decision making such as management labor relation, customer's satisfaction, and skills of management. In addition, ***Comparison not possible*** in financial statement analysis because financial statements is constructed from historical data, so comparative analysis of financial statements of different years cannot be performed due

to expansion changes the view, showed by the statements of different years. Furthermore, financial statement analysis may give a **Wrong judgment** based on wrong analysis due to users skills inadequately applied with limited knowledge in analyzing financial statements; also, the biased attitude of the analyst may lead to false judgment and conclusion. However, I took due care and skills to cater with such issues.

Hence, it is important that analysts and users fully understand its limitations before evaluating financial statements of the company. Analysts and users should consider:

- The use of estimates in allocating costs of each period. The ratios will be as accurate as the estimates, and the cost principle is used to prepare FS and financial information is not adjusted for price changes or inflation/deflation;
- Companies can choose different accounting methods to use, which has different impact ratios, and it is difficult to differentiate companies;
- Companies may have different fiscal year ends making differentiation difficult if the industry is cyclical;
- Classification if diversified companies are difficult especially in comparison purposes;
- FSA does not provide answers to questions of the uses which give rise to questions.

In this research, the availability of data was taken from a source in annual reports. Where the data was not found in the financial statements of the companies, annual reports notes has been referred to take the requisite data. In addition, market prices per share were taken from (DFM) historical price. The closing price at December 31 of each year was taken as a base for the whole years.

1.6 ORGANIZATION OF THE PAPER

Chapter one introduces financial statement analysis stating its definition and importance, states the objectives of the study, asks the questions behind the study and explores the limitations of the study.

Chapter two is the literature review, which expounds a clear definition of the terms and concepts of financial statement analysis followed by research articles on financial statement analysis, and the chapter ends with a summary of the researched articles.

Chapter three gives an idea of the background of construction in the UAE followed by the background of the three studied companies

Chapter four proceeds with the methodology of this research identifying the sample data and period followed by articulating the tools of analysis used in the research and explaining each tool in the analytical approach section.

Chapter five utters the results found from the ratio analysis conducted on the three companies.

Chapter six clarifies the findings on each company followed by the suggestions and recommendations.

Chapter seven is the conclusion, which answers the research questions on chapter one.

CHAPTER 2:

Literature Review

CHCHAPTER 2: LITERATURE REVIEW

The Second chapter is an evaluation of literature review. The chapter will be divided into three sections. The first section will explain important technical terms and concepts in the financial statement analysis field. The second section will include forty four (44) number of articles. The articles chosen are from diverse literature studies on different types of financial statements and financial ratios. At the end of the chapter, the third section that will summarize the previous two sections.

2.1 TERMINOLOGY

The first sections will explore different term related to the research that needs further explanation. The following terms are according to the Business Dictionary, Investopedia, Encyclopedia, IFRS, Inc. and Accounting Simplified websites.

Balance Sheet/Statement of Financial Position:

The encyclopedia website (2014) defines ‘The Balance Sheet’ as the statement particularly of the assets, liabilities, and capital of a business or other organization at a point in time, detailing the balance of income and expenditure over the preceding period.”

Cash Flow Statement:

According to the financial analysis tools and techniques book by Erich A. Helfert (2001) “In financial accounting, it is a financial statement that shows how changes in balance sheet accounts and income affect cash and cash equivalents, and breaks the analysis down to operating, investing and financing activities. It also shows the reconciliation of the net profit from the income statement to the generated amount for that same period.”

Changes in Equity/ Statement of Retained Earnings:

The Accounting Simplified website (2014) defines ‘The Changes in Equity Statement’ as a summary that details the change in owners' equity over an accounting period by presenting the movement in reserves comprising the shareholders' equity. Movement in shareholders' equity over an accounting period comprises the following elements: Net profit or loss during the accounting period attributable to shareholders Increase or decrease in share capital reserves Dividend payments to shareholders Gains and losses recognized directly in equity Effect of changes in accounting policies Effect of correction of prior period error.

Financial Ratios:

The Inc.com website (2014) defines ‘Financial Ratios’ as the relationships determined from a company's financial information and used for comparison purposes.”

International Financial Reporting Standards:

The Investopedia website (2014) defines ‘IFRS’ as a set of accounting standards stating how particular types of transactions and other events should be reported in financial statements. IFRS are issued by the International Accounting Standards Board.

International Accounting Standards Board:

The IFRS website (2014) defines ‘**IASB**’ as an independent, private-sector body that develops and approves IFRS, which the ISAB works thoroughly world-wide with representatives from the finance field. It operates under the oversight of the IFRS Foundation. The mission of ISAB is to develop enforceable, globally accepted International Financial Reporting Standards (IFRS).

Profit and Loss Accounts:

The Investopedia website (2014) defines ‘The Income Statement’ as the financial statement that measures a company's financial performance over a specific accounting period which is formed to exhibit if the company generates profit. Financial performance is assessed by giving a summary of how the business incur its revenues and expenses through both operating and non-operating activities.

The Big Four:

Finance Walk (2015) defines ‘The Big Four’ as the four largest international professional services networks, offering audit, assurance, tax, consulting, advisory, actuarial, corporate finance, and legal services. The firms are Deloitte, PricewaterhouseCoopers, Ernst & Young and KPMG.

2.2 RESEARCHED ARTICLES

Financial statements main purpose is to grant information to a wide range of users about the financial position, performance and changes in financial position of any business. Information from financial statements helps users in making decisions. There are different types of financial statements, and each statement provides different type of information. However, the standards of all financial reports are the same, and they are standardized by the IFRS. The IFRS foundation objective is to develop IFRS through IASB to promote the use and rigorous application of the Standards. The following

section will summarize forty four (44) number of articles that will demonstrate different methods of financial ratios to analyze financial statement.

Helfert (2001) simplified the pronation of financial statement analysis in his book. The reason behind that is to make readers understand management decisions and their impact on the financial performance. Dr. Helfert (2001) wrote his book for his audience, student, analyst, and business executive, as a key to financial/economic analysis. He also discussed the economic value of a business in a simple presentation. Dr. Helfert's book (2001) wrapped up all essential methods and techniques that are required for an entrepreneur financial analyst such as basic financial projections and evaluate business investment decisions. All the techniques are explained theoretically and demonstrated technically.

Likewise, Tamari (1978) explicated that Financial Analysis progressed recently in more than one field, and that it covered statistics and econometrics, accounting and finance. Dr. Tamari (1978) also mentioned two timely books by Baruch Lev and George Foster in his book that he benefited from. These two books clarifies financial ratios and their uses with demonstrating them in depth.

In addition, Tracy (1980) provided an understanding to readers about his book on financial statements. The book is mostly based on accounting principles, and it is dividends into twenty four chapters. He explained in his book different aspects of the financial statement analysis.

Moreover, Bajkowski (1999) explored the importance of Financial Statement Analysis in assessing the operating and financial condition of a firm using analytical tools and techniques. Moreover, by examining the construction and basic understanding of components of financial statement analysis, a one would know how information can be applied in investment analysis. Consequently, that results were that the value of financial statement analysis would vary based on one's relationship with the firm.

Similarly, Huffman (2013) evaluated the importance of financial statements in decision making regarding boosting the revenue and detecting competitive advantage. The research focus on giving the needs for executives a deep understanding on data analysis

while examining financial statements. It further explains different ways of using analytical method such as activity-based analysis, and horizontal or vertical analysis. Furthermore, Piotroski (2000) analyzed the effect of strategy of simple accounting-based fundamental analysis on a broad portfolio of high book to market firms to find the conclusion regarding shift of the distribution earned. The research proves that by means of the selection of financially sound high BM firms while the entire distribution of realized returns is switched to the right, the mean return earned by a high-book-to market investor can rise minimum of 7H% yearly. Also, evident by an investment strategy which annual returns from 1976 to 1996 increases to 23%. However, advantages of Financial Statement Analysis are more focus on small and medium sized firms with low share turnover and without. Moreover, his research points out that market response less to the historical information based from good connectivity of historical information, future performance of the firm and quarterly earnings. With all the proofs, the research results were that market does not affiliate historical financial information into prices in a timely manner.

On the other hand, Galantine and Misch (2009) described the use of FSA in both prepare-based and user-based. In order to evaluate corporate financial decisions, Galantine and Misch (2009) examined corporate performance trends. The corporate performance trend was examined to compare companies of the same industry in order to build an investment recommendation. Also, it will help to deliberate non-financial statement concerns that would be essential to potential investors.

Correspondingly, Reeves (2011) provided a basic knowledge on elements and uses of financial statements. He describes the components of financial statements, their application, preparation and analysis. Overall, the resource guide aims to give understanding about the value of financial statements as supporting documents and in evaluation of financial condition of business which many entrepreneurs does not realized.

Contrariwise, Chang and Most (1981) suggested that investors should not use the information presented in published financial statements for their investment decisions. However, they propose that in order to resolve the problem of doubt upon the methodology of accounting research in determining the impact of accounting numbers on stock market prices, they conducted thorough investigation on importance of financial statements for investment decisions based from the views of investors and

financial analysts. The survey results were that respondents believed on the importance of corporate annual reports in investment decisions. However, further study on the decision processes of investors and financial analysts must await for definite results.

On the other hand, Epstein and Pava (1994) conferred the outcome of a survey conducted among randomly chosen investors on what makes a corporate annual report useful, and how its usefulness could be improved. The survey results were statement of cash flow is more valuable and useful as well as auditor's report which are contrary to income statement and management's discussion and analysis as per investors.

Likewise, Zeff (2013) conducted a survey and analysis on the progression of financial reporting during the past 90 years. The aim of his study is to provide an understanding of "the origins, significance, and limitations of conceptual frameworks". Zeff (2013). The study results were that all approaches of Financial Statements are presented in different ways in USA, Great Britain, Canada, Australia, and the International Standards Committee. However, these approaches presented the same results even if the presentation were different.

Furthermore, Dan (2013) correlated fiscal problems with financial reporting accounting regulations. The aim of Dan's study is to incorporate the key aspects of the financial procedures and the insistence of the main procedure caused by reporting process. The research tries to synthesize the problems and solving the correlations in procedural manner. Dan (2013) suggested that the key origin of the synthesis of problems arrives from combination of information and outcome of the financial statements audit activity and their contrast with the regulations.

Similarly, Brown (2006) conducted an analysis of the financial statements of two major companies in the retail industry. He wanted to make comparison between Wal-Mart Stores Inc. and Target Corporation by applying financial ratio in reviewing their 2006 annual reports.

Moreover, Riedl and Srinivasan (2010) explored if the presentation of special items within the financial statements exposes the firm's fundamental economic performance or opportunism. They studied both items on the income statements whether as a separate line item or collectively aggregated under a specific head of financial

statement. Riedl and Srinivasan (2010) presentation decisions of reflecting underlying firm performance were coherent with most of the results of special items.

As a matter of fact, Bruns (1992) expounded the value and application of financial ratios in evaluation of profitability, activity, solvency and leverage, and returns to shareholders.

Besides, Reale (2011) estimated significance of financial ratios in managing a business in the U.S. The research provides knowledge on four classifications of financial ratios such as liquidity, leverage, profitability and efficiency ratios. Moreover, the study provides information on the frequently used standard financial ratios by business owners, lenders and management teams.

Also, Monea (2009) aimed to show the main financial ratios such as profitability, activity, long-term debt or dividend policy ratios that provides image about the company's profitability, financing position, use of its assets efficiency and long-term debt financing. In addition, the researcher tries to provide deep knowledge on financial ratios analysis.

On the contrary, Haber (2004) presented chapter 21 of "Accounting Demystified" book which explores core types of ratios such as liquidity ratios, efficiency ratios and profitability ratios. Moreover, the research explains that ratios formulated from financial statements are part of the process of analysis and functional for their potential to normalize and relate various elements of financial information, and also vertical and horizontal analyses uses in comparing company to itself.

Furthermore, Zager, Sacer and Decman (2012) aimed to specify the trends and dynamics of some of the most important financial ratios of financial position and business performance of SMEs in the Republic of Croatia. They indicated that SMEs make financial statements just to comply in tax regulations and legislations which makes internal reports under-presented or even not existing. Moreover, the accounting information is applied deficiently in their decision making process and management as well. Overall, the research results were financial ratio analysis is very important and generally accepted in business due to its simplicity in application and calculation, and

the quality of performance of the business will be assessed for the important economic discipline.

Moreover, Collier, Grai, Haslitt and McGowan (2004) provided the way of using actual financial data for financial ratio analysis. The aim of their research is to expose students in the computation of ratios for an actual company. Moreover, they used Motorola Corporation as their sample because of its several segments and constructs a financial and industry analysis for the company. Also, the complications on principles of financial ratio analysis application and the financial analysis itself should be considered.

Additionally, Altman (1968) gauged an analytical effectiveness of ratio analysis. The research recommends that in academic environment, traditional ratio analysis is not significant analytical technique anymore. While, a set of financial ratios with particular analysis approach was needed to assess the problem of corporate bankruptcy prediction accurately. The research results were that it will take on greater statistical significance in analyzing ratios using multivariate framework compare to common technique of sequential ratio comparisons.

On the other hand, Ohnson (1970) conducted the research to evaluate the causes of failure based on ratio analysis. He discussed the key results from the studies and compared various methods and concluded that ratio analysis is an effective method in forecasting firm failure as well as examining firms post failure.

However, Ednlister (1972) judged the effectiveness of financial ratio analysis for determining small business failure. Ednlister (1972) mentioned that Altman, Beaver, and Blum have advance factual research of financial analysis through statistical techniques, to evaluate failure and success, with the help of financial data and also useful in forecasting of failure of medium and large asset-size companies. Limitation of availability of data, small/medium-sized firms have not followed the above mentioned research.

Also, Altman (1968) assessed the problem of ratio analysis quality in analytical methods. He conducted a set of financial and economic ratios to forecast corporate bankruptcy. Moreover, he applied on the studied ratios a discriminant statistical

methodology. However, his study is not applied on all corporations, but his data was limited on manufacturing corporations.

In addition, financial ratios are presented which is useful in knowing the profitability of a company ('Making Sense of Profits Using Profitability Ratios' 2008). Further, the research includes calculations of equations and definition of terms of profit margin ratios in associate with sales, assets and dollars invested; thus, the article results were that profit figures are not the only indicators of a company's probability in choosing a company to invest in ('Making Sense of Profits Using Profitability Ratios' 2008).

Conversely, Oum and Yu (1998) examined the changes in the productivity growth to conduct an analysis on profitability. They chose 22 airline companies between the years 1986 and 1995. Their analysis were conducted on different places in the world. They concluded that the overall profitability was improved during the 1990s.

Similarly, Arif (2014) prepared Strategic Financial Analysis report on DELL and HP, which are two computer technology companies that are globally recognized in producing computers and other technological stuffs. The said Strategic Financial Analysis Report included companies with common size income statement and balance sheet, comparative income statement and balance sheet, different financial statement ratio which are liquidity, capital structure and solvency, ROI, operating performance, market measured from the year of 2010 to 2013, and brief summary of Computer Technology Industry together with the strategies executed by Dell and HP. In addition, the reports characterized the performance of the company and their financial health as well. However, a conclusion was given based on the strategies of the two companies and financial analysis report for enhancement and investment recommendation.

Nevertheless, Li-Hua, Szu-Hsien, Yi-Min, and Chun-Fan (2014) examined whether firms realize assets within a short period to settle liabilities when the debts are due. The study investigates the financial data of "Uni-President" which is a listed company and "Tsin Tsin" which is a delisted company to compare their performance based on liquidity indicators. Moreover, it is noted that current and quick ratios are the most frequently used indicators in measuring liquidity but cash conversion cycle (CCC) may be a better approach. Overall, results were CCC indicators reflects the ability of the firm to pay its short-term debt and liquidity better.

Cagle, Campbell and Jones (2013) evaluated company's liquidity through following ratios;

1. Current Ratio;
2. Cash Conversion Cycle (CCC).

Furthermore, they evaluated Circuit Company and Best Buy during the 10-year period before City Circuit filed its bankruptcy in 2008. In addition to the above, the study indicates that current ratio measure does not include a time factor while the CCC formula incorporates time related to selling inventory, collecting receivables, and paying accounts.

On the other hand, Armen (2013) assessed the liquidity and solvency of major U.S. airline companies based on the published data in the statement of cash flows filed in Securities and Exchange Commission. The main intent of the study is to acquire deep knowledge regarding financial performance of U.S. airlines based on cash flow information as support to the traditional ratio analysis. His research results were that the majority part of the chosen U.S. airline companies have issues in liquidity and distinctly possible to face financial problems in meeting present financial commitments, which in fact express why they are highly leveraged relying on outside sources of financing.

Additionally, Ferrer, R. and Ferrer, G. (2011) tested the degree of compliance with International Financial Reporting Standards (IFRS) through liquidity and leverage ratios if measured by Balance Sheet and Income Statement of 100 Publicly Listed Corporations in the Philippines. To assess the disclosure of financial statement, they used compliance audit output with application of split procedure to score the indicators of each companies. Findings from the calculation of t-statistics were that any of the indicators does not apply significant effect on the financial variables. Overall, the study results were that financial leverage and liquidity has no impact on International Financial Reporting Standard.

Moreover, Kirkham (2012) examined the importance in analysis of the liquidity of companies by applying traditional ratios as compared to cash flow ratios. Moreover, findings on traditional ratios could cause to a decision error concerning liquidity of companies. The research results were that dissimilarity found between the traditional

liquidity ratios and cash flows ratios and that analysis from traditional liquidity ratios is superior compared against cash flow ratios.

Contrariwise, Jarrow (2013) checked economic fundamentals with maximum leverage ratio or capital adequacy rules. He calculated the maximum leverage ratio which the probability of insolvency is lesser from some predetermined amount. Consequently, similarity between leverage ratio rules which affects risks with Value-at-Risk (VaR) capital adequacy rule, can be analyzed. But finding communicates that leverage ratio rules are comparatively instinctive and easier from VaR rules.

Also, Nissim and Penman (2003) presented financial statement analysis that differentiate leverage occur in financing activities and in operations. Furthermore, they provided two leveraging equations which described their influence to the book rates of return of equity. Apart from above, the research explains cross-sectional dissimilarity in current and future rates of return as well as price-to book ratios. The study's overall results were that price of balance sheet line items for operating liabilities is not the same to who is dealing with financing liabilities.

In addition, Nissim and Penman (2003) differentiated between operational leverage and operational activity ratios. They used different equations in their study to examine how different leverage types affect book rates of return on equity. Moreover, they conducted an empirical analysis to clarify the difference between the current and future cross-sectional rates of return and the price-to-book ratios.

However, Welch (2011) explored the two common problems in capital structure research. The first one is that non-financial liabilities, a debt, should never be as equivalent as equity. The error of mixing the two terms have been observed through debt to equity ratio. The other one is equity-issuing activity not to be viewed as similar to capital structure changes. Results were that there is weak connection between the two and capital structure and capital issuing literature are different.

Conversely, Chen and Zhao (2006) discussed the relationship between the market-to-book ratio and leverage ratio. The topic was chosen because it is widely documented as an empirical regularities. They investigate the negative relationship between the two studied areas in a capital structure literature. Chen and Zhao looked into companies

with high higher market-to-book ratios to show the audience that the chosen companies face lower debt financing costs and borrow more.

Furthermore, Drake (2011) thought that manager should reward their employees upon their performance. In the article, Drake explained how a manager knows if his/her employees are doing well, and how to determine each department performance. On the other hand, she also enlightened to lenders how to determine if their borrowers will pay back as promised. Moreover, Drake clarified to investors the way to predict how well the securities of one company will perform relative to that of another or how each security is riskier than another. She explained many more aspects that would benefit stakeholders in her article.

On the other hand, Monea, Monea and Orboi (2010) examined the main activity ratios which help to measure the company's ability to use its assets and capital efficiently. On top of that, they applied financial ratios relevant to assets management and evaluation of levels of output produced by assets.

However, Nissim and Penman (2001) remarked that financial statement analysis has traditionally been seen as part of the fundamental analysis required for equity valuation. Nissim and Penman (2001) examined financial statement analysis using equity valuation. They analyzed financial statement with professional technique for future use. Their analysis of the financial statements covers operational activities and financial activities. They conducted financial ratios computation to predict future ratio to determine equity payoffs.

Nevertheless, Lan (2012) emphasized the value of financial ratios on a company's attractiveness. The study explains and provides further details on various financial ratios and its calculations which includes inventory turnover, quick ratio and debt-to-assets ratio. The study is concluded that by giving useful figures, analyzing ratios connects with corporate financial statements.

Conversely, Folayan, Oguntade and Ogundari (2007) empirically studied profitability and operational efficiencies. Their study was based in Nigeria and was on Cocoa. In order to find institutions that were able to recover their operating expenses, they collected the positive and highest figures of profits in the cocoa marketing institutions

industry. They concluded that post-deregulation cocoa marketing era is profitable and efficient.

Contrariwise, Ibarra (2009) explored the importance of statement of cash flows for both internal and external users. His research applies ratios based from the operating cash flows in evaluating the financial status of three manufacturing companies in the Philippines. The study aims to determine the limitations in using the ratios. Also, the researcher shows that cash flow ratios can be used as tools in assessing the financial status of companies but not including profitability ratios; however, the main limitation in applying the ratios is when operating activities are not producing cash, which can lead to negative ratio that cannot be used in analyzing the company's performance.

Whereas, Violeta, Adrian, Sorin, and Mirela, (2008) explored the main market ratios computed by the investors on market capital with the use of fundamental and technical analysis methods. The article explains that investors shall be the major user of financial information because capital market financing has become a modern substitute to financing into monetary market. The article concludes that market ratios are the most thorough means of measuring a company since they exhibit validation on influence of risk and profitability financial ratios.

2.3 SUMMARY, COMMENTS AND CRITICISMS

In the aforementioned literature review, the financial statements' main purpose is to grant information to a wide range of users about the financial position, performance and changes in financial position of any business. Financial statement's information helps different users in making decisions especially in boosting the revenue and detecting competitive advantage. This section will summarize the previous forty four (44) articles reviews.

According to Reeves (2011), financial statements are significant as supporting documents and in evaluation of financial condition of the business which many entrepreneurs does not realized. As there are different types of financial statements, and each statement provides different type of information. Moreover, Zeff (2013) findings on his survey and analysis on financial reporting were that all approaches of Financial Statements present the same results even if presented in different ways. Moreover, the standers of financial reports are the same, and they are standardized by the IFRS. The

IFRS foundation objective is to develop IFRS through IASB to promote the use and rigorous application of the Standards. However, Dan (2013) correlated fiscal problems with financial reporting accounting regulations. He suggested that the key origin of the synthesis of problems arrives from combination of information and outcome of the financial statements audit activity and their contrast with the regulations. In addition, Financial Statement Analysis is important in assessing the operating and financial condition or performance of a firm Bajkowski (1999). Furthermore, by examining the construction and basic understanding of components of financial statement analysis will know how information can be applied in investment analysis. Moreover, based from the result of the thorough investigation conducted by Chang and Most (1981), investors and financial analysts believes on the importance of financial statements for investment decisions.

On top of all that, financial ratios are essential tools applying in assessment of Financial Statements of the company. Bruns, (1992) expounded the value and application of financial ratios in evaluation of profitability, activity, solvency and leverage, and returns to shareholders. Also, Reale (2011) estimated significance of financial ratios in managing a business provides knowledge on four frequently used standard financial ratios by business owners, lenders and management teams. Moreover, Lan (2012) emphasizes the value of financial ratios on a company's attractiveness and his study concludes that by giving useful figures, analyzing ratios connects with corporate financial statements. Also, Making Sense of Profits Using Profitability Ratios (2008) presented financial ratios which is useful in knowing the profitability of a company which includes the calculations of equations and definition of terms of profit margin ratios in associate with sales, assets and dollars invested. Similarly, Monea, Monea and Orboi (2010) examined the main activity ratios which help to measure the company's ability to use its assets and capital efficiently. On top of that, they apply financial ratios relevant to assets management and evaluation of levels of output produced by assets. Financial Ratio Analysis are also an effective way in forecasting firm failure as well as examining firm post failure. Advance factual research of financial analysis through statistical techniques with help of financial data can evaluate the failure and success of the company.

However, Financial Ratio Analysis has its limitations. Altman (1968) assess the problem of ratio analysis quality in analytical methods which he conducts a set of financial and economic ratios to forecast for corporate bankruptcy. However, his study is not applied on all corporations, but his data was limited on manufacturing corporations. Also, Altman (1968) recommends that traditional ratio analysis is not significant analytical technique in academic environment anymore. Moreover, complications on principles of financial ratio analysis application and the financial analysis itself found out in the study of Collier, Grai, Haslitt and McGowan (2004).

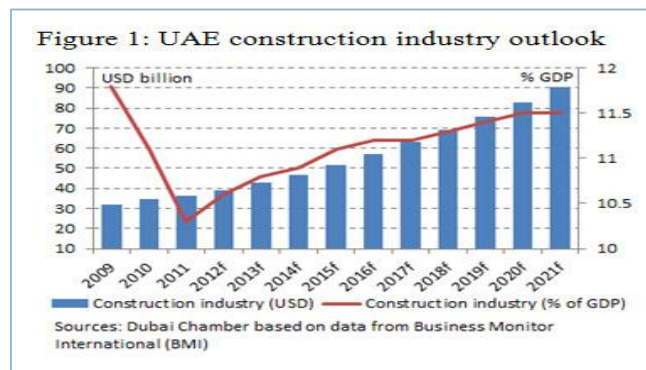
CHAPTER 3:

Historical Background

CHAPTER 3: HISTORICAL BACKGROUND

The chapter comprises three sections. Each section will explain the background of one of the chosen companies consecutively; Arabtec Holding PJSC, Drake & Scull PJSC, and Emaar Properties PJSC. However, a brief explanation about the construction industry in the UAE will be given.

In general, construction is a very broad term meaning “the art and science to form material or immaterial objects, systems or organizations” (Oxford English Dictionary, 2009). However, in a technical matter, Sturgis (1989) defines ‘construction’ as the process of preparing for and forming buildings and building systems. Based on the study analysis of Dubai Chamber (2012), the construction industry of the UAE is one of the fastest growing economies in the Middle East as it experienced a massive investments in the construction industry from public and private enterprises. Dubai Chamber (2012) declared that the rapid growth is based on the recovery from the global financial crisis in 2008. Moreover, Dubai Chamber (2012) predicated precisely that in 2008 the GDP percentage of the UAE was 10.6% and 10.3% in 2011. Also, Dubai



Chamber (2012) predicted that the GDP percentage of the UAE will be 11.1% in 2015 and 11.5% in 2021. A graphical representation from Dubai Chamber (2012) exhibits the UAE’s construction industry outlook in Figure 1.

3.1 COMPANY 1 (ARABTEC HOLDING PJSC):

Arabtec Holding PJSC which is known as Arab Technical Construction Company previously, has completed plenty of exemplary projects both residential and commercial throughout the UAE since 1975 such as hotels, airports, higher education developments, residential buildings and distribution facilities. Moreover, the company also prominent in industrial and infrastructure, oil and gas, pipeline construction, power generation, marine works and general manufacturing facilities. Arabtec Holding PJSC marked the industry for over three decades for its innovation and technology advancement in construction sector.

Arabtec Holding PJSC was listed in the Dubai Financial Market in 2005 and has been considered as the first private construction company go in public in Dubai.

Presently, the company engaged in many subsidiaries which is related in construction sectors such as development of concrete ready mix and providing equipment in constructing industrial, high rise and residential and infrastructure projects. Arabtec Holding PJSC is operating in Abu Dhabi, Dubai, Jordan, Qatar, Russia, Saudi Arabia, Syria and possible expansion in Libya, Algeria and Egypt. Refer to appendix one for annual reports and appendix four for abbreviations.

3.2 COMPANY 2 (DRAKE & SCULL PJSC):

In 1996, Drake & Scull established in Abu Dhabi after ninety (90) years of the company's foundation in United Kingdom and considered as its first office in the Middle East. Moreover, the company operates worldwide and has offices in Dubai, Egypt, Kuwait, Oman, Saudi Arabia, Qatar, India, Jordan, Algeria and Thailand, in addition to managing projects in Europe and other parts of North Africa.

Drake & Scull is dominant in constructing most iconic landmarks. They have wide array of businesses and mainly dealing with the industry demands. Moreover, Drake & Scull Construction (DSC) provides MEP solutions, Drake & Scull Rail focusing on rail networks and rail stations, Drake & Scull Oil & Gas focusing on Onshore and Offshore oil facilities, Passavant Energy & Environment which caters to Water and Waste Water Treatment and Drake & Scull Development, which addresses Public Private Partnerships (PPP) in the infrastructure sector.

The firm transformed into well-known multi-billion dollar organization globally for only four decades. In 2008, DSI extended 55% of its shares to the public and among top twenty global IPOs, Ernst & Young tops the IPO. The fully Integrated Management Systems, certified to ISO 9001:2008, ISO 14001:2005 and OHSAS 18001:2007 standards are compliant with leading building, health and safety regulations, as well as sound environmental and energy management procedures.

Drake & Scull is moving forward continuously with new strategies, innovative business models and unbeaten quality standards even under the most challenging situation. Refer to appendix two for annual reports and appendix four for abbreviations.

3.3 COMPANY 3 (EMAAR PROPERTIES PJSC):

EMAAR Properties is an iconic developer of advanced master-planned communities founded in 1997 which made the real estate sector of Dubai evolved. Also, it is a Public Joint Stock Company listed in Dubai Financial Market. The company is continuing to create master-planned projects globally in hospitality and leisure and shopping malls and retail globally.

Moreover, various mega-structure has been created by EMAAR. Downtown Dubai considered as EMAAR's flagship development, which is the world's most visited lifestyle destination and where the famous Burj Khalifa, Dubai Mall and Dubai Fountain is located. Other communities developed by EMAAR are Arabian Ranches, Emirates Living and Dubai Marina. Refer to appendix three for annual reports and appendix four for abbreviations.

CHAPTER 4:

Methodology

CHAPTER 4: METHODOLOGY

The chapter will emphasize the system of methods used appointed into three sections. At first, the sample data and period information considered in the study will be identified in the first section. Then, the second section will indicate the tools used in the data analysis. Lastly, the chapter applies the tools on the data of the three companies.

4.1 SAMPLE DATA AND PERIOD

The data analysis comprises the financial statements of three major companies in the construction industry in the UAE, which are listed in Dubai Financial Market (DFM). A detailed ratio and trend analysis have been calculated. Limitation of research time and unavailability of unaudited financial statements induced the selection to three companies as most of the small and medium sized companies are not bound to audit their account from a renowned audit firms. Hence, reliability of data was in question. The chosen companies are Arabtec Holding PJSC, Drake & Scull PJSC, and Emaar Properties PJSC. The three chosen companies have a world-wide reputation especially in the UAE. The results would be more reliable than other small and medium sized companies as the three chosen companies' accounts were audited by one of the big four firms. Based on the reliability, the volume of work involved financial statement of ATRC, DSI and EMAAR have been considered. Moreover, all three companies share the same industry of "Real-Estate and Construction". The data was collected by downloading through online source of the DFM's website. The collected data includes annual reports of the companies, such as; Balance Sheets, Income Statement, Cash Flow Statement and Changes in Equity Statement. Furthermore, the sample period is covering the years 2011 to 2013. For easier explanation, figures of the study have been rounded off to thousands. Copies of comprehensive financial statements are attached in appendix one, two and three.

4.2 TOOLS OF ANALYSIS

The section will include the tools used to extract the data that will be used in conducting the analysis. The tools include various types of financial ratios. However, the study will only cover the important tools required for the desired analysis. The main objective of financial ratios in the study is to compare the past and current situation of each company in the past three years, which allows comparison on each company with its competitors

and studying the efficacy and risk of each company. To achieve the previous objectives, the following ratios will be used in the study.

A- PROFITABILITY RATIOS

1. Gross Profit Margin
2. Operating Profit Margin / Operating Margin
3. Net Profit Margin / Profit Margin
4. Return on Total Assets (ROTA)
5. Return on Assets (ROA) and
Return on Investments (ROI)
6. Operating Return on Assets (OROA)
7. Return on Operating Assets (ROOA)
8. Return on Common Stockholders / Equity Ratio
9. Return on Equity (ROE) / Return on Net Worth (RONW)

B- LIQUIDITY RATIOS

1. Current Ratio
2. Quick Ratio / Acid-Test Ratio / Quick Assets Ratio
3. Net Working Capital to Sales Ratio
4. Inventory to Net Working Capital
5. Cash Coverage Ratio

C- LEVERAGE RATIO

1. Capitalization Ratio
2. Total Debt to Total Assets Ratio
3. Long-Term Debt to Total Assets Ratio
4. Total Debt to Equity Ratio
5. Equity Multiplier
6. Interest Coverage Ratio
7. Long-Term Debt to Equity Ratio
8. Debt Service Coverage Ratio (DSCR)

D- ACTIVITY/EFFICIENCY RATIOS

1. Inventory Turnover Ratio
2. Receivables Turnover Ratio
3. Total Asset Turnover Ratio
4. Fixed-Asset Turnover Ratio
5. Average Collection Period
6. Working Capital Turnover Ratio (WCT)
7. Number of Days of Inventory / Days Sales of Inventory (DSI)
8. Number of Days of Receivable / Days Sales Outstanding (DSO)
9. Operating Cycle
10. Liquidity Index

E- CASH FLOW RATIOS

1. Operating Cash Flow Ratio/Sales Ratio
 2. Free Cash Flow/Operating Cash Flow Ratio
 3. Cash Flow per Share
- **Cash Flow Coverage Ratios**
4. Short-Term Debt Coverage Ratio
 5. Capital Expenditure Coverage Ratio
 6. Dividends Coverage Ratio
 7. CAPEX + Cash Dividends Coverage Ratio

F- MARKET VALUE RATIOS

1. Earnings per Share (EPS)
2. Dividend per Share (DPS)
3. Dividend Payout Ratio
4. Plow Back Ratio / Retention Ratio
5. Price-Earnings Ratio / (P/E) Ratio
6. Dividends Yield on Common Stock

4.3 ANALYTICAL APPROACH

The previous ratios will be explained in details in the section to be followed. Each ratio will start with a technical definition and followed by its formula.

A- PROFITABILITY RATIOS:

Profitability ratios exhibit how the company generates its profits. Moreover, the company's profit margin shows the potential of standing firm against competition and depression period. A higher value relative ratio against competitor's ratio or comparative ratio from a previous period is indicative that the company is doing well. On the other hand, return on assets evaluates the efficiency of the company of creating profit returns on assets and net worth mainly concentrates on financial returns produced by the owner's invested capital.

1. GROSS PROFIT MARGIN:

A financial metric practiced to assess a business's financial viability by analyzing the proportion of money left over from revenues after accounting for the Contract Cost. The ratio guides as the foundation for paying further expenses and future savings. Small Business Development Corporation (2014) noted that the gross profit margin is calculated as:

$$\text{Gross Profit Margin} = \frac{\text{Gross Income}}{\text{Revenue}} \times 100$$

2. OPERATING PROFIT MARGIN / OPERATING MARGIN:

Operating margin emanates the proportion of a company's revenue remaining after paying production variable costs i.e. direct production related expenditures such as wages, raw materials etc. A healthy operating margin is desirable for a company to enable paying fixed costs, such as interest on debt, a vital portion to improve company's leverage and to build trust in investors. The ratio helps pricing strategy and efficiency. Investopedia (2014) noted that the operating profit margin is calculated as:

$$\text{Operating Profit Margin} = \frac{\text{Net Operating Income}}{\text{Revenue}} \times 100$$

3. NET PROFIT MARGIN / PROFIT MARGIN:

A ratio of profitability calculated as net income to revenues, or net profits divided by sales multiplied by 100. It measures how much out of every Dirham of revenue a company actually keeps in earnings. Profit margin is extremely important when comparing companies in similar industries. A higher profit margin indicates a more profitable company that has better control over its costs compared to its competitors. Profit margin is exhibited as a percentage; a 20% profit margin, for example, means the company has a net income of AED0.20 for each Dirham of sales. Business Development Corporation (2014) noted that the net profit margin is calculated as:

$$\text{Net Profit Margin} = \frac{\text{Net Income}}{\text{Revenue}} \times 100$$

4. RETURN ON TOTAL ASSETS (ROTA):

A ratio that measures a company's earnings before interest and taxes (EBIT) against its total assets. The ratio is indicative of how effectively a company is using its assets to generate earnings before contractual obligations inevitable to be paid. Investopedia (2014) noted that the return on total assets is calculated as:

$$\text{Return on Total Assets} = \frac{\text{EBIT}}{\text{Total Assets}} \times 100$$

5. RETURN ON ASSETS (ROA) / RETURN ON INVESTMENTS (ROI):

An indication of relative profitability as against total assets for a company. ROA/ROI elaborates efficiency of management in using its assets to generate earnings. Calculated by dividing a company's annual earnings by its total assets, ROA/ROI is displayed as a percentage, which is sometimes referred as "return on investment". Investopedia (2014) noted that the return on assets is calculated as:

$$\text{Return on Assets} = \frac{\text{Net Income}}{\text{Total Assets}} \times 100$$

6. OPERATING RETURN ON ASSETS (OROA):

The ratios is the same as “return on assets”; however, it is subject to a little difference as mentioned in the previous ratio. It has an emphasis on operational activity income of a company rather than whole income. Investopedia (2014) noted that the operating return on assets is calculated as:

$$\text{Operating Return on Assets} = \frac{\text{Net Operating Income}}{\text{Total Assets}} \times 100$$

7. RETURN ON OPERATING ASSETS (ROOA):

The return on operating assets include only the assets used to make revenue. Management will understand the productive assets when measuring return on operating assets. Also, they will be able to reduce the cost of non-productive assets and put their attention to assets that essentially assist them from the firm's financial statement. Investopedia (2014) noted that the return on operating assets is calculated as:

$$\text{Return on Operating Assets} = \frac{\text{Net Income}}{\text{Operating Assets}} \times 100$$

8. RETURN ON COMMON STOCKHOLDERS / EQUITY RATIO:

The ratio is more important to investors of any company with respect to profitability, which measures a company's success in generating income for the benefit of common stockholders. The ratio is usually expressed in percentage. Accounting for Management (2013) noted that the return on stockholders' equity is calculated as:

$$\text{Return on Stockholders' Equity} = \frac{\text{Net Income}}{\text{Average Shareholders' Equity}} \times 100$$

9. RETURN ON EQUITY (ROE) / RETURN ON NET WORTH (RONW):

Return on equity measures a company's profitability by emanating how much profit a company is having with the money that shareholders invested. Net income is for a full fiscal year (before dividends paid to common stock holders but after dividends to preferred stock). Shareholder's equity does not include preferred shares. Ready Ratios (2014) noted that the return on equity is calculated as:

$$\text{Return on Equity} = \frac{\text{Net Income}}{\text{Shareholders' Equity}} \times 100$$

B- LIQUIDITY RATIOS:

Balance sheets help to determine the financial reliability by providing liquidity ratios, which manifest how much the company earned in a day. The current ratio exhibit the relationship of working capital of available current assets in achieving the current obligations of the company. Moreover, quick ratio is almost the same in which assets can be easily converted to cash to find out the immediate working capital relationship.

1. CURRENT RATIO:

The ratio is generally applied to exhibit an idea of the company's ability to pay back its short-term liabilities (debt and payables) with its short-term assets (cash, inventory, receivables). Higher the ratio, higher the ability to pay back short-term obligation. A ratio less than 1.0 proposes that the company would be incapable of paying off its obligations when they become payable at that point. Furthermore, it is a bad indication of financial health, yet it does not essentially mean that it will go bankrupt as there are many ways to access financing; however, it is definitely not a good sign. Drake, P.P. (2011) noted that the current ratio is calculated as:

Current Ratio =	$\frac{\text{Current Assets}}{\text{Current Liabilities}}$
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2. QUICK RATIO / ACID-TEST RATIO / QUICK ASSETS RATIO:

The quick ratio is an indicator of a company's short-term liquidity, which is also measurement of a company's ability to meet its short-term obligations with its most liquid assets. Furthermore, it measures the Dirhams amount of liquid assets existing for each Dirham of current liabilities. Higher the quick ratio, healthier the company's liquidity situation. Drake, P.P. (2011) noted that the quick ratio is calculated as:

Quick Ratio =	$\frac{\text{Current Assets} - \text{Inventory}}{\text{Current Liabilities}}$
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3. NET WORKING CAPITAL TO SALES RATIO:

The ratio helps to analyze the firm's ability to finance additional revenue without incurring additional liability. Drake, P.P. (2011) noted that the net working capital to sales ratio is calculated as:

Net Working Capital to Sales Ratio =	$\frac{\text{Current Assets} - \text{Current Liabilities}}{\text{Revenue}}$
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4. INVENTORY TO NET WORKING CAPITAL:

The ratios measure a percentage that shows a firm's ability to finance its inventories from its available cash. Numbers less than 100 are preferable as they indicate high liquidity. Numbers greater than 100 emanates that the inventories are too large in relative to the firm's financial strength measures the effect of a company's inventory level on its ability to operate profitably. The Online Business Dictionary (2011) noted that the inventory to net working capital is calculated as:

$$\text{Inventory to Net Working Capital} = \frac{\text{Inventory}}{\text{Current Assets} - \text{Current Liabilities}} \times 100$$

5. CASH COVERAGE RATIO:

A measure of a company's capability to cover its financial liabilities. In vivid meaning, a high coverage ratio is a better ability for a company to fulfill its obligations to its lenders. Stakeholders also calculate coverage ratios to ascertain the change in a company's financial position. Common coverage ratios include the interest coverage ratio, debt service coverage ratio and the asset coverage ratio. The cash coverage ratio is beneficial for evaluating the amount of cash available to pay for a borrower's interest expense, and depicts as a ratio of the cash feasible to the value of interest to be paid. To adjudge adequate ability to pay, the ratio should be considerably greater than 1.0. Accounting Tools (2011) noted that the cash coverage ratio is calculated as:

$$\text{Cash Coverage Ratio} = \frac{\text{EBIT} + \text{Non-Cash Expense}}{\text{Interest Expense}}$$

C- LEVERAGE RATIO:

The ratio computed to get an idea of the company's methods of financing or determining its capability to cover financial liabilities. There are various ratios; however, the main factors to be looked at include debt, equity, assets and interest expenses. Also, the ratio calculated to determine a company's mix of operating costs, indicating how changes in output will influence operating income. Fixed and variable costs are the two types of operating costs; upon the company and the industry, the mix will be different.

1. CAPITALIZATION RATIO:

It is the proportion of debt in a company's capital structure and expressed in percentage. Also, it is a measurement for long-term debt usage. Higher the proportion of debt increase, higher the risk of bankruptcy, higher the capitalization ratio. Such decisions of debt financing is often induced by increase in return on equity which is due to high tax shield on debts. Investopedia (2014) noted that the ratio is calculated as:

$$\text{Capitalization Ratio} = \frac{\text{Long-Term Debt}}{\text{Long-Term Debt} + \text{Shareholders' Equity}} \times 100$$

2. TOTAL DEBT TO TOTAL ASSETS RATIO:

The ratio defines the total value of debt relative to assets, which allows judgments of leverage to be conducted across various companies. Higher the ratio, higher the degree of leverage, and consequently, financial risk. Total debt to total assets is a wide-ranging ratio that includes long-term, short-term debt and all tangible and intangible assets. Investopedia (2014) noted that the total debt to total assets is calculated as:

$$\text{Total Debt to Total Assets Ratio} = \frac{\text{Total Debt}}{\text{Total Assets}}$$

3. LONG-TERM DEBT TO TOTAL ASSETS RATIO:

A measurement expressing the percentage of a company's assets that are financed with borrowing and financial obligations extending for more than one year. The ratio provides a standard measure of the financial health of a company, including its ability to cover financial obligations. A decreased trend over the years indicates that a company is less dependent on borrowing to attain sustained growth of a company. Investopedia (2014) noted that the long-term to assets is calculated as:

$$\text{Long-Term Debt to Total Assets Ratio} = \frac{\text{Long-Term Debt}}{\text{Total Assets}}$$

4. TOTAL DEBT/EQUITY RATIO:

A measure of a company's financial leverage computed by dividing its total liabilities by stockholders' equity. It shows a proportion of equity and debt the company uses to finance its assets.

Note: Occasionally interest-bearing, long-term debt is only used instead of total liabilities in the calculation.

Drake, P.P. (2011) noted that the total debt to equity ratio is calculated as:

Total Debt to Equity Ratio =	$\frac{\text{Total Debt}}{\text{Total Shareholders' Equity}}$
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5. EQUITY MULTIPLIER:

The equity multiplier is an indicator of a company's financial leverage. A high equity multiplier is desirable because financing through equity results in lower leverage, consequently, low dependency on debts. Furthermore, lower the debt attracts more profit due to minimized cost of interest. The multiplier is a variation of the debt ratio.

Finance Formulas (2014) noted that the equity multiplier is calculated as:

Equity Multiplier =	$\frac{\text{Total Assets}}{\text{Total Shareholders' Equity}}$
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6. INTEREST COVERAGE RATIO:

The ratio expresses how a company can simply pay interest on outstanding debt. It is computed by dividing a company's earnings before interest and taxes by the interest expenses for similar period. A low ratio indicates that the company is troubled with debts. The interest coverage ratio anchor is 1.5. If the company has a ratio lower than 1.5, the company situation is doubtful. Also, if the company is having a ratio that is below 1, it means that the company is not generating enough revenue to meet its obligations in terms of interest expense. Hence, the ideal ratio of the interest expense is 1.5 or above. Drake, P.P. (2011) noted that the times-interest coverage ratio is calculated as:

Interest Coverage Ratio =	$\frac{\text{EBIT}}{\text{Interest Expense}}$
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7. LONG-TERM DEBT TO EQUITY RATIO:

It shows what proportion of equity and debt the company is utilizing to finance its assets in the long-run. A high debt/equity ratio usually elaborates that a company has been aggressive in financing its growth with debt. Consequently, it will give a volatile earnings as against of the additional interest expense. In addition, the debt/equity ratio is reliant on the industry in which the company operates. The Free Financial Dictionary (2012) noted that the long-term debt to equity ratio is calculated as:

Long-Term Debt to Equity Ratio =	$\frac{\text{Long-Term Debt}}{\text{Total Shareholders' Equity}}$
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8. DEBT SERVICE COVERAGE RATIO (DSCR):

In corporate finance, it is the value of cash flow available to cover the yearly interest and principal payments on debt, including sinking fund payments.

In government finance, it is the value of export earnings needed to cover the yearly interest and principal payments on debt servicing (country's external debts).

Investopedia (2014) noted that the debt-service coverage ratio is calculated as:

Debt Service Coverage =	$\frac{\text{Net Operating Income}}{\text{Total Debt Services}}$
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D- ACTIVITY/EFFICIENCY RATIOS:

Activity ratios are essential in detecting whether a company's management is efficient and effective in making revenue and generate cash. They are ratios that are used to depict the relative efficiency of a company according to the asset utilization, leverage or other such balance sheet items.

1. INVENTORY TURNOVER RATIO:

The ratio measures the efficiency of how quickly a company consumes its supply of goods over a particular period of time, and the ratios used is most often. The cost of revenue (COR) may be replaced because revenue is recorded at market value, whereas inventories are generally recorded at cost. Furthermore, average inventory can be used in the place of the ending inventory level to eliminate seasonal factors to minimum level. A high ratio suggests either a high revenue or an ineffective inventory buying. Higher inventory levels are is undesirable because they show an investment with a rate of return of zero, which will cause the company to face dropping prices in the future. Drake, P.P. (2011) noted that the inventory turnover ratio is calculated as:

$\text{Inventory Turnover} = \frac{\text{Cost of Revenue}}{\text{Inventory}}$

2. ACCOUNTS RECEIVABLES TURNOVER RATIO:

The ratio is used to quantify company's effectiveness in extending credit and collecting debts. A high ratio indicates that the company is operating under a cash basis or that it is an extension on credit and collection of accounts receivable is efficient, and a low ratio indicates that a company should review its credit policies to guarantee the timely collection of delayed credit. High accounts receivable depicts that money tied up with customers, but an early recovery will help to use the same cash to earn more revenue. Drake, P.P. (2011) noted that the receivable turnover ratio is calculated as:

$\text{A/R Turnover} = \frac{\text{Revenue}}{\text{A/R}}$

3. TOTAL ASSET TURNOVER RATIO:

The asset turnover ratio to compute a company's capability to use its assets to generate sales or revenue. Asset Turnover is generally computed over a yearly basis, either fiscal or calendar year. The asset turnover ratio has the tendency to be high in companies which are in the sector of consumer staples that will have a relatively small asset base but high revenue volume. Contrariwise, companies in sectors like utilities and telecommunications that have large asset bases will have lower asset turnover. Drake, P.P. (2011) noted that the total asset turnover ratio is calculated as:

$$\text{Total Asset Turnover} = \frac{\text{Revenue}}{\text{Total Assets}}$$

4. FIXED ASSET TURNOVER RATIO:

Measure of financial ratio i.e. net revenue to fixed assets. The fixed-asset turnover ratio analyzes that how a company is capable to make net revenue from the use of fixed-asset investments especially the book value of property, plant and equipment. A higher ratio expresses the companies' effectiveness in using its assets to generate revenue. Drake, P.P. (2011) noted that the fixed turnover ratio is calculated as:

$$\text{Fixed Asset Turnover} = \frac{\text{Revenue}}{\text{Fixed Assets}}$$

5. AVERAGE COLLECTION PERIOD:

The estimated time that a company expects to get their owed money back from its customers, in terms of receivables. Accounting Tools (2013) noted that the average collection period is calculated as:

$$\text{Average Collection Period} = \frac{\text{A/R}}{\text{Total Sales} / 365}$$

6. WORKING CAPITAL TURNOVER (WCT):

A tool of comparing the diminution of working capital to creating sales over a specific time, which offers some beneficial information of using WC to create sales effectively. Accounting Explained (2011) noted that the average collection period is calculated as:

$$\text{Working Capital Turnover Ratio} = \frac{\text{Net Revenue}}{(\text{Beginning WC} + \text{Ending WC}) / 2}$$

7. NUMBER OF DAYS OF INVENTORY / DAYS SALES OUTSTANDING (DSO):

A financial tool that a company's use to determine its performance that draws to the investors an idea of how long it takes a company to pay back its inventory into sales (including goods that are work in progress). Typically, the shorter "lower" the DSI, the better it is. Note: The average DSI varies from one industry to another is important. Drake, P.P. (2011) noted that the number of days of inventory is calculated as:

$$\text{Number of Days of Inventory} = \frac{\text{Inventory}}{\text{COR} / 365}$$

8. NUMBER OF DAYS OF RECEIVABLE / DAYS SALES OUTSTANDING (DSO):

An instrument that measures the average number of days that a company takes to collect revenue subsequent to a sale. The lower the DSO, the fewer days it takes for a company to collect its accounts receivable. The higher the DSO, the longer it takes for a company to sell its product to customers on credit and the longer to collect their money back. Drake, P.P. (2011) noted that the number of days of receivable is calculated as:

$$\text{Number of Days of Receivable} = \frac{\text{A/R}}{\text{Revenue} / 365}$$

9. OPERATING CYCLE:

Operating cycle is a tool to measure operating efficiency, working capital management and time that a company realize its inventories in cash. The shorter the operating cycle, the better, which means that the company's cash is tied up for a shorter period. Drake, P.P. (2011) noted that the operating cycle is calculated as:

$$\text{Operating Cycle} = \text{Days of Inventory} + \text{Days of Receivables}$$

10. LIQUIDITY INDEX:

The liquidity index computed the days needed to convert a company's trade receivables and inventory into cash. The index is used to approximate the capability of a company to generate the cash required to cover its current liabilities. Accounting Tools (2012) noted that the operating cycle is calculated as:

$$\text{Liquidity Index} = \frac{(\text{Trade Receivables} \times \text{Days to Liquidate}) + (\text{Inventory} \times \text{Days to Liquidate})}{\text{Trade Receivables} + \text{Inventory}}$$

E- CASH FLOW RATIOS:

The Cash Flow Ratios emphasize how cash is generated. It also concentrates on the safety net of a company. The Cash Flow Ratios give different users an idea of the financial health, strength and performance of a company. A greater cash flow shows a greater health, whereas low cash flow indicates unhealthy cash coverage of a company.

1. OPERATING CASH FLOW/SALES RATIO:

A company's operating cash flow to sales ratio is expressed as a percentage, and it gives an idea of a company's capability to convert sales into available cash. Ready Ratios (2014) noted that the operating cash flow/sales ratio is calculated as:

$$\text{Operating Cash Flow/Sales Ratio} = \frac{\text{Operating Cash Flow}}{\text{Revenue}} \times 100$$

2. FREE CASH FLOW/OPERATING CASH FLOW RATIO:

The free cash flow/operating cash flow ratio measures the relationship between free cash flow and operating cash flow. Capital expenditures are considered to be an essential outflow of funds to maintain a company's competitiveness and efficiency. When subtracting capital expenditures from the operating cash flow, the cash flow remaining after these deductions, it is considered as "free" cash flow, which becomes available to a company to use for expansion, acquisitions, and/or financial stability to weather difficult market conditions. Companies with greater financial health and strength tend to have a higher percentage of free cash flow embedded in a company's operating cash flow. Ready Ratios (2014) noted that the free cash flow/operating CF ratio is calculated as:

$$\text{Free Cash Flow/Operating CF Ratio} = \frac{\text{OCF} - \text{Capital Expenditure}}{\text{Operating Cash Flow}} \times 100$$

3. CASH FLOW PER SHARE:

The ratio determines the operating cash flows related to each share of common stock. It is a change of the earnings per share that replaces net income with net operating cash flows. On the other hand, net income is based on the management decision and unique choice of accounting policies and preparation of accounting estimates. The net cash flows from operating activities is a more concrete figure, and potentially more reliable. Ready Ratios (2014) noted that the cash flow per share is calculated as:

$$\text{Cash Flow Per Share} = \frac{\text{Operating CF} - \text{Preferred Dividends}}{\text{Numbers of Shares}}$$

→ Cash Flow Coverage Ratios

These ratios determine the capability of the company's operating cash flow to cover its liabilities or ongoing concern costs. Operating cash flow is the amount of cash that flows in the company from its main activity. Companies will have greater ability to cover its obligations when they have larger operating cash flow coverage. Also, it will allow the company to expand their business without obstacles or debt services.

4. SHORT-TERM DEBT COVERAGE RATIO:

The account shown in the balance sheet of a company under the current liabilities. Company compromises debts which are due within one year of period and such debts (short-term) are usually taken out. The account is extremely important when measuring a company's financial strength. If the ratio is larger than the company's cash and cash equivalents, it indicates a weak financial health. Moreover, it shows that the company does not have enough cash to pay off its short-term debts. Some of the long-term debt are included in the account even if short-term debts are due within a year. Investopedia (2014) noted that the short-term debt coverage is calculated as:

Short-Term Debt Coverage =	$\frac{\text{Operating Cash Flow}}{\text{Short-Term Debt}}$
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5. CAPITAL EXPENDITURE COVERAGE RATIO:

Capital expenditure coverage ratio determines if a company generates enough cash from operations to meet its' expenses, paid for purchased capital asset or for made investments. The ratio show if a company's capacity is able to acquire long-term assets using free cash flow. As businesses go through cycles of large and small capital expenditures, the cash flow to capital expenditures ratio will frequently fluctuate. Investopedia (2014) noted that the capital expenditure coverage is calculated as:

Capital Expenditure Coverage =	$\frac{\text{Operating Cash Flow}}{\text{Capital Expenditure}}$
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6. DIVIDENDS COVERAGE RATIO:

Dividend Coverage Ratio is the number of times a company is able of paying dividends to shareholders from the profits earned within the accounting period. The higher the coverage ratio, the better, which indicates that the company is able to pay dividends to shareholders from the profits earned within the accounting period without difficulty. Investopedia (2014) noted that the dividends coverage is calculated as:

$$\text{Dividends Coverage} = \frac{\text{Operating Cash Flow}}{\text{Cash Dividends}}$$

7. CAPEX + CASH DIVIDENDS COVERAGE RATIO:

CAPEX + dividends coverage ratio shows company's usage of funds from operating cash flow in order to invest within the company and dividends payout. Investopedia (2014) noted that the CAPEX + cash dividends coverage is calculated as:

$$\text{CAPEX + Cash Dividends Coverage} = \frac{\text{Operating Cash Flow}}{\text{Capital Expenditure + Cash Dividends}}$$

F- MARKET VALUE RATIOS:

Market Value Ratios expresses a determinable market value, the stock price, to book values gathered from the firm's financial statements.

1. EARNINGS PER SHARE (EPS):

EPS is usually measured to be the single extreme important variable in determining a share's price. In addition, it is a main component considered in calculating the price-to-earnings valuation ratio. Finance Formulas (2014) noted that the earnings per share is calculated as:

Earnings Per Share =	$\frac{\text{Net Income}}{\text{Numbers of Shares}}$
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2. DIVIDEND PER SHARE (DPS):

The total number of declared dividends for every ordinary share issued. Finance Formulas (2014) noted that the dividends per share is calculated as:

Dividends Per Share =	$\frac{\text{Dividends Paid to Shareholders}}{\text{Numbers of Shares}}$
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3. DIVIDEND PAYOUT RATIO:

Dividend payout ratio measures the earnings paid to shareholders in dividends. The payout ratio to shareholders are expressed in percentage or as a proportion of cash flow. It is the key to determine the sustainability of a company's dividend payments. Investors look negatively when dividends paid is reduced, which causes stock prices to depreciate as investors pursue alternative dividend-paying stocks. The lower the payout ratio, the better. Companies that pay more than 100% shows that they are paying out more in dividends than it makes in net income. Investopedia (2014) noted that the dividends per share is calculated as:

Dividends Payout Ratio =	$\frac{\text{Dividends Per Share}}{\text{Earnings Per Share}} \times 100$
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4. PLOW BACK RATIO / RETENTION RATIO:

The plowback ratio is the net income that a company does not payout as dividends. Also, it is the ratio of annually retained earnings after dividends have been paid out to total earnings for the period. It shows how much the total earnings a company is reinvesting as compared with paying out to shareholders, it shows the amount of income that a company reinvests into its own operations and it shows the amount of dividends that are paid out as a percentage of earnings, which is the reciprocal of the payout ratio. Accounting Explained (2014) noted that the plowback ratio is calculated as:

$$\text{Plow Back Ratio} = 1 - \frac{\text{Dividends Per Share}}{\text{Earnings Per Share}} \times 100$$

5. PRICE-EARNINGS RATIO / (P/E) RATIO:

A measurement if a company's current share price in relation to its per-share earnings. The higher the P/E ratio, investors expect higher ratios to earnings growth in the future compared to companies with a lower P/E within the same industry and historically. Investors should take P/E ratios as an anchor for comparison in their investment. Investopedia (2014) noted that the P/E ratio is calculated as:

$$\text{Price-Earnings Ratio} = \frac{\text{Market Price per Share}}{\text{Earnings Per Share}}$$

6. DIVIDENDS YIELD ON COMMON STOCK:

A financial ratio that measures how much a company pays out in dividends annually in relation to its share price. The dividend yield is the return on investment for a stock is when capital gains are nonexistent. Investopedia (2014) noted that the dividends yield on common stock is calculated as:

$$\text{Dividends Yield on Common Stock} = \frac{\text{Annual Dividends Per Share}}{\text{Market Price Per Share}} \times 100$$

CHAPTER 5:

Results & Analysis

CHAPTER 5: RESULTS AND ANALYSIS

The chapter applies the previous chapter's formulas on each company's data.

A- PROFITABILITY RATIOS:

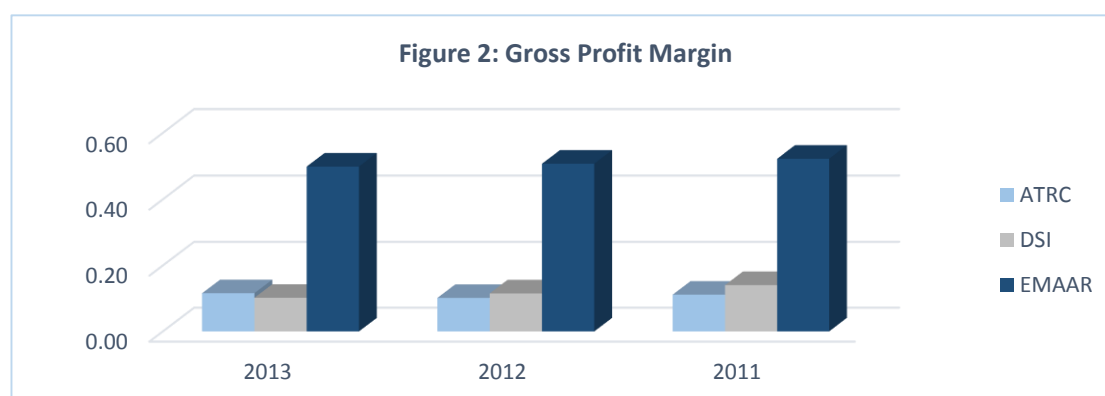
Data to calculate profitability ratios is collected from the balance sheet and the income statement.

1. GROSS PROFIT MARGIN:

Gross Profit Margin =		Gross Income	x 100
		Revenue	
Company	Year 2013	Year 2012	Year 2011
ATRC	$\frac{852,977.00}{7,369,328.00} = 12\%$	$\frac{575,599.00}{5,659,944.00} = 10\%$	$\frac{548,241.00}{4,923,558.00} = 11\%$
DSI	$\frac{496,893.00}{4,879,189.00} = 10\%$	$\frac{382,914.00}{3,321,268.00} = 12\%$	$\frac{437,089.00}{3,109,618.00} = 14\%$
EMAAR	$\frac{5,149,125.00}{10,328,472.00} = 50\%$	$\frac{4,178,877.00}{8,239,928.00} = 51\%$	$\frac{4,235,551.00}{8,112,332.00} = 52\%$

Table 1: Gross Profit Margin Ratio Calculations

Gross profit margin is the measure of ratio with we compare the direct revenue to direct expenses in percentage. The ratio shows how much revenue is left after deducting direct expenses to meet other administrative and distributive/selling cost. The table shows that the ratio is somewhat consistent over the years. However, the EMAAR has clear edge from the other companies due to its large structure and scattered business activities in the world. EMAAR is doing exceptionally well in comparison to ATRC and DSI as it has a ratio of 50%, and the other two companies are fluctuating around 10% to 14%.



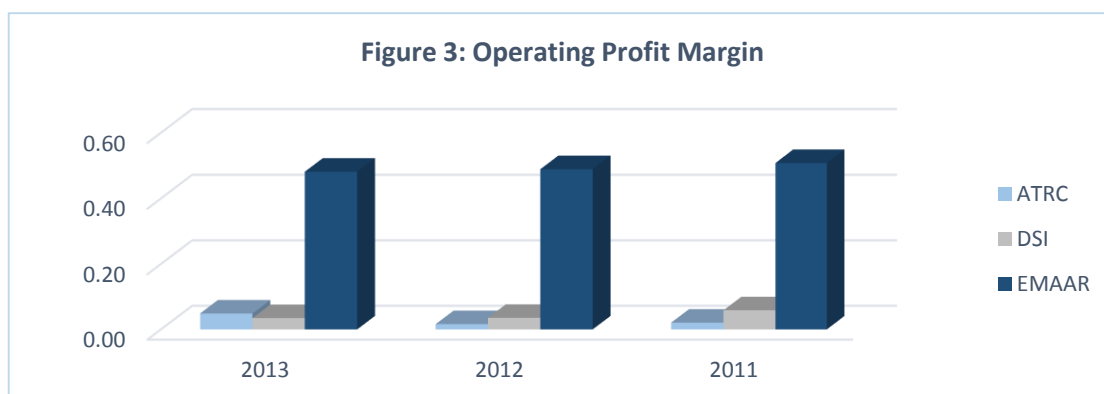
As mentioned above, the graph demonstrates that EMAAR outstands both companies in covering its administrative expenses. DSI decreases over the years from 14% to 10%. On the other hand, ATRC have been fluctuating in a range of 11%. However, all three companies are steady over the years.

2. OPERATING PROFIT MARGIN / OPERATING MARGIN:

Operating Profit Margin =		Net Operating Income Revenue		x 100
Company	Year 2013	Year 2012	Year 2011	
ATRC	$\frac{359,244.00}{7,369,328.00} = 4.9\%$	$\frac{90,823.00}{5,659,944.00} = 1.6\%$	$\frac{102,001.00}{4,923,558.00} = 2.1\%$	
DSI	$\frac{168,312.00}{4,879,189.00} = 3.4\%$	$\frac{117,621.00}{3,321,268.00} = 3.5\%$	$\frac{182,211.00}{3,109,618.00} = 5.9\%$	
EMAAR	$\frac{4,972,977.00}{10,328,472.00} = 48\%$	$\frac{4,030,674.00}{8,239,928.00} = 49\%$	$\frac{4,119,409.00}{8,112,332.00} = 51\%$	

Table 2: Operating Profit Margin Ratio Calculations

Operating profit margin is calculated while considering other operating cost and other operating income in the figures of direct cost and revenue. Operating profit margin expresses the operating profit percentage. Again, the table shows that operating cost for ATRC and DSI is on the higher side. Over the years, the change is not big, but EMAAR is leading with very high operating profit margin of round about 50%. For EMAAR, the trend is decreasing from 50% to 48% and likewise the other firms. However, the decrease is marginal and can be ignored due to inflationary tendencies in the market.



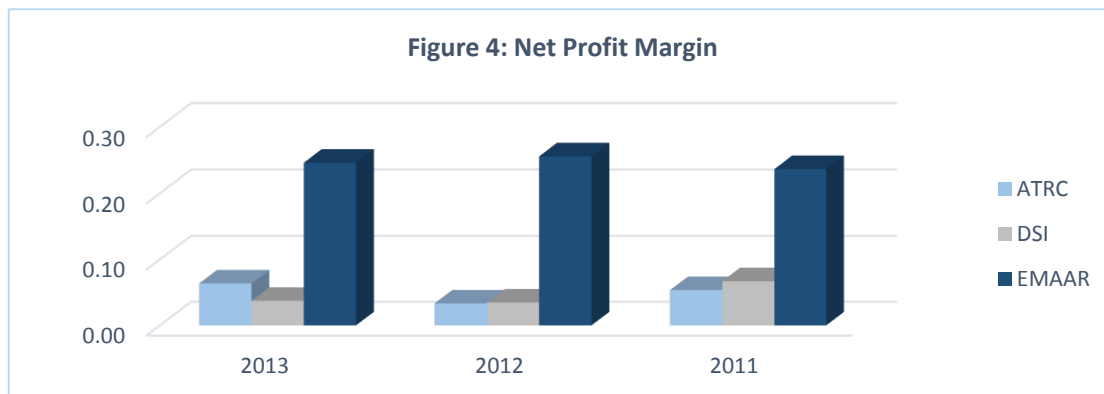
The graph represents the operating profit ratio percentage. It seems that ATRC bars are increasing slightly over the years. Alternatively, DSI have been decreasing slightly from 2011 to 2013. On top of that, EMAAR has the highest percentage, but the rate is decreasing.

3. NET PROFIT MARGIN / PROFIT MARGIN:

Net Profit Margin =		Net Income	x 100
		Revenue	
Company	Year 2013	Year 2012	Year 2011
ATRC	$\frac{468,259.00}{7,369,328.00} = 6.4\%$	$\frac{188,227.00}{5,659,944.00} = 3.3\%$	$\frac{263,532.00}{4,923,558.00} = 5.4\%$
DSI	$\frac{181,735.00}{4,879,189.00} = 3.7\%$	$\frac{115,043.00}{3,321,268.00} = 3.5\%$	$\frac{208,298.00}{3,109,618.00} = 6.7\%$
EMAAR	$\frac{2,540,615.00}{10,328,472.00} = 25\%$	$\frac{2,106,924.00}{8,239,928.00} = 26\%$	$\frac{1,917,941.00}{8,112,332.00} = 24\%$

Table 3: Net Profit Margin Ratio Calculations

Net profit margin expresses the overall profitability of the company. It is evident that EMAAR's administrative and other costs have been increase, which brought half of its gross profit down to 25% as a net profit margin. The other companies have not changed much with respect to their net profitability as compared to their gross profit margin. The main reason is that EMAAR is operating worldwide with diverse functions in other construction related fields. Furthermore, high value projects are also adding up more towards profit as compared to other companies such as EMAAR, which indicates a high profitability in the UAE. ATRC and DSI are mainly focused on construction in highly competitive market of the UAE, which is inducing them to charge lower profit margin wherever they quote a price.



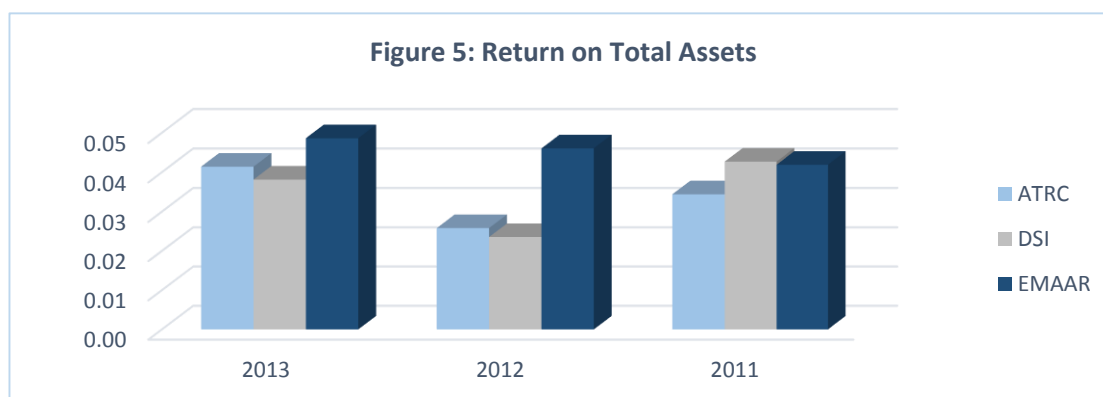
The figure illustrates the overall profitability of each company. For all companies, the trend is almost consistent with slight difference over the year. Both ARTC's and DSI's trends have been fluctuating in a zigzag trend line. On the other hand, EMAAR appears to be steady over the past three years. Between the three companies, EMAAR has the highest profitability amongst them.

4. RETURN ON TOTAL ASSETS (ROTA):

Return on Total Assets =		EBIT	x 100
		Total Assets	
Company	Year 2013	Year 2012	Year 2011
ATRC	$\frac{530,029.00}{12,800,330.00} = 4.1\%$	$\frac{231,264.00}{8,951,668.00} = 2.6\%$	$\frac{300,068.00}{8,721,691.00} = 3.4\%$
DSI	$\frac{273,090.00}{7,162,298.00} = 3.8\%$	$\frac{151,454.00}{6,429,550.00} = 2.4\%$	$\frac{245,040.00}{5,740,682.00} = 4.3\%$
EMAAR	$\frac{3,157,057.00}{64,931,931.00} = 4.9\%$	$\frac{2,816,276.00}{61,151,191.00} = 4.6\%$	$\frac{2,516,005.00}{60,054,106.00} = 4.2\%$

Table 4: Return on Total Assets Ratio Calculations

The ratio tells us how efficiently the company using its assets in generating their revenue. As clear from the table, the ratio is almost consistent for all the companies, and all the three companies are having 3% to 5% return on their assets. EMAAR is comparatively equivalent in ROTA ratio, yet it still has a higher return over the ATRC and DSI. The other possible reason of such change may be that EMAAR, being a developers, after building their own assets holding them to be resold in the market and that retention is causing them the low return over assets. However, other companies are having almost the same ratio showing they are consistent in their competitive industry.



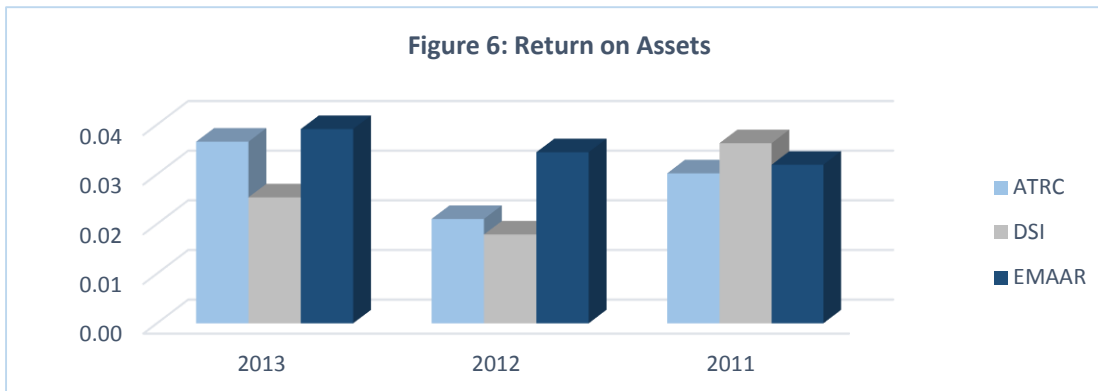
The return on total assets bar chart quantifies a company's ability to utilize acquired assets to generate revenue. In 2011, DSI was the most efficient out of all the three companies, but all of the three companies were at a close ratio. The three companies are almost the same in the year 2011 and 2013; however, there is a difference in the year 2012. It is clearly demonstrated that EMAAR was doing better than the other two companies only in 2012. On the other hand, 2013 was a challenging year for ATRC and DSI. They both tried to reach as EMAAR's efficiency.

5. RETURN ON ASSETS (ROA) / RETURN ON INVESTMENTS (ROI):

Return on Assets =		$\frac{\text{Net Income}}{\text{Total Assets}} \times 100$	
Company	Year 2013	Year 2012	Year 2011
ATRC	$\frac{468,259.00}{12,800,330.00} = 3.7\%$	$\frac{188,227.00}{8,951,668.00} = 2.1\%$	$\frac{263,532.00}{8,721,691.00} = 3.0\%$
DSI	$\frac{181,735.00}{7,162,298.00} = 2.5\%$	$\frac{115,043.00}{6,429,550.00} = 1.8\%$	$\frac{208,298.00}{5,740,682.00} = 3.6\%$
EMAAR	$\frac{2,540,615.00}{64,931,931.00} = 3.9\%$	$\frac{2,106,924.00}{61,151,191.00} = 3.4\%$	$\frac{1,917,941.00}{60,054,106.00} = 3.2\%$

Table 5: Return on Assets Ratio Calculations

Return on investment is a better indicator of how efficiently the assets of the company is being utilized. As evident, all the companies are consistent over the years in utilization that can easily give an idea about the general behavior of construction industry in such ratios as consistency shows a healthy market for all the companies. As EMAAR's profitability and revenue is higher than other companies, they should utilize their assets more efficiently. If it is assumed that some of the assets by EMAAR are built for them self on build operate and transfer (BOT) basis, such return may be considered as acceptable.



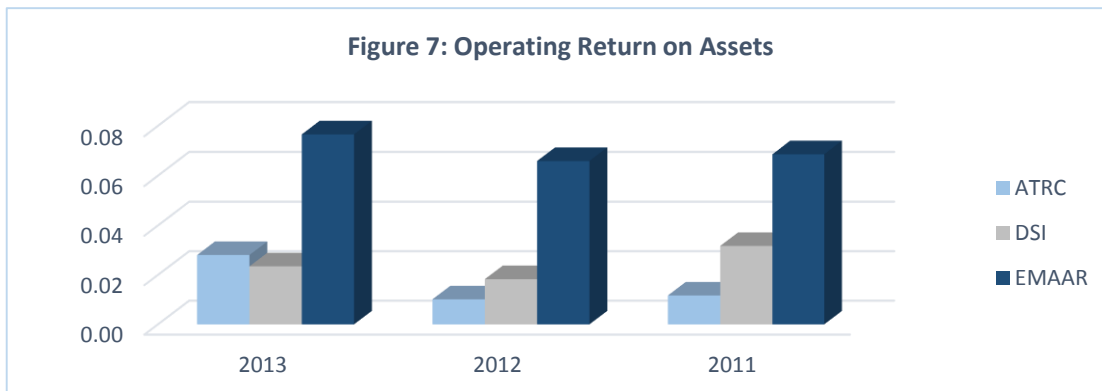
The graphical representation shows the asset efficiency of the management in each company. A high ratio of ROA/ROI is better as it shows that the company is earning more on a lower rate of investment. In 2011, DSI was on top of both ARTC and EMAAR. Unfortunately, DSI declined from 4% to 2%. Luckily, they stood up again and rose their efficacy by 1% up to 1%. ARTC was facing the same scenario as DSI showing a zigzag trend. On the other hand, EMAAR maintained the same ratio, but it is rising slightly over the years.

6. OPERATING RETURN ON ASSETS (OROA):

Operating Return on Assets =		Net Operating Income Total Assets		x 100
Company	Year 2013	Year 2012	Year 2011	
ATRC	$\frac{359,244.00}{12,800,330.00} = 2.8\%$	$\frac{90,823.00}{8,951,668.00} = 1.0\%$	$\frac{102,001.00}{8,721,691.00} = 1.2\%$	
DSI	$\frac{168,312.00}{7,162,298.00} = 2.3\%$	$\frac{117,621.00}{6,429,550.00} = 1.8\%$	$\frac{182,211.00}{5,740,682.00} = 3.2\%$	
EMAAR	$\frac{4,972,977.00}{64,931,931.00} = 7.7\%$	$\frac{4,030,674.00}{61,151,191.00} = 6.6\%$	$\frac{4,119,409.00}{60,054,106.00} = 6.9\%$	

Table 6: Operating Return on Assets Ratio Calculations

Operating income to total assets is the measure how assets are generating operating income. This ratio giving a good indication for EMAAR which is generating the most of their operating income from operating assets i.e. almost 7-8% consistently throughout the year. On the other hand, ATRC and DSI having low efficiency in such matter. Therefore, both companies need to put some attention towards their operating income which they are generating from the total assets. Though, as mentioned above, ROA, in total, are consistent, but operating income to total assets is on the lower side and EMAAR is having edge in operating return on assets comparatively.



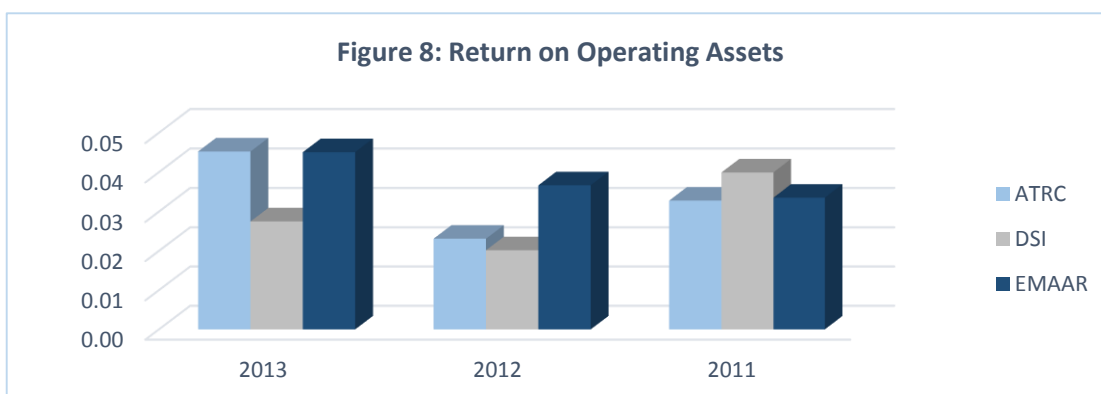
The graphical representation shows that operating income from assts. It is clear that navy blue bas are the highest. Both the gray and light blue bars decreased from 2011 to 2012, but they increase in 2013, which indicates that they are being more efficient in the last year. Again, EMAAR is being more efficient in comparison to ARTC and DSI.

7. RETURN ON OPERATING ASSETS (ROOA):

Return on Operating Assets = $\frac{\text{Net Income}}{\text{Operating Assets}} \times 100$			
Company	Year 2013	Year 2012	Year 2011
ATRC	$\frac{468,259.00}{10,347,349.00} = 4.5\%$	$\frac{188,227.00}{8,139,268.00} = 2.3\%$	$\frac{263,532.00}{8,033,634.00} = 3.3\%$
DSI	$\frac{181,735.00}{6,604,081.00} = 2.8\%$	$\frac{115,043.00}{5,698,850.00} = 2.0\%$	$\frac{208,298.00}{5,215,195.00} = 4.0\%$
EMAAR	$\frac{2,540,615.00}{56,359,127.00} = 4.5\%$	$\frac{2,106,924.00}{57,440,630.00} = 3.7\%$	$\frac{1,917,941.00}{57,188,834.00} = 3.4\%$

Table 7: Return on Operating Assets Ratio Calculations

Return on operating assets again showing consistency over the years for all the three companies. Again, EMAAR is having slighter edge over the other companies. ROA, ROOA and OROA are the ratios that shows how efficiently the company using its assets in generating profit. All the above three ratios are somewhat consistent; in totality, EMAAR is the only company with a marginal edge, which is understandable due to its mammoth structure.



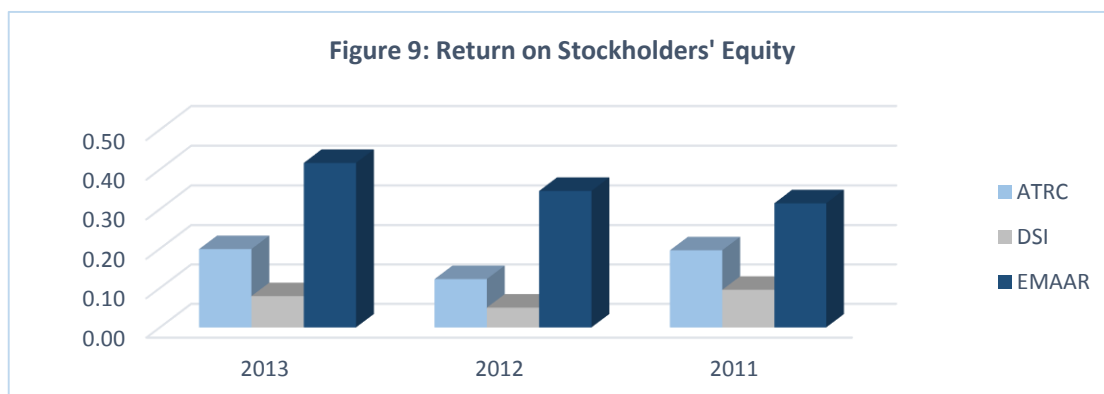
Similarly, return on operating assets is quite the same as return on asset. Though, the ratio will emphasize the operational activities. The highest return form operational activities was by DSI in 2011. In 2012, EMAAR rose to almost the same level as DSI in 2011. However, ARTC overcame both DSI and EMAAR in 2013. Over the years, the graph show a zigzag trend in both ARTC and DSI. On the other hand, EMAAR's trend is increasing from 2011 to 2013.

8. RETURN ON COMMON STOCKHOLDERS' / EQUITY RATIO:

Return on Stockholders' Equity =		$\frac{\text{Net Income}}{\text{Average Shareholders' Equity}} \times 100$	
Company	Year 2013	Year 2012	Year 2011
ATRC	$\frac{468,259.00}{2,354,625.00} = 20\%$	$\frac{188,227.00}{1,532,375.00} = 12\%$	$\frac{263,532.00}{1,345,500.00} = 20\%$
DSI	$\frac{181,735.00}{2,285,047.00} = 8\%$	$\frac{115,043.00}{2,285,047.00} = 5\%$	$\frac{208,298.00}{2,177,778.00} = 9.6\%$
EMAAR	$\frac{2,540,615.00}{6,100,589.00} = 42\%$	$\frac{2,106,924.00}{6,091,239.00} = 35\%$	$\frac{1,917,941.00}{6,091,239.00} = 31\%$

Table 8: Return on Stockholders' Equity Ratio Calculations

The ratio expresses the net income to average shareholders' equity as a measure of percentage. The table above shows very clearly that EMAAR has much attraction to the investors as its return is increasing over the years, which have more attractive revenue gaining activities. On the other hand, ATRC and DSI are to some extent, not consistent. The year 2012 has not been good for all of the three companies regarding the return on common stockholders' equity. In short, ARTC and DSI are not giving an attractive indication to their shareholders, and even DSI management needs to show more concerns to put it efforts to make it more efficient to attract more investment by shareholders.



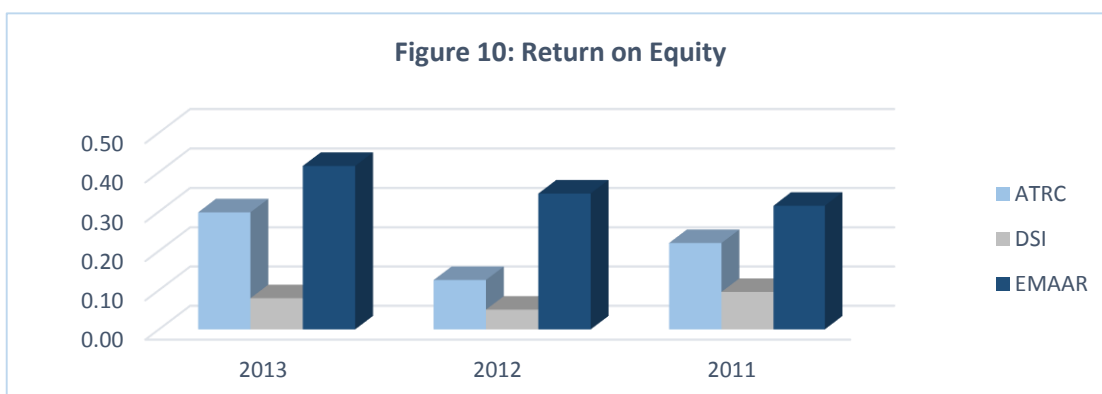
The graphical representation represents the net income to average shareholders' equity. It is clear that the navy blue bars are the highest. On the other hand, the gray bars are the lowest. It indicates that the highest return to investors are given by EMAAR, and the lowest is DSI. Also, the navy blue bars are increasing over the years slightly. However, both ARTC and DSI decreased from 2011 to 2012, but they increase in 2013.

9. RETURN ON EQUITY (ROE) / RETURN ON NET WORTH (RONW):

Return on Equity =		Net Income Shareholders' Equity		x 100
Company	Year 2013	Year 2012	Year 2011	
ATRC	$\frac{468,259.00}{1,569,750.00} = 30\%$	$\frac{188,227.00}{1,495,000.00} = 13\%$	$\frac{263,532.00}{1,196,000.00} = 22\%$	
DSI	$\frac{181,735.00}{2,285,047.00} = 8\%$	$\frac{115,043.00}{2,285,047.00} = 5\%$	$\frac{208,298.00}{2,177,778.00} = 10\%$	
EMAAR	$\frac{2,540,615.00}{6,109,939.00} = 42\%$	$\frac{2,106,924.00}{6,091,239.00} = 35\%$	$\frac{1,917,941.00}{6,091,239.00} = 31\%$	

Table 9: Return on Equity Ratio Calculations

Again, the ratio expresses how efficiently the company is earning over its shareholders wealth. A little difference is seen in ATRC as compared to other company when calculating ROE. This is because there is no change for EMAAR or DSI, which has consistent shareholding as compare to ARTC. ARTC is earning increasingly compare to proportional increase to their shareholders equity which is a good sign of growth.



The graph will benefit investors; it will show them the profitability of each company in regards of measuring how much the company is generating income for common stockholders. It is clearly shown that EMAAR is the most beneficial for investor over the past three years. Hence, EMMAR investors will feel safe to invest in the future. As DSI returns are low, they are the least favorable to investors in comparison to the other two companies. ARTC returns are between both DSI and EMAAR.

B- LIQUIDITY RATIOS:

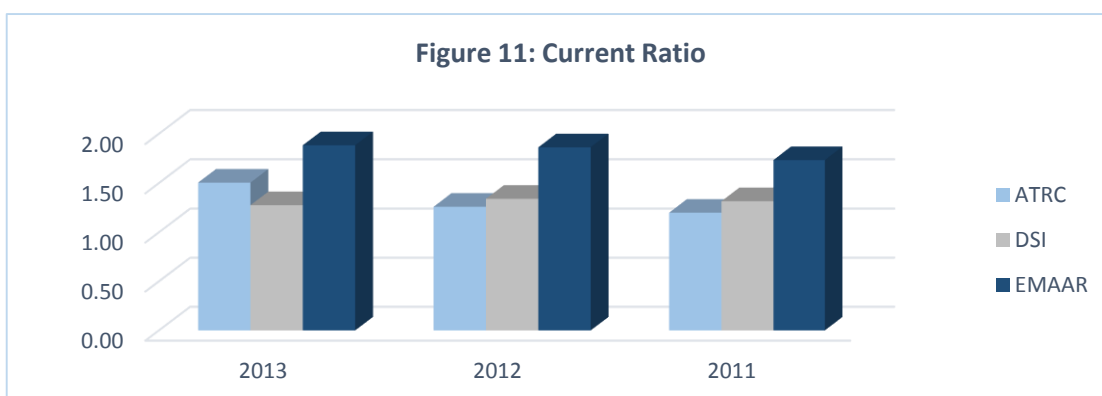
Data to calculate liquidity ratios is collected from the balance sheet and the income statement.

1. CURRENT RATIO:

Current Ratio =		Current Assets Current Liabilities	
Company	Year 2013	Year 2012	Year 2011
ATRC	$\frac{10,072,492.00}{6,693,342.00} = 1.50$	$\frac{6,487,047.00}{5,148,489.00} = 1.26$	$\frac{6,182,599.00}{5,153,422.00} = 1.20$
DSI	$\frac{5,137,216.00}{4,025,946.00} = 1.28$	$\frac{4,594,712.00}{3,426,231.00} = 1.34$	$\frac{3,745,568.00}{2,846,448.00} = 1.32$
EMAAR	$\frac{37,854,232.00}{20,099,929.00} = 1.88$	$\frac{34,267,964.00}{18,394,440.00} = 1.86$	$\frac{33,011,038.00}{19,045,490.00} = 1.73$

Table 10: Current Ratio Calculations

Money is the lifeblood of every company. Most of the companies are concerned about liquidity to know how much they are able to meet their short-term obligations. In general, current ratio must be greater than 1. A ratio of 2:1 is considered healthy, but a ratio that is above 2 gives an indicator that extra money is tied up in short-term assets, which ultimately affects efficiency. In the above scenario, all the companies have good liquidity, but EMAAR has a very good ratio of round-about 1:1.8 which is good as compare to its competitor. On the other hand, other companies are not bad in totality as they have enough working capital to set of their short-term debt to run the business.



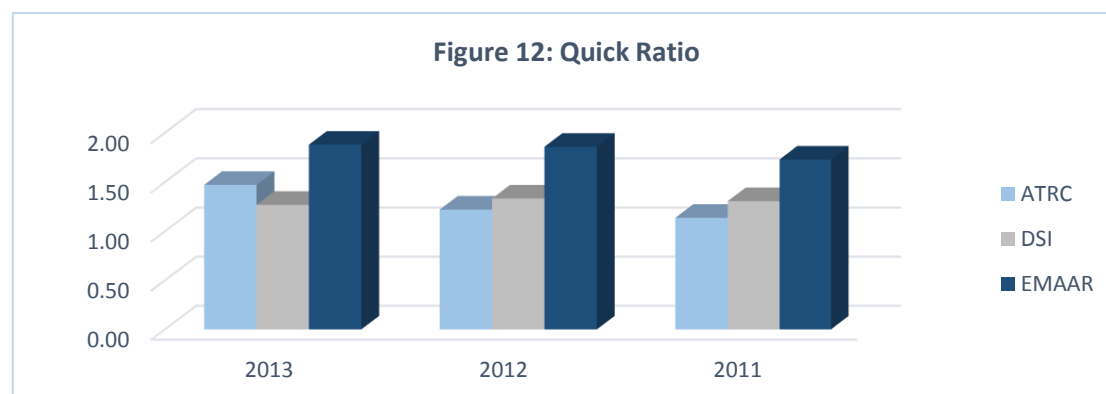
The graph illustrates each company's ability to meet its short-term liabilities with its short-term assets. As seen in the graph, EMAAR has the highest ability to meet their short-term obligations with their assets. From 2011 to 2013, EMAAR's and ATRC's trend seems to be increasing, but DSI's trend has been fluctuating.

2. QUICK RATIO / ACID-TEST RATIO / QUICK ASSETS RATIO:

Quick Ratio =		$\frac{\text{Current Assets} - \text{Inventory}}{\text{Current Liabilities}}$	
Company	Year 2013	Year 2012	Year 2011
ATRC	$\frac{10072492-220904}{6,693,342.00} = 1.47$	$\frac{6487047-202731}{5,148,489.00} = 1.22$	$\frac{6182599-319016}{5,153,422.00} = 1.14$
DSI	$\frac{5137216-30259}{4,025,946.00} = 1.27$	$\frac{4594712-26510}{3,426,231.00} = 1.33$	$\frac{3745568-26163}{2,846,448.00} = 1.31$
EMAAR	$\frac{37854232-80775}{20,099,929.00} = 1.88$	$\frac{34267964-90698}{18,394,440.00} = 1.86$	$\frac{33011038-80721}{19,045,490.00} = 1.73$

Table 11: Quick Ratio Calculations

The quick ratio is similar to current ratio, however, the only difference is that we exclude inventory from the current assets. In other words, only assets, which are more liquid, are considered. As usual EMAAR has enough liquid assets to set off their current liability. Moreover, other firms has also good indications of having healthy liquidity. Thus, a quick ratio of 1.5 means that a company has AED 1.50 of liquid assets available to cover each AED 1 of current liabilities.



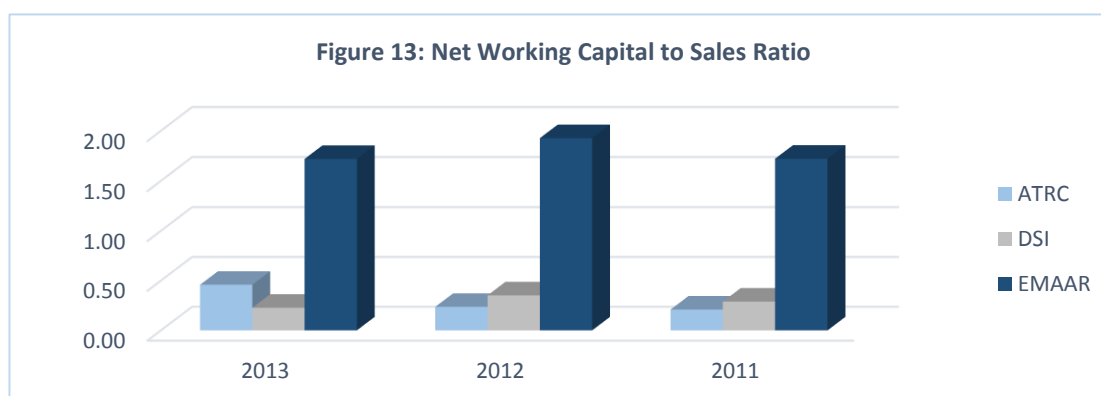
Contrariwise to the previous graphical representation, this ratio show the ability of the company to meet their short-term obligations with its most liquid assets. Again, EMAAR has the highest ability to meet their short-term obligations with its most liquid assets. Similarly, ARTC's trend is also increasing over the years, but DSI's trend is fluctuating.

3. NET WORKING CAPITAL TO SALES RATIO:

Net Working Capital to Sales Ratio = $\frac{\text{Current Assets} - \text{Current Liabilities}}{\text{Revenue}}$			
Company	Year 2013	Year 2012	Year 2011
ATRC	$\frac{10072492-6693342}{7,369,328.00} = 0.46$	$\frac{6487047-5148489}{5,659,944.00} = 0.24$	$\frac{6182599-5153422}{4,923,558.00} = 0.21$
DSI	$\frac{5137216-4025946}{4,879,189.00} = 0.23$	$\frac{4594712-3426231}{3,321,268.00} = 0.35$	$\frac{3745568-2846448}{3,109,618.00} = 0.29$
EMAAR	$\frac{37854232-20099929}{10,328,472.00} = 1.72$	$\frac{34267964-18394440}{8,239,928.00} = 1.93$	$\frac{33011038-19045490}{8,112,332.00} = 1.72$

Table 12: Net Working Capital to Sales Ratio Calculations

The ratio gives an understanding of how a company is using its working capital efficiently to generate revenue which evidently is really good in case of EMAAR. For EMAAR, more than one AED is available to finance revenue with incurring liability. Hence, clearly EMAAR can invest more to earn more revenue as compared to ATRC and DSI, which have less amount of each AED available against revenue for more investment in revenue generating activity.



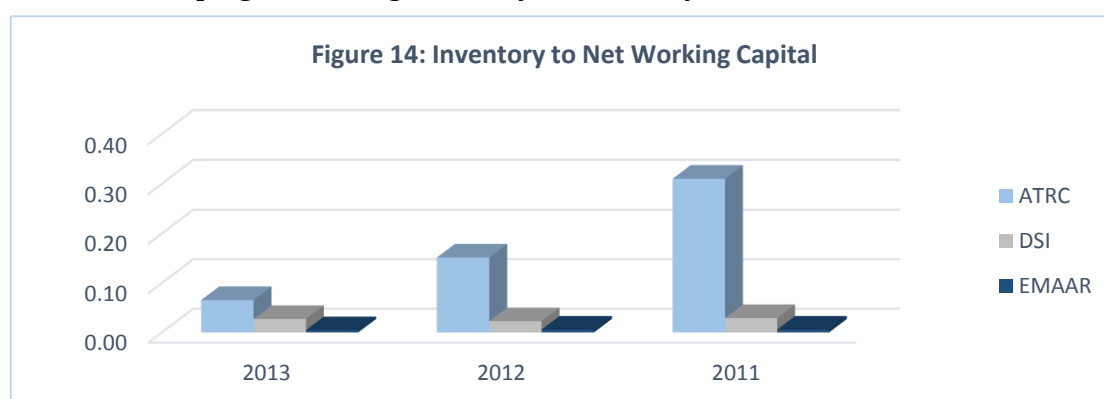
The graph shows the ability of each company to finance additional revenue without incurring additional liability. Both trend lines of EMAAR and DSI seems to be fluctuating. However, ARTC's trend line is increasing over the years. In addition, ARTC's and DSI's ability is too low to finance additional revenue without incurring additional liability. Conversely, the ability of EMAAR is high in comparison to ARTC and DSI.

4. INVENTORY TO NET WORKING CAPITAL:

Inventory to Net Working Capital = $\frac{\text{Inventory}}{\text{Current Assets} - \text{Current Liabilities}} \times 100$			
Company	Year 2013	Year 2012	Year 2011
ATRC	$\frac{220,904.00}{10072492-6693342} = 6.5\%$	$\frac{202,731.00}{6487047-5148489} = 15\%$	$\frac{319,016.00}{6182599-5153422} = 31\%$
DSI	$\frac{30,259.00}{5137216-4025946} = 2.7\%$	$\frac{26,510.00}{4594712-3426231} = 2.3\%$	$\frac{26,163.00}{3745568-2846448} = 2.9\%$
EMAAR	$\frac{80,775.00}{37854232-20099929} = 0.5\%$	$\frac{90,698.00}{34267964-18394440} = 0.6\%$	$\frac{80,721.00}{33011038-19045490} = 0.6\%$

Table 13: Inventory to Net Working Capital Ratio Calculations

The ratio shows how much money has been tied up in the inventory. Impressively, EMAAR is having good indicators here too. However, ATRC need to bring something under consideration in the matter where they should analyze how to minimize further the cost of keeping and having inventory as shown by EMAAR.



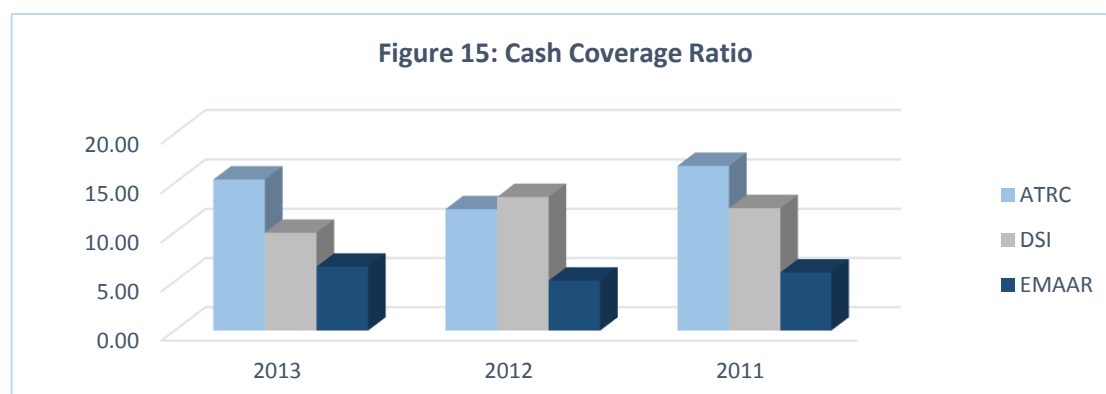
The graph represents the percentage of each company's ability to finance its inventories from its available cash. As seen in the table and referring to the graph, all ratios are under 100%, which is preferable and indicates that all three companies have high liquidity over the years. However, some companies have a lower ratio, which means that they are more liquid than the others. The most liquid company is EMAAR as the ratio does not exceed 2.3%. On the other hand, the least liquid is ARTC, shown in light blue color bars, which has a rate of 31% maximum and 6.5% minimum.

5. CASH COVERAGE RATIO:

Cash Coverage Ratio =		EBIT + Non-Cash Expense Interest Expense	
Company	Year 2013	Year 2012	Year 2011
ATRC	$\frac{530029+259324}{51,452.00} = 15.34$	$\frac{231264+280973}{41,531.00} = 12.33$	$\frac{300068+272628}{34,248.00} = 16.72$
DSI	$\frac{273090+85138}{36,032.00} = 9.94$	$\frac{151454+80317}{17,078.00} = 13.57$	$\frac{245040+72932}{25,553.00} = 12.44$
EMAAR	$\frac{3157057+767217}{603,669.00} = 6.50$	$\frac{2816276+762479}{705,115.00} = 5.08$	$\frac{2516005+804616}{562,255.00} = 5.91$

Table 14: Cash Coverage Ratio Calculations

The cash flow position with respect to operations to pay off interest indicates how much cash is the operating activity generating to pay off interest. Here, ATRC and DSI are having good availability of cash from operating with respect to EMAAR. EMAAR has an average of AED 6 in operating cash flow against every AED 1 of interest payable as compared to ARTC and DSI, which have AED 15 and AED 10 respectively. Hence, ATRC and DSI has enough cash after paying off interest to have more operating assets and they can utilize the rest for other activities.



The bar graph represents the cash coverage ratio which will show the ability of to cover its financial liabilities with cash. It is obvious from that the least able to cover its obligations with cash is EMAAR, which is due to the low amount they keep of cash. On the other hand, ARTC and DSI are challenging each other to cover their obligations in cash. When comparing both companies, it is clear that ARTC overcame DSI in both years 2011 and 2013. However, DSI overcame ARTC only in 2012.

C- LEVERAGE RATIO:

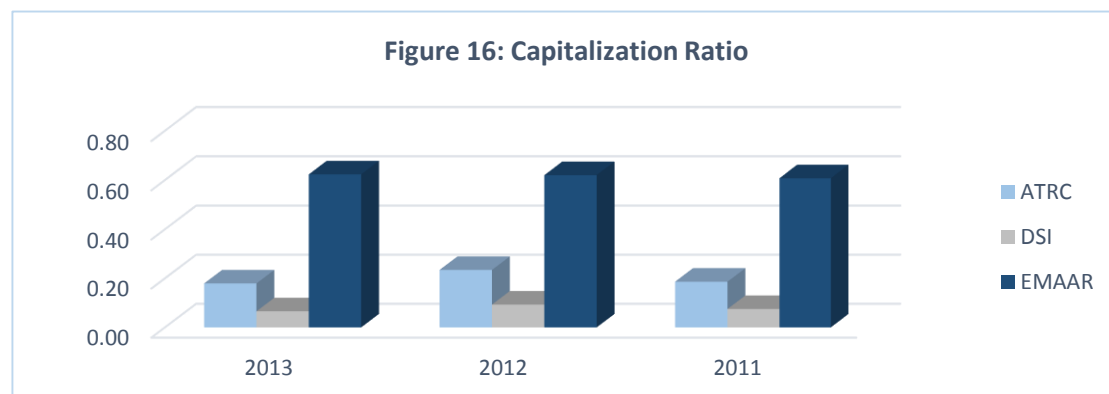
Data to calculate leverage ratios is collected from the balance sheet and the income statement.

1. CAPITALIZATION RATIO

Capitalization Ratio =		$\frac{\text{Long Term Debt}}{\text{Long Term Debt} + \text{Shareholders' Equity}} \times 100$	
Company	Year 2013	Year 2012	Year 2011
ATRC	$\frac{342,962.00}{342962+1569750} = 18\%$	$\frac{457,834.00}{457834+1495000} = 23\%$	$\frac{274,139.00}{274139+1196000} = 19\%$
DSI	$\frac{161,526.00}{161526+2285047} = 6.6\%$	$\frac{234,547.00}{234547+2285047} = 9.3\%$	$\frac{176,677.00}{176677+2177778} = 7.5\%$
EMAAR	$\frac{10,099,010.00}{10099010+6109939} = 62\%$	$\frac{9,937,421.00}{9937421+6091239} = 62\%$	$\frac{9,419,709.00}{9419709+6091239} = 61\%$

Table 15: Capitalization Ratio Calculations

Higher the percentage of debt to long-term debt and equity shows financing of assets through debt indicating a risky situation of bankruptcy. Such behaviors is often attracted by higher tax shield on debt. The ratio is on the higher side for EMAAR while it's low in ATRC and DSI. Though the percentage is high for EMAAR, the value of its fixed assets is well enough to settle a loan. EMAAR's financing policy is not attracted by tax shield as it is depending on debt, and the policy's main objective is to have more investment opportunities. EMAAR's conversion ratio is high with respect to physical assets, but high debt financing is risky while having recession under consideration. Hence, EMAAR should find its policy's weaknesses for further improvements.



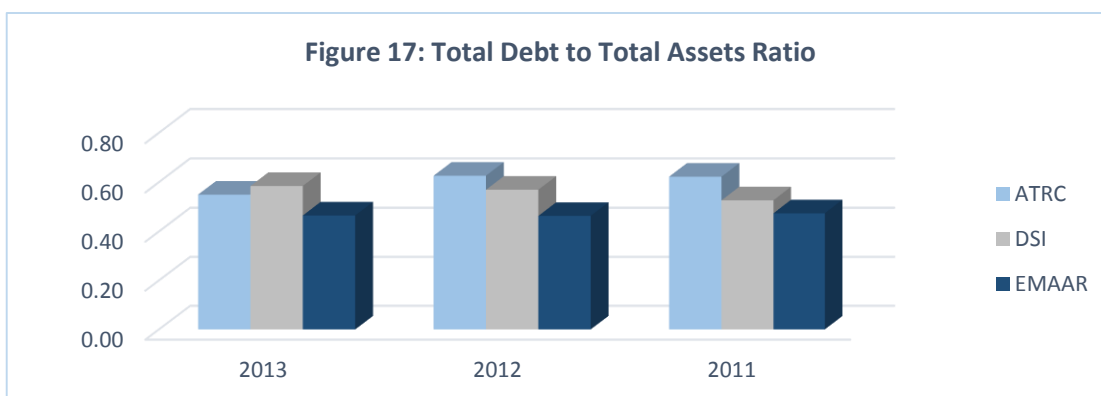
It is clear from the graph that the navy blue bars are the highest amongst the other two companies with an average of 61%. However, the high trend of EMAAR does not mean it will go bankrupt as it has have higher valued assets. On the other hand, both the grey and light blue have lower ratios, which means that they have a low probability of bankruptcy.

2. TOTAL DEBT TO TOTAL ASSETS:

Total Debt to Total Assets Ratio =		Total Debt Total Assets	
Company	Year 2013	Year 2012	Year 2011
ATRC	$\frac{7,036,304.00}{12,800,330.00} = 0.55$	$\frac{5,606,323.00}{8,951,668.00} = 0.63$	$\frac{5,427,561.00}{8,721,691.00} = 0.62$
DSI	$\frac{4,187,472.00}{7,162,298.00} = 0.58$	$\frac{3,660,778.00}{6,429,550.00} = 0.57$	$\frac{3,023,125.00}{5,740,682.00} = 0.53$
EMAAR	$\frac{30,198,939.00}{64,931,931.00} = 0.47$	$\frac{28,331,861.00}{61,151,191.00} = 0.46$	$\frac{28,465,199.00}{60,054,106.00} = 0.47$

Table 16: Total Debt to Total Assets Ratio Calculations

The ratio shows how much assets are available to set off total debt. The ratio is almost same for all the companies as mentioned in the table above. At an average for all the company, the ratio is 1:0.5, which shows against each AED of assets there is 0.5AED of total liability to be settled. All the companies have a good position and somewhat consistent. Therefore, a risk factor is lower for each of the above company.



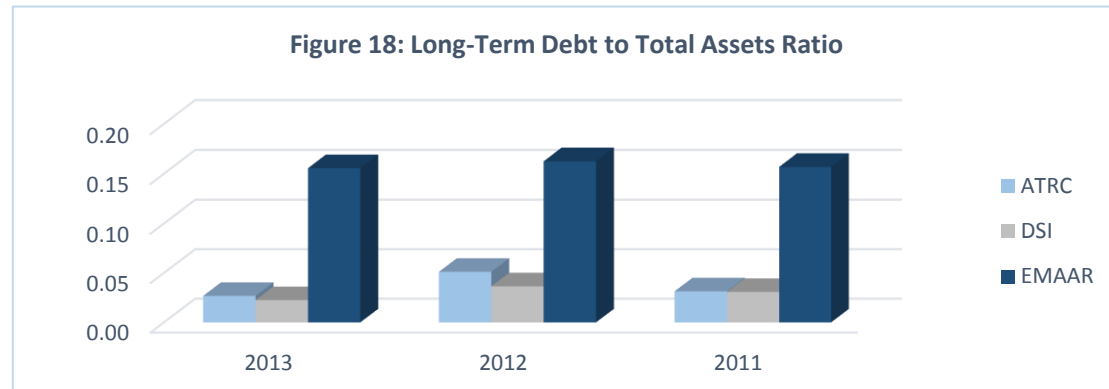
The total debt to assets ratio graph characterizes the total value of debt relative to assets of each of the three companies. In 2011 and 2012, the graph exemplifies the highest value of debt relatively to assets is ARTC, DSI then EMAAR respectively. On the other hand, 2013 was a different year for ARTC as it decreased slightly in its leverage because the higher ratio the higher the degree of leverage. Also, DSI tends to increase its leverage from 2011 to 2013. Finally, EMAAR's leverage is stable over the years with an average ratio of 0.46.

3. LONG-TERM DEBT TO TOTAL ASSETS RATIO

Long-Term Debt to Total Assets Ratio = $\frac{\text{Long-Term Debt}}{\text{Total Assets}}$			
Company	Year 2013	Year 2012	Year 2011
ATRC	$\frac{342,962.00}{12,800,330.00} = 0.03$	$\frac{457,834.00}{8,951,668.00} = 0.05$	$\frac{274,139.00}{8,721,691.00} = 0.03$
DSI	$\frac{161,526.00}{7,162,298.00} = 0.02$	$\frac{234,547.00}{6,429,550.00} = 0.04$	$\frac{176,677.00}{5,740,682.00} = 0.03$
EMAAR	$\frac{10,099,010.00}{64,931,931.00} = 0.16$	$\frac{9,937,421.00}{61,151,191.00} = 0.16$	$\frac{9,419,709.00}{60,054,106.00} = 0.16$

Table 17: Long-Term Debt to Total Assets Ratio Calculations

Total long-term debt for all the above company is not much. However, EMAAR is having comparatively fewer amount of long-term debt against operating assets, which is a good indicator in terms of the business health as a lower long-term debt will result in a lower interest payable and a more efficient company performance. Over the years, there is no change in EMAAR that indicates that it's keeping long-term assets in the same ratio with debt i.e. for each Dirham of operating assets, which shows a consistent policy. On the other hand, ATRC and DSI are less reliant on external debts against their operating asset.



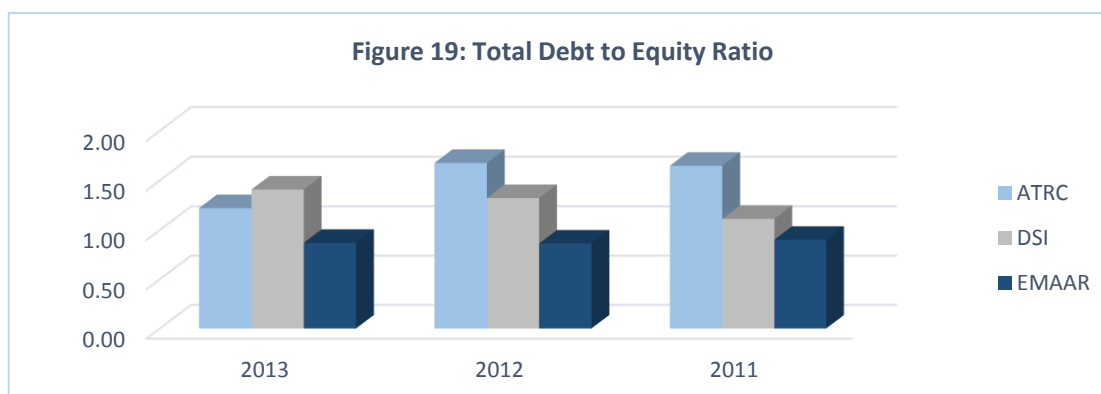
The bar graph of the long-term debt to assets ratio is the same as the previous bar graph; however, the long-term debt to assets ratio graph demonstrates the debts that is for more than one year. On the contrariwise from the previous graph, EMAAR has the highest leverage to cover its long-term debts amongst the three companies. It indicates that it has the healthiest financial situation. On the other hand, ARTC and DSI seems to have the same leverage ratio in the year 2011. In 2012, ARTC overcame DSI slightly. However, ARTC decreased in 2013, and it was almost as the same as DSI.

4. TOTAL DEBT TO EQUITY RATIO:

Total Debt to Equity Ratio =		Total Debt Total Shareholders' Equity	
Company	Year 2013	Year 2012	Year 2011
ATRC	$\frac{7,036,304.00}{5,764,026.00} = 1.22$	$\frac{5,606,323.00}{3,345,345.00} = 1.68$	$\frac{5,427,561.00}{3,294,130.00} = 1.65$
DSI	$\frac{4,187,472.00}{2,974,826.00} = 1.41$	$\frac{3,660,778.00}{2,768,782.00} = 1.32$	$\frac{3,023,125.00}{2,717,557.00} = 1.11$
EMAAR	$\frac{30,198,939.00}{34,732,992.00} = 0.87$	$\frac{28,331,861.00}{32,819,330.00} = 0.86$	$\frac{28,465,199.00}{31,588,907.00} = 0.90$

Table 18: Total Debt to Equity Ratio Calculations

The ratio shows how a company is dependent on financing. In other words, at what ratio the company is relying on their debt as compare to capital. In the UAE, most of the companies are having their capital structure as a mix of debt and equity, where they emphasis more on debt and less on equity. It can easily be said the companies are highly levered here in the UAE. The ideal ratio for a company is to go for debt intensive investment is 1.5 i.e. 60 % of debt and 40% of capital. However, situation may vary from country to country. Higher interest rate always discourages debt intensive investment. In the above scenario, all the ratios are less than 1.5 except ATRC, which in 2011 and 2012 was having more reliance on debt intensive techniques. However, the ratio's value should never go above 2. On the other hand, EMAAR is having more capital intensive investment; therefore, it is having less financing cost to be paid out of profit which can be one of the contributory factor to higher profit.



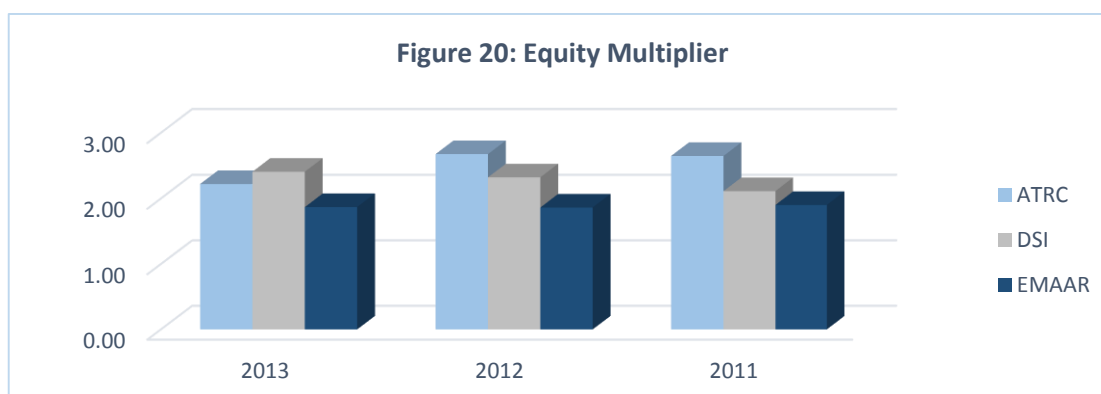
The bar graph of total debt to equity ratio demonstrates a proportion of equity and debt that the company needs to finance its assets. ARTC has the highest debt/equity ratio, and EMAAR has the lowest debt/equity ratio in the past three years.

5. EQUITY MULTIPLIER:

Company	Equity Multiplier = $\frac{\text{Total Assets}}{\text{Total Shareholders' Equity}}$		
	Year 2013	Year 2012	Year 2011
ATRC	$\frac{12,800,330.00}{5,764,026.00} = 2.22$	$\frac{8,951,668.00}{3,345,345.00} = 2.68$	$\frac{8,721,691.00}{3,294,130.00} = 2.65$
DSI	$\frac{7,162,298.00}{2,974,826.00} = 2.41$	$\frac{6,429,550.00}{2,768,782.00} = 2.32$	$\frac{5,740,682.00}{2,717,557.00} = 2.11$
EMAAR	$\frac{64,931,931.00}{34,732,992.00} = 1.87$	$\frac{61,151,191.00}{32,819,330.00} = 1.86$	$\frac{60,054,106.00}{31,588,907.00} = 1.90$

Table 19: Equity Multiplier Ratio Calculations

It is a measurement of a company's financial leverage that how a company is dependent on investment in assets through equity. Higher ratio expresses more reliability on debt to purchase assets. It is clear from the table that EMAAR is having less dependency on debt financing to assets than other companies like ATRC and DSI. EMAAR is consistent while other companies are changing their decisions over the years. DSI is more and more reliant over debt financing for assets while ATRC is decreasing its reliance on debt to finance assets.



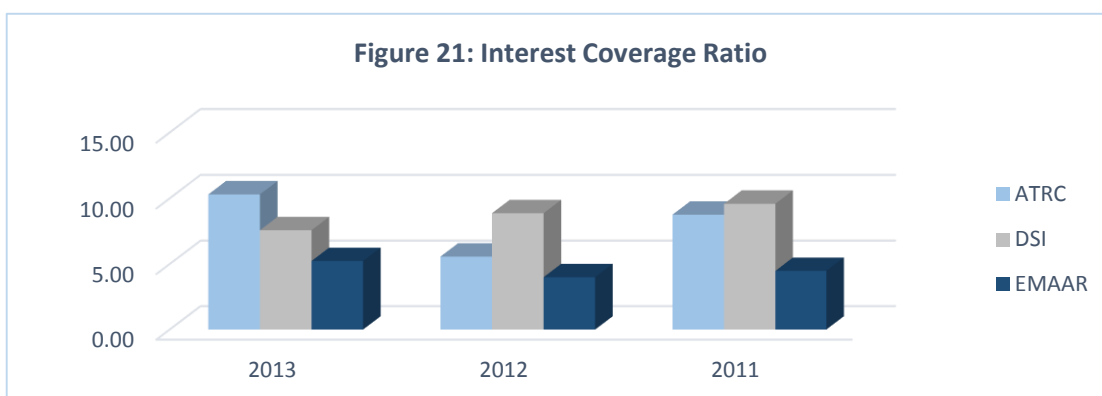
The graphical representation shows the financial leverage of a company in order to know the financial health of each of the three companies. In 2011 and 2012, ATRC was the highest between the three companies which gave it a better financial health. After ATRC, DSI comes next, and it is followed by EMAAR; however, the situation is different in 2013 that ATRC decreased from 2.68 to 2.22; luckily, DSI overcame ATRC by maintaining its financial leverage ratio.

6. INTEREST COVERAGE RATIO:

Interest Coverage Ratio =		EBIT	
		Interest Expense	
Company	Year 2013	Year 2012	Year 2011
ATRC	$\frac{530,029.00}{51,452.00} = 10.30$	$\frac{231,264.00}{41,531.00} = 5.57$	$\frac{300,068.00}{34,248.00} = 8.76$
DSI	$\frac{273,090.00}{36,032.00} = 7.58$	$\frac{151,454.00}{17,078.00} = 8.87$	$\frac{245,040.00}{25,553.00} = 9.59$
EMAAR	$\frac{3,157,057.00}{603,669.00} = 5.23$	$\frac{2,816,276.00}{705,115.00} = 3.99$	$\frac{2,516,005.00}{562,255.00} = 4.47$

Table 20: Interest Coverage Ratio Calculations

The ratio shows how much profit is available to cover up the interest cost or finance cost. The table above indicates that every company is having good amount of profit to set off interest cost. In the above scenarios, every company has enough amount of profit to be paid for interest and the appropriation for shareholders.



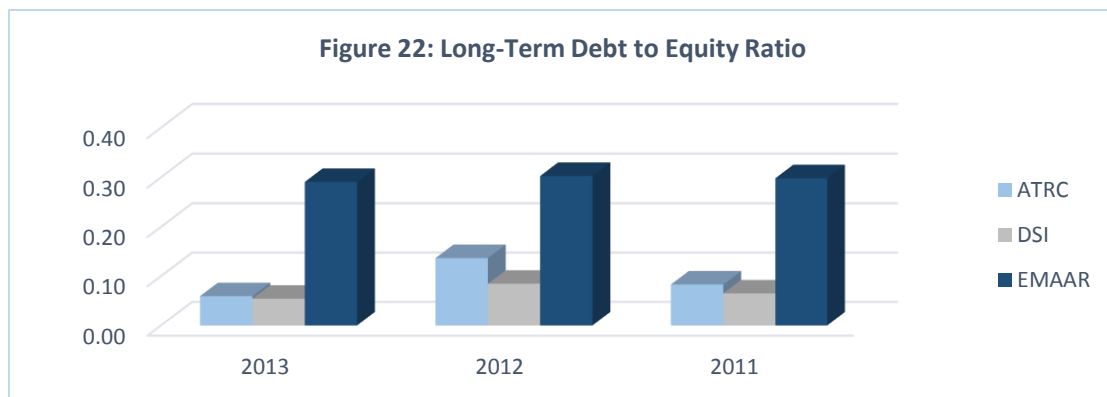
The graph shows how each company can pay interest on outstanding debt. In 2011, DSI pays the highest interest on outstanding debt, and the lowest was paid by EMAAR. ARTC decreased for almost half from 2011 to 2012, while DSI and EMAAR remains the same. Conversely, ARTC increased in 2013 more that it was in the first place in 2011, and it was the highest amongst them in that year. On the other hand, DSI fell slightly, and EMAAR rose marginally.

7. LONG-TERM DEBT TO EQUITY RATIO:

Long-Term Debt to Equity Ratio =		Long-Term Debt Total Shareholders' Equity	
Company	Year 2013	Year 2012	Year 2011
ATRC	$\frac{342,962.00}{5,764,026.00} = 0.06$	$\frac{457,834.00}{3,345,345.00} = 0.14$	$\frac{274,139.00}{3,294,130.00} = 0.08$
DSI	$\frac{161,526.00}{2,974,826.00} = 0.05$	$\frac{234,547.00}{2,768,782.00} = 0.08$	$\frac{176,677.00}{2,717,557.00} = 0.07$
EMAAR	$\frac{10,099,010.00}{34,732,992.00} = 0.29$	$\frac{9,937,421.00}{32,819,330.00} = 0.30$	$\frac{9,419,709.00}{31,588,907.00} = 0.30$

Table 21: Long-Term Debt to Equity Ratio Calculations

If financing is done through debt, a company can potentially generate a healthy revenue; however, the same can be achieved by having investment through shareholders, which will further reduce the debt cost. Since the cost of the debt financing may outweigh the return that the company generates on the debt through investment and business activities, debt financing should be avoided, which can lead to bankruptcy that would leave shareholders with nothing. The table shows that long-term debt is mostly avoided by DSI and ATRC and their major dependency is equity/shareholders' investment which is a healthy sign. However, it is seen that DSI is less dependent on long-term debt and consequently facing fewer amount of cost of debt i.e. interest and other finance cost. Comparatively, the long-term debt financing on the higher side for EMAAR, to some extent EMAAR depends on external debt financing to an acceptable level. For every AED 1 of Shareholder the debt financing is AED 0.3 at an average. In a nut shell, all the companies are consistent with their debt financing policy that there is no significant change over the years.



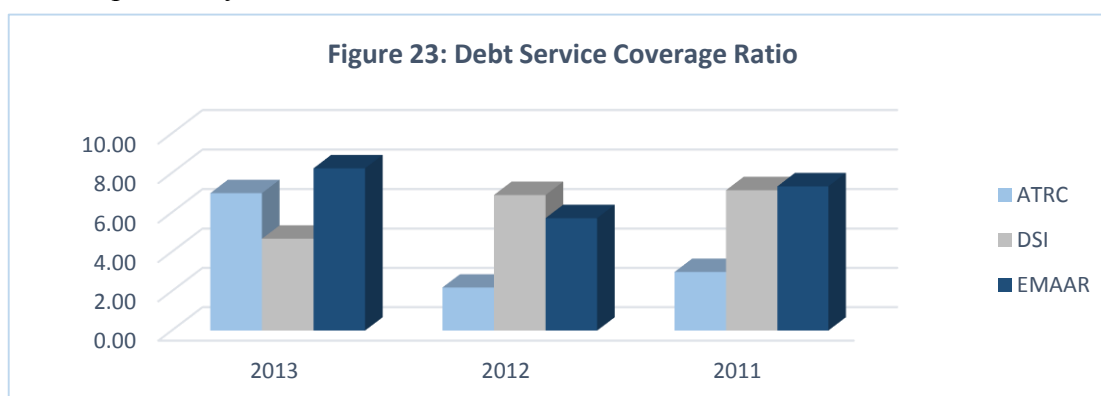
The graph shows the proportion of equity and debt the company is utilizing to finance its assets in the long-run of each company. ATRC and DSI seems to be lowest proportion in comparison to EMAAR, and their trend tends to fluctuate over the past three years. In all of the three years, EMAAR covers up the highest ratio amongst its competitor, and it also maintains its steady trend. That graph indicates that EMAAR has been aggressive in financing its growth with debt.

8. DEBT SERVICE COVERAGE RATIO (DSCR):

Debt Service Coverage =		Net Operating Income Total Debt Services	
Company	Year 2013	Year 2012	Year 2011
ATRC	$\frac{359,244.00}{51,452.00} = 6.98$	$\frac{90,823.00}{41,531.00} = 2.19$	$\frac{102,001.00}{34,248.00} = 2.98$
DSI	$\frac{168,312.00}{36,032.00} = 4.67$	$\frac{117,621.00}{17,078.00} = 6.89$	$\frac{182,211.00}{25,553.00} = 7.13$
EMAAR	$\frac{4,972,977.00}{603,669.00} = 8.24$	$\frac{4,030,674.00}{705,115.00} = 5.72$	$\frac{4,119,409.00}{562,255.00} = 7.33$

Table 22: Debt Service Coverage Ratio Calculations

As explained above, DSI is less dependent on debt financing over the years. Therefore, it can be seen from the table that the debt servicing is lower for DSI. On the other hand, ATRC is increasing over the years. EMAAR has an average of AED 7.1 against every AED of interest therefore enough operating profit to adjust the interest cost. As explained above, DSI's trend is decreasing, which is due to the profit increased from the year 2011 to 2013 at a decreasing rate. For ATRC, the situation is also favorable but comparatively lower than EMAAR's situation.



The bar graph illustrates the value to cover the yearly interest and principal payments on debt. From 2011 to 2012, ARTC decreased in their interest payment on debt. However, it improved in the year after, 2013, from 2.19 to 6.98. Conversely, DSI is falling in interest payment on debt year after year. On the other hand, EMAAR fluctuates with the range of 7.09; however, in 2013, the company was at its best in comparison to the past three years and in comparison to the other three companies.

D- ACTIVITY/EFFICIENCY RATIOS:

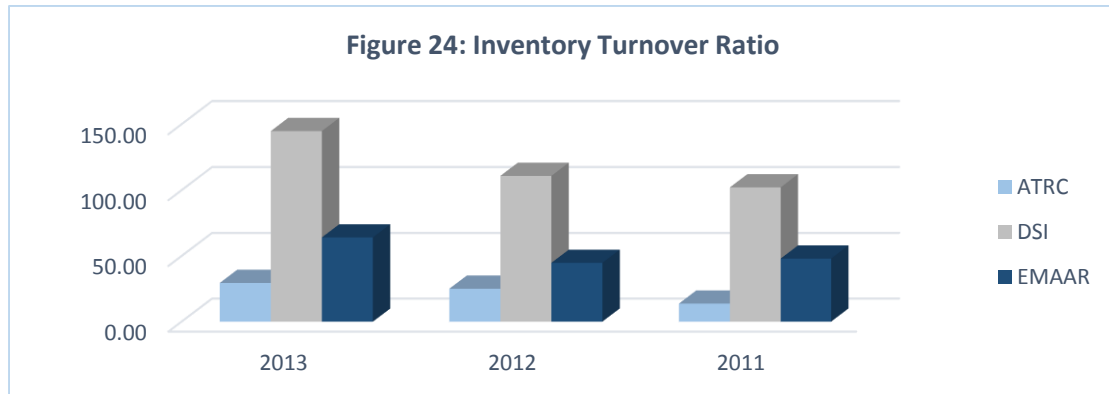
Data to calculate the activity/efficiency ratios is collected from the balance sheet, the income statement, and the cash flow statement.

1. INVENTORY TURNOVER RATIO:

Inventory Turnover =		Cost of Revenue Inventory	
Company	Year 2013	Year 2012	Year 2011
ATRC	$\frac{6,516,351.00}{220,904.00} = 29.50$	$\frac{5,084,345.00}{202,731.00} = 25.08$	$\frac{4,375,317.00}{319,016.00} = 13.72$
DSI	$\frac{4,382,296.00}{30,259.00} = 144.8$	$\frac{2,938,354.00}{26,510.00} = 110.8$	$\frac{2,672,529.00}{26,163.00} = 102.1$
EMAAR	$\frac{5,179,347.00}{80,775.00} = 64.12$	$\frac{4,061,051.00}{90,698.00} = 44.78$	$\frac{3,876,781.00}{80,721.00} = 48.03$

Table 23: Inventory Turnover Ratio Calculations

As explained above, a high inventory turnover ratio depicts two things; high revenue or in effective inventory buying. In the case above, DSI has a low inventory ratio in comparison with the cost of revenue. As compared to revenue, the inventory level of DSI is too low or the revenue is on a higher side. For EMAAR, it is the second in the scenario, and the company also has a large amount of revenue against inventory. However, when analyzing ARTC, it is evident that it has lower revenue and higher amount of inventory. The ratio is too high for DSI, then EMAAR comes next, which doesn't mean that they have ineffective buying; but in fact, they have a large revenues. Moreover, the kind of business they are running has a low inventory holding period; hence, the value of the ratio is higher. Comparatively, ARTC has a higher inventory level even when comparing it with EMAAR and DSI. Therefore, a conclusion can be drawn that ARTC needs to put some attention to inventory buying because it trend with the competitors is different.



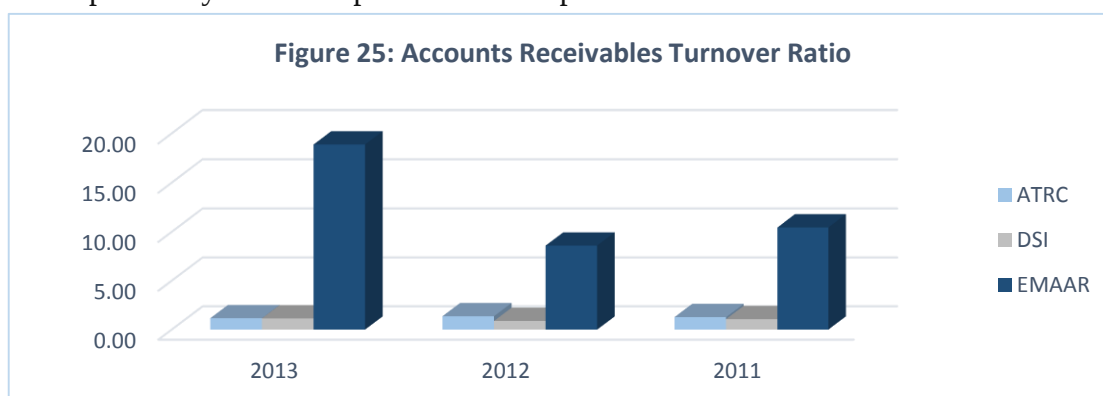
The graph represents the inventory turnover. DSI seems to be the highest, which suggests either a high revenue or an ineffective inventory buying. As it's shown in the previous table, DSI's inventory is too high in comparison to the two companies. High inventories are undesirable, and this could mean that the company is slow in delivering their projects. On the other hand, ARTC was the least amongst the other companies' ratios; however, the company's ratio has been increasing over the years. Nevertheless, ARTC is still maintain to be the lowest even with the increase that it is having over the years. Moreover, EMAAR's trend is fluctuating over the years, and it is in a moderate situation between ARTC and DSI.

2. ACCOUNTS RECEIVABLES TURNOVER RATIO:

A/R Turnover =		Revenue A/R	
Company	Year 2013	Year 2012	Year 2011
ATRC	$\frac{7,369,328.00}{6,324,872.00} = 1.17$	$\frac{5,659,944.00}{4,144,594.00} = 1.37$	$\frac{4,923,558.00}{3,856,063.00} = 1.28$
DSI	$\frac{4,879,189.00}{4,256,323.00} = 1.15$	$\frac{3,321,268.00}{3,741,861.00} = 0.89$	$\frac{3,109,618.00}{2,901,110.00} = 1.07$
EMAAR	$\frac{10,328,472.00}{547,391.00} = 18.87$	$\frac{8,239,928.00}{958,608.00} = 8.60$	$\frac{8,112,332.00}{776,485.00} = 10.45$

Table 24: Accounts Receivables Turnover Ratio Calculations

Higher the ratio gives an indicator of efficient collection of debts, and lower the ratio shows in-efficient collection. In the case of EMAAR, the ratio is on the higher side, which means they immediately materialize their bills and collect money as soon as possible. On the other hand, ATRC and DSI need to reconsider their policy and make it comparatively more competitive with respect to EMAAR.



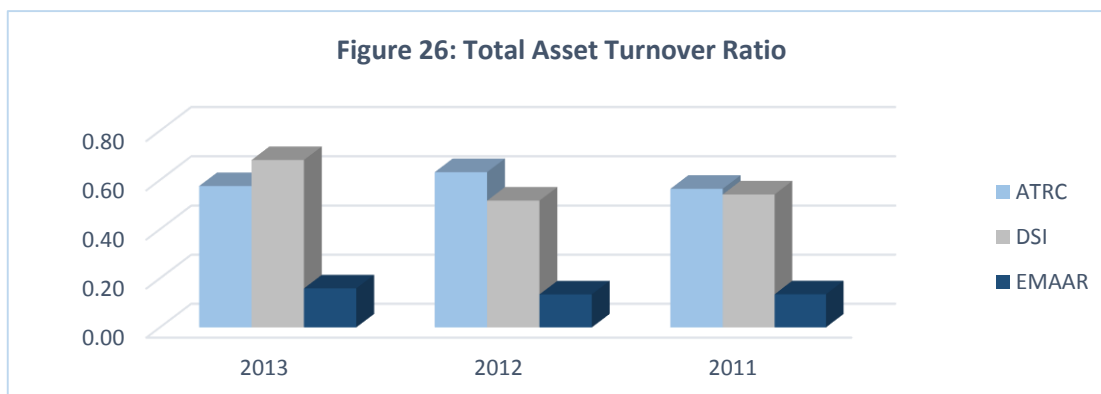
The bar graph shows the effectiveness of each company in extending credit and in collecting debts. It is clear from the graph that EMAAR has the highest ratios in all the three years, which indicates either the company is operating under a cash basis or that it is an extension on credit and collection of accounts receivable is efficient. In the case of EMAAR, the company is an extension on credit and collection of accounts receivable is efficient because the cash in very high. In addition, the graph shows that both ARTC and DSI have low bars, which indicates that the company is operating under cash basis.

3. TOTAL ASSET TURNOVER RATIO:

Total Asset Turnover =		Revenue Total Assets	
Company	Year 2013	Year 2012	Year 2011
ATRC	$\frac{7,369,328.00}{12,800,330.00} = 0.58$	$\frac{5,659,944.00}{8,951,668.00} = 0.63$	$\frac{4,923,558.00}{8,721,691.00} = 0.56$
DSI	$\frac{4,879,189.00}{7,162,298.00} = 0.68$	$\frac{3,321,268.00}{6,429,550.00} = 0.52$	$\frac{3,109,618.00}{5,740,682.00} = 0.54$
EMAAR	$\frac{10,328,472.00}{64,931,931.00} = 0.16$	$\frac{8,239,928.00}{61,151,191.00} = 0.13$	$\frac{8,112,332.00}{60,054,106.00} = 0.14$

Table 25: Total Asset Turnover Ratio Calculations

The ratio expresses how efficiently a company is using its assets to earn revenue. Higher the ratio, higher the company's ability to use the assets efficiently. ARTC and DSI are using their assets more efficiently than EMAAR. Hence, EMAAR needs to put attention because with such a huge amount of assets, they should be able to generate more revenue. In 2013, the most favorable situation was for DSI. EMAAR's ratio is increasing at a decreasing rate. With such a huge amount of assets EMAAR should contribute more towards revenue.



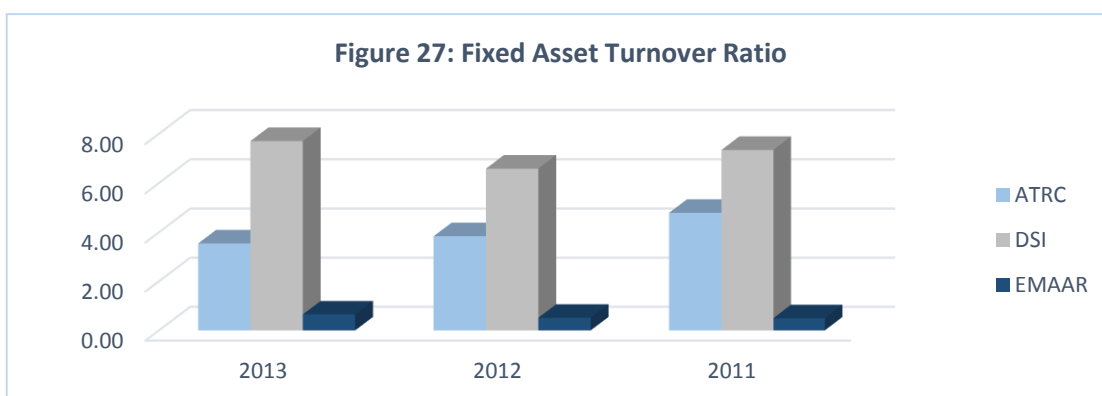
The graph illustrates how a company is able to use its assets to generate revenue. It is seen in the graph that EMAAR is the lowest, which indicates that the company should use their assets more efficiently to generate revenue. In 2011 and 2012, the most efficient company was ARTC, DSI then EMAAR, respectively. In 2013, DSI was the highest amongst the other two companies. It seems that they have been using their assets more efficiently to generate revenue.

4. FIXED ASSET TURNOVER RATIO:

Fixed Asset Turnover =		Revenue Fixed Assets	
Company	Year 2013	Year 2012	Year 2011
ATRC	$\frac{7,369,328.00}{2,077,603.00} = 3.55$	$\frac{5,659,944.00}{1,472,850.00} = 3.84$	$\frac{5,659,944.00}{1,180,912.00} = 4.79$
DSI	$\frac{4,879,189.00}{633,305.00} = 7.70$	$\frac{3,321,268.00}{504,200.00} = 6.59$	$\frac{3,109,618.00}{423,412.00} = 7.34$
EMAAR	$\frac{10,328,472.00}{15,906,792.00} = 0.65$	$\frac{8,239,928.00}{16,039,844.00} = 0.51$	$\frac{8,112,332.00}{16,299,004.00} = 0.50$

Table 26: Fixed Asset Turnover Ratio Calculations

As compared to the total asset turnover results, the fixed asset turnover ratio results are almost the same. As mentioned above, EMAAR is not using its assets efficiently to generate more revenue. As above, ATRC is doing well, while DSI is even better for fixed assets utilization.



The graph illustrates a similar representation to the previous graph; however, the fixed asset turnover ratio graph will only study the use of fixed asset. Similarly, EMAAR is the lowest in the past three years, but DSI is the highest in all three years in regards to using fixed assets. Moreover, ATRC is being slightly less efficient over the year as it is decreasing from one year to the other.

5. AVERAGE COLLECTION PERIOD:

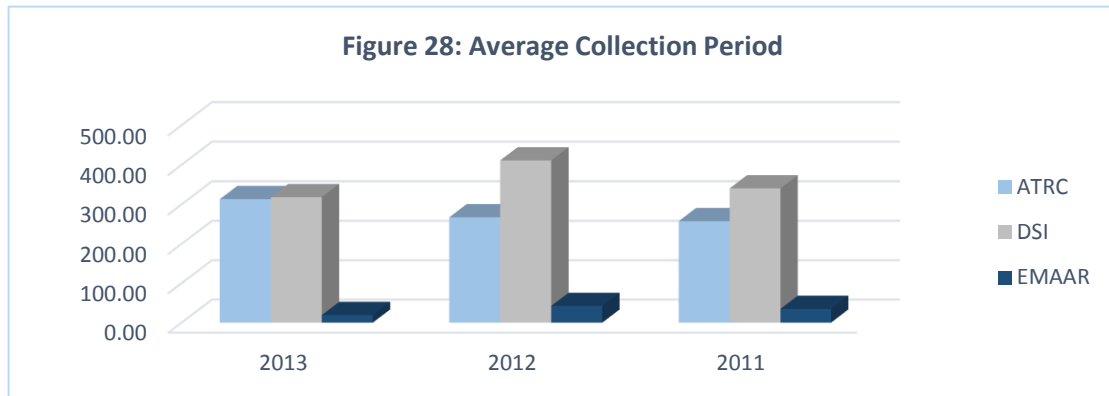
Average Collection Period =		A/R Total Sales / 365	
Company	Year 2013	Year 2012	Year 2011
ATRC	$\frac{6,324,872.00}{7369328/365} = 313.3$	$\frac{4,144,594.00}{5659944/365} = 267.3$	$\frac{3,856,063.00}{5463698/365} = 257.6$
DSI	$\frac{4,256,323.00}{4879189/365} = 318.4$	$\frac{3,741,861.00}{3321268/365} = 411.2$	$\frac{2,901,110.00}{3109618/365} = 340.5$
EMAAR	$\frac{547,391.00}{10328472/365} = 19.34$	$\frac{958,608.00}{8239928/365} = 42.46$	$\frac{776,485.00}{8112332/365} = 34.94$

Table 27: Average Collection Period Ratio Calculations

The ratios calculations, as relate to construction industry, usually involves greater number of days for collection as billing is based on progress to the construction project. Usually, the collection period for the construction industry is on the higher side; however, it should not be too high to effect the performance with respect to liquidity. In the scenario above, it is evident that EMAAR is healthy in terms of collections from debtors. On the other hand, the other two companies are almost taking one year for their collection. The reason could be as following:

- ✓ ATRC and DSI is having large projects that involves a greater completion period of each progress payment;
- ✓ Collection of ATRC and DSI is poor;
- ✓ Performance for completing the project or project portion is low;
- ✓ EMAAR is efficient in collection and project completion.

No matter what the reason is, the collection period as shown above for ARTC and DSI is too high, and the high ratio might affect the efficiency in future with respect to liquidity. In addition, both companies may require to finance their projects from long-terms debt with debt servicing cost, which is usually inconsiderable as explained previously in leverage ratio.



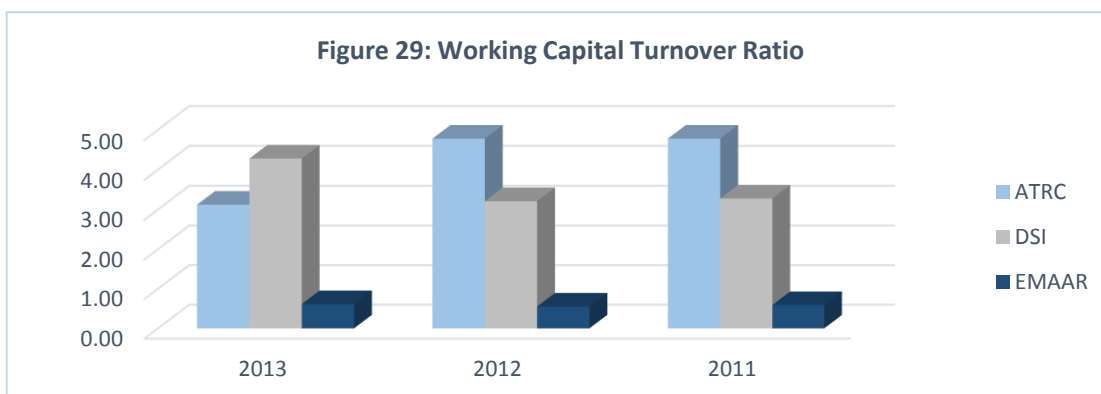
The graph exhibits how fast each company get its money back from debtors. Impressively, EMAAR seems to get its money back in no time. Contrariwise, DSI is the slowest in collecting its money back from its customers as proved in the graph from the high bars. Also, ARTC is slow in collecting its money back; however, the situation of ARTC is better than DSI's situation, which can be a motivation for DIS to overcome ARTC.

6. WORKING CAPITAL TURNOVER (WCT):

Working Capital Turnover Ratio = $\frac{\text{Net Revenue}}{(\text{Beginning WC} + \text{Ending WC}) / 2}$			
Company	Year 2013	Year 2012	Year 2011
ATRC	$\frac{7,369,328.00}{2,358,854.00} = 3.12$	$\frac{5,659,944.00}{1,183,867.50} = 4.78$	$\frac{4,923,558.00}{1,029,757.50} = 4.78$
DSI	$\frac{4,879,189.00}{1,139,875.50} = 4.28$	$\frac{3,321,268.00}{1,033,800.50} = 3.21$	$\frac{3,109,618.00}{948,573.50} = 3.28$
EMAAR	$\frac{10,328,472.00}{16,813,913.50} = 0.61$	$\frac{8,239,928.00}{14,919,536.00} = 0.55$	$\frac{8,112,332.00}{13,760,379.50} = 0.59$

Table 28: Working Capital Turnover Ratio Calculations

The working capital turnover ratio is an important ratio with respect to activity. The ratio explains how much the working capital is contributing in earning revenue. Higher ratio of working capital indicates that company is using its working capital effectively in generating revenue. From the scenario above, DSI has an edge over the other companies as its working capital is effectively producing revenue, which is increasing over the year. For ATRC, the ratio is also favorable, but the ratio is decreasing over the year. EMAAR is behind the two companies. EMAAR should put attention in this department. The possible reason for low ratio is either the revenue is low or the working capital is high.



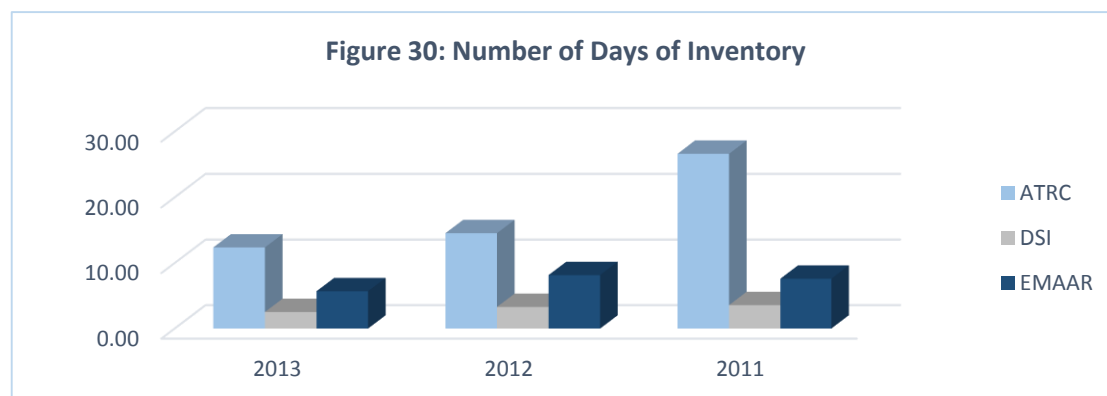
The working capital turnover ratio graph is beneficial in comparing diminution of WC of each company to create sales in a specific time frame. In 2011 and 2012, the highest ratio was by ARTC then by DSI and EMAAR, respectively. This indicates that ARTC is generating a lot of sales compared to the money it uses to fund the sales. However, ARTC decreased in 2013, and it means they incurred more money to fund the sales. On the other hand, DSI reduced the money funding for sales, so the WCT increased and was the highest amongst them in the same year.

7. NUMBER OF DAYS OF INVENTORY / DAYS SALES OUTSTANDING (DSO):

Number of Days of Inventory =		Inventory COR / 365	
Company	Year 2013	Year 2012	Year 2011
ATRC	$\frac{220,904.00}{17,853.02} = 12.37$	$\frac{202,731.00}{13,929.71} = 14.55$	$\frac{319,016.00}{11,987.17} = 26.61$
DSI	$\frac{30,259.00}{12,006.29} = 2.52$	$\frac{26,510.00}{8,050.28} = 3.29$	$\frac{26,163.00}{7,322.00} = 3.57$
EMAAR	$\frac{80,775.00}{14,189.99} = 5.69$	$\frac{90,698.00}{11,126.17} = 8.15$	$\frac{80,721.00}{10,621.32} = 7.60$

Table 29: Number of Days of Inventory Ratio Calculations

After the analysis on the table above, it is evident that all the companies are improving over the years for their inventory conversion. As explained earlier, the inventory holding period is very low in the construction industry. The days of conversion of inventory is healthy for DSI, which means that it doesn't take much time to convert its existing material into final product i.e constructed unit (small or large). However, it is clear that the rate of improvement in the ratio is higher for ATRC, consistent for DSI and semi concerning for EMAAR. Hence, EMAAR needs to look at their conversion policy. ATRC also needs to take an action to minimize the number of days of inventory ratio. The possibility of an unhealthy ratio could be from big projects which require big conversion time.



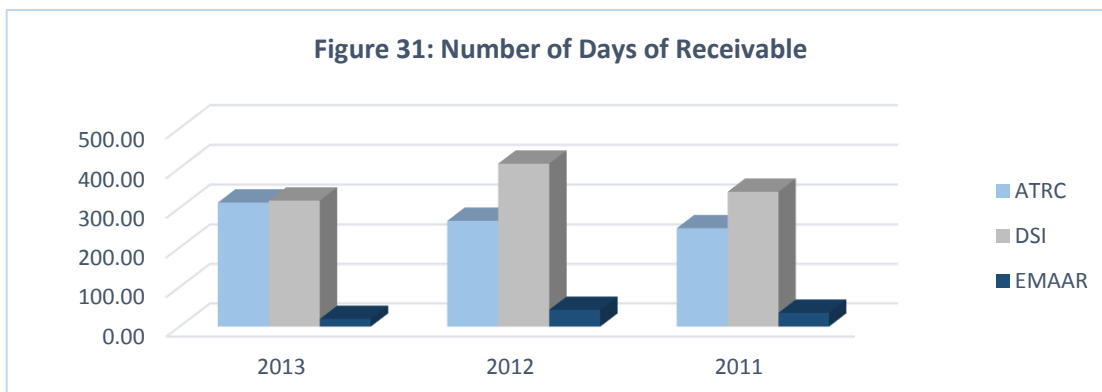
The graph determines each company's performance to converting their inventory into a product. In the past three years, it is shown that DSI is the fastest, and ARTC is the slowest. Even if ARTC is the slowest between the three companies, it is improving throughout the years. Similarly, all three companies are trying to improve the number of days of sales of inventory (DSI) as all the trend line are decreasing.

8. NUMBER OF DAYS OF RECEIVABLE / DAYS SALES OUTSTANDING (DSO):

Number of Days of Receivable = $\frac{A/R}{Revenue / 365}$			
Company	Year 2013	Year 2012	Year 2011
ATRC	$\frac{6,324,872.00}{7369328/365} = 313.3$	$\frac{4,144,594.00}{5659944/365} = 267.3$	$\frac{3,856,063.00}{5659944/365} = 248.7$
DSI	$\frac{4,256,323.00}{4879189/365} = 318.4$	$\frac{3,741,861.00}{3321268/365} = 411.2$	$\frac{2,901,110.00}{3109618/365} = 340.5$
EMAAR	$\frac{547,391.00}{10328472/365} = 19.34$	$\frac{958,608.00}{8239928/365} = 42.46$	$\frac{776,485.00}{8112332/365} = 34.94$

Table 30: Number of Days of Receivable Ratio Calculations

As it's evident in the number of days of receivable table, EMAAR is considered efficient. EMAAR is improving over the years regarding its collections from receivables and using the same money in its operations to earn more revenue. On the other hand, ATRC and DSI should be more concerned over their collection policy. Both companies' money is tied up with the customers, which need to be collected immediately to be used in business. The reason may be due to large projects with huge amount of progress billing. Even in such case, they should plan how a huge process may be broken down into small processes so that early collection would be possible as binding cash for a longer period may affect the operations of any company.



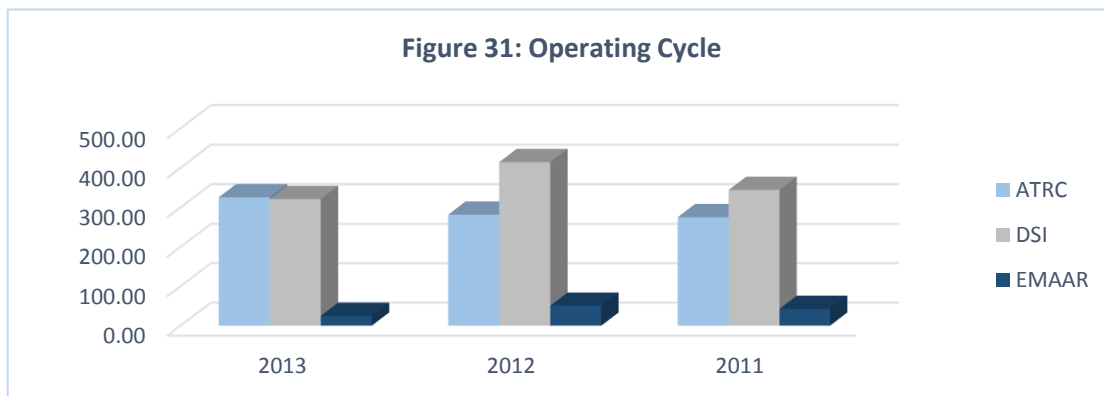
The bar graph exhibits the average number of days that a company takes to collect revenue subsequent to a sale. Over the past three years, EMAAR take less days in collecting its accounts receivable; on the other hand, DSI is the slowest amongst the three companies in selling its product to customers on credit and the longer to collect its money back. ARTC has a moderate situation in comparison to EMAAR and DSI; unluckily, it is taking longer to take its money back over the years.

9. OPERATING CYCLE:

Operating Cycle =		No. of Days of Inventory + No. of days of Receivables		
Company	Year 2013	Year 2012	Year 2011	
ATRC	12.37 + 313.3 = 325.6	14.55 + 267.3 = 281.8	26.61 + 248.7 = 275.3	
DSI	2.52 + 318.4 = 320.9	3.29 + 411.2 = 414.5	3.57 + 340.5 = 344.1	
EMAAR	5.69 + 19.34 = 25.04	8.15 + 42.46 = 50.61	7.60 + 34.94 = 42.54	

Table 31: Operating Cycle Ratio Calculations

The table represents the number of days that each company takes to realize its inventories in cash. Over the year, EMAAR seems to have the shortest operating cycle, which indicates that the company's cash is tied up for a shorter period. On the other hand, both DSI and ARTC have a longer operating cycle, which means that their cash is tied up for a longer period.



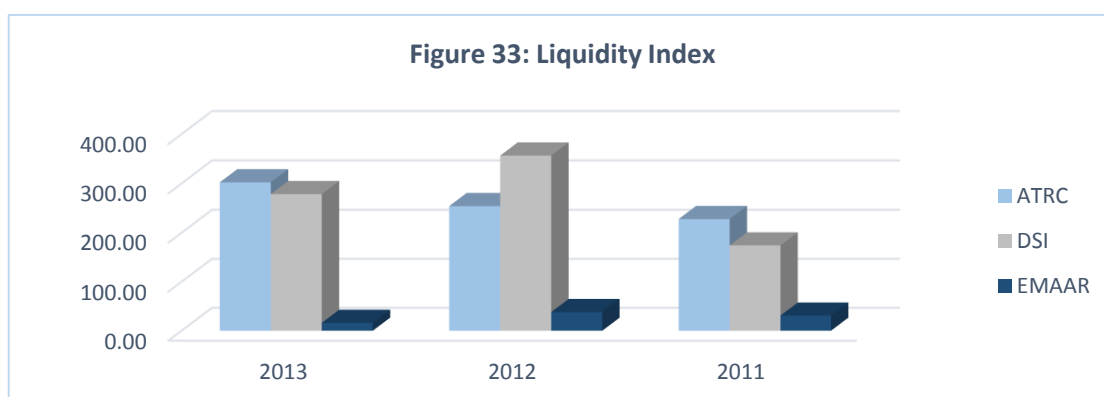
The graph shows the life span that it takes each company to realize its inventory in cash. As seen in the graph, the major color is grey, which indicates that DSI's cash is tied up for a longer period. Contrariwise, the least seen color is the navy blue; thus, EMAAR's cash stay for a very short period. Moreover, ARTC's situation is similar to DSI's, but ARTC is doing a little better than DSI as its operating cycle is shorter.

10. LIQUIDITY INDEX:

$\text{Liquidity Index} = \frac{(\text{Trade Receivables} \times \text{Days to Liquidate}) + (\text{Inventory} \times \text{Days to Liquidate})}{\text{Trade Receivables} + \text{Inventory}}$			
Company	Year 2013	Year 2012	Year 2011
ATRC	$\frac{1,978,849,815.12}{6,545,776.00} = 302.3$	$\frac{1,104,900,240.15}{4,347,325.00} = 254.2$	$\frac{963,208,495.14}{4,226,123.00} = 227.9$
DSI	$\frac{67,584,702.52}{242,762.00} = 278.4$	$\frac{71,632,230.10}{200,925.00} = 356.5$	$\frac{9,433,107.09}{54,141.00} = 174.2$
EMAAR	$\frac{10,126,932.19}{628,166.00} = 16.12$	$\frac{39,963,306.98}{1,049,306.00} = 38.09$	$\frac{26,516,906.30}{857,206.00} = 30.93$

Table 32: Liquidity Index Ratio Calculations

The table shows the number of days needed for each company to convert its trade receivables and inventory into cash. Impressively, EMAAR has also the shortest span in liquidating their trade receivables and inventories. On the other hand, both DSI and ARTC have a longer span in liquidating. From 2011 to 2013, EMAAR has been improving itself by reducing their inventory and receivables, so the ratio reached to 16.12. Conversely, ATRC ratio has been increasing over the years. However, it is seen that DSI's trend has increased in the last year from 356.5 to 278.4, which indicates that the company need a longer period to convert numerous current assets.



In the graph, as explained above in the table explanation, the navy blue color bars showing the effectiveness of EMAAR efficiency of conversion cycle. However, it is shown that DSI's trend has increased in the last year from 356.5 to 278.4, which indicates that the company needs a longer period to convert numerous current assets to cash which could affect its capability to pay bills in the short-term. ATRC, the light blue color bars, need some improving measures also as the bar trend shows that it's increasing over the year.

E- CASH FLOW RATIOS:

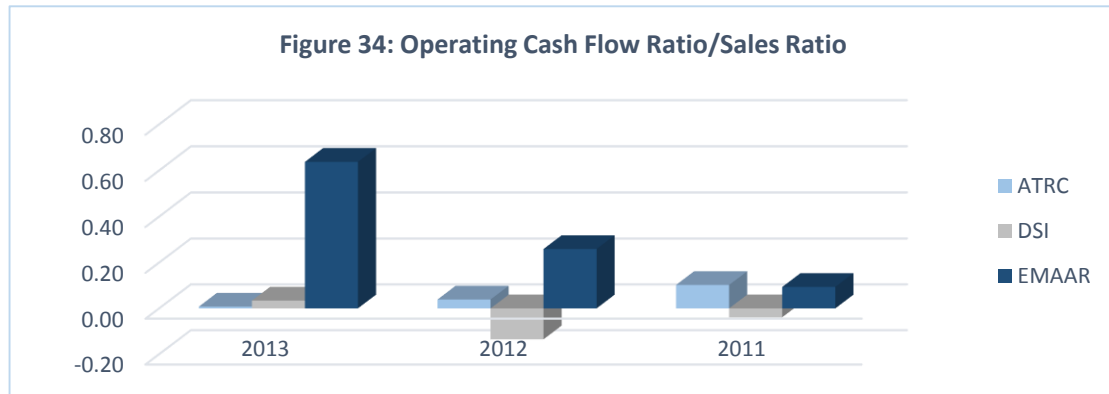
Data to calculate cash flow ratios is collected from the balance sheet, the income statement and the cash flow statement.

1. OPERATING CASH FLOW/SALES RATIO:

Operating Cash Flow/Sales Ratio=		Operating Cash Flow	x 100	
		Revenue		
Company	Year 2013	Year 2012	Year 2011	
ATRC	$\frac{57,410.00}{7,369,328.00} = 0.8\%$	$\frac{218,696.00}{5,659,944.00} = 3.9\%$	$\frac{503,440.00}{4,923,558.00} = 10.2\%$	
DSI	$\frac{165,222.00}{4,879,189.00} = 3.4\%$	$\frac{-448,051.00}{3,321,268.00} = -13\%$	$\frac{-121,126.00}{3,109,618.00} = -3.9\%$	
EMAAR	$\frac{6,581,326.00}{10,328,472.00} = 63.7\%$	$\frac{2,134,914.00}{8,239,928.00} = 25.9\%$	$\frac{758,676.00}{8,112,332.00} = 9.4\%$	

Table 33: Operating Cash Flow/Sales Ratio Calculations

The ratio shows the percentage of operating cash against revenue; in other words, it shows how much a company is able to generate cash from its operations. Higher the ratio, higher the company's ability to meet up its operations. A negative ratio is an indicator to a poor cash flow condition. A company with a negative cash flow is often affected by shortage of cash with respect to running operations, which is often financed through equity or debt. EMAAR's ratio is the highest one, increasing over the years, indicating that they are able to generate a greater amount of cash from operations. On the other hand, ATRC needs to put some efforts to bring the operating cash flow/sales ratio higher as its losing its position over the years. Also, DSI has a poor cash position with negative outcome in 2011 and 2012.



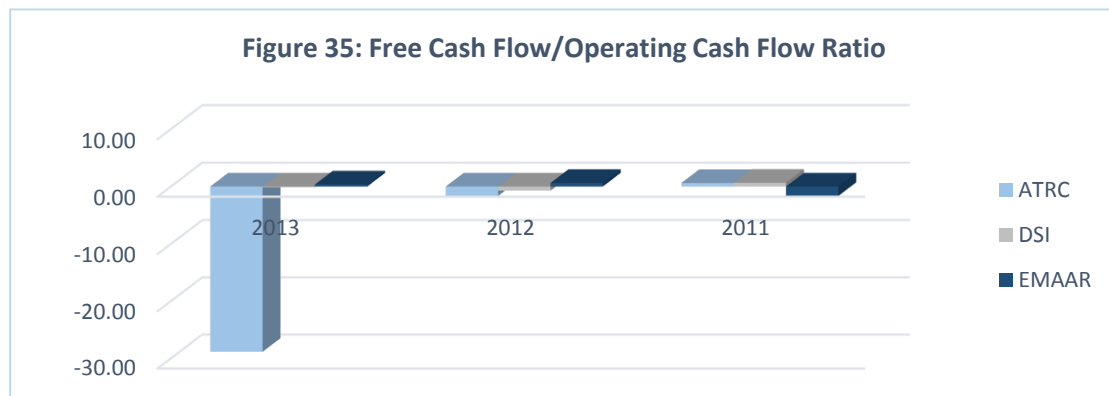
The operating cash flow to sales ratio graph draws an idea for each company easily to know its ability to make cash from its operational activities. As clear in the graph, the navy blue bars are having the best condition of cash flow in compassion to the other two companies. On the other hand, they grey bars shows that the company is having a poor condition in both years 2011 and 2012; however, the DSI stood back on its feet and generated positive figures. Contrariwise, ARTC, light blue bars, is unable to keep up its cash flow increasing, and the bars are decreasing every year. ARTC should take an action to solve the issue regarding the cash flow to avoid reaching a negative figure.

2. FREE CASH FLOW/OPERATING CASH FLOW RATIO:

Free Cash Flow/Operating Cash Flow Ratio = $\frac{\text{OCF} - \text{Capital Expenditure}}{\text{Operating Cash Flow}} \times 100$			
Company	Year 2013	Year 2012	Year 2011
ATRC	$\frac{-1,657,691.00}{57,410.00} = -2887\%$	$\frac{-358,426.00}{218,696.00} = -164\%$	$\frac{308,167.00}{503,440.00} = 61\%$
DSI	$\frac{-22,765.00}{165,222.00} = -13.8\%$	$\frac{323,368.00}{-448,051.00} = -72.2\%$	$\frac{-78,893.00}{-121,126.00} = 65.1\%$
EMAAR	$\frac{2,380,902.00}{6,581,326.00} = 36\%$	$\frac{1,320,447.00}{2,134,914.00} = 62\%$	$\frac{-1,250,865.00}{758,676.00} = -165\%$

Table 34: Free Cash Flow/Operating Cash Flow Ratio Calculations

The ratio indicates how much a company is generating its cash from operations to further financing or expansions. In the scenario above, the situation is not encouraging for the current year. The negative value for ATRC of a 2000% indicates that it has a huge investment in the capital structure; however, it is not through its operating cash, but it's financed through possible equity or debt. In addition, DSI's situation gives an indicator that the cash generation from operations is not meeting up the capital expenditures. EMAAR is the only company between the other two that has a positive percentage, which indicates that it can expand into further investment in fixed/long-term assets.



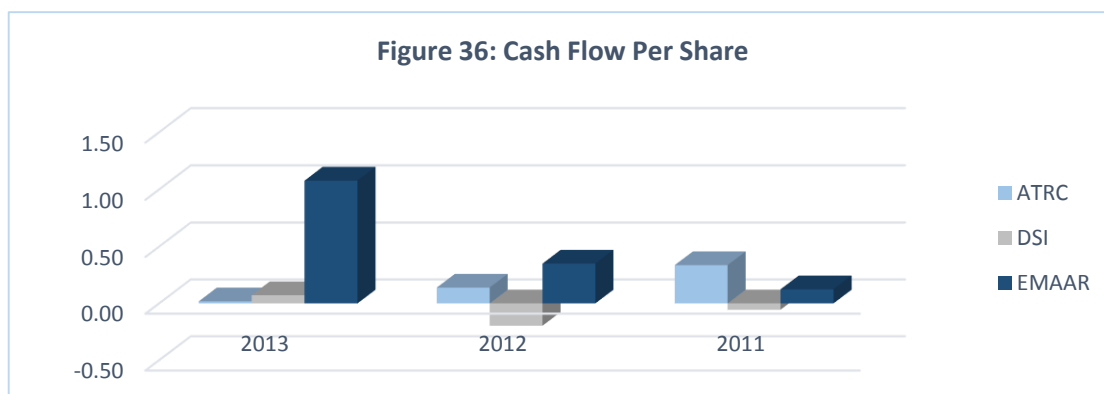
The free cash flow to operating cash flow graph illustrates the relationship between FCF and OCF. It is seen in the graph that the light blue bar in 2013 is falling drastically, which is a clear indicator that ARTC has invested a larger capital structure on debt rather than form operational cash. ARTC was doing well in 2011, but the situation of the company has been falling each year; also, the same situation is seen in the grey bars. Moreover, it is shown in the graph that the grey bars in 2012 were also negative, which shows that DSI cannot cover their capital expenditures; unlike ARTC, DSI's negative figures are increasing but remaining negative at the same time. On the other hand, as the navy blue bars are increasing from one year to the other, EMAAR has the best situation in comparison to the other two companies. It seems that the company is trying to meet its capital expenditures or to expand its business from operational cash.

3. CASH FLOW PER SHARE:

Cash Flow Per Share =		Operating Cash Flow – Preferred Dividends	
		Numbers of Shares	
Company	Year 2013	Year 2012	Year 2011
ATRC	$\frac{57,410.00}{3,139,500.00} = 0.02$	$\frac{218,696.00}{1,569,750.00} = 0.14$	$\frac{503,440.00}{1,495,000.00} = 0.34$
DSI	$\frac{165,222.00}{2,285,047.00} = 0.07$	$\frac{-448,051.00}{2,285,047.00} = -0.20$	$\frac{-121,126.00}{2,177,778.00} = -0.06$
EMAAR	$\frac{6,581,326.00}{6,109,939.00} = 1.08$	$\frac{2,134,914.00}{6,091,239.00} = 0.35$	$\frac{758,676.00}{6,091,239.00} = 0.12$

Table 35: Cash Flow Per Share Ratio Calculations

The ratio concerns shareholders more as it will benefit them in knowing if the company will be able to pay off their dividends in the near future from their operations. Even if Directors approved the dividend (Cash), the payment will only be possible and feasible if the operating cash flow, after deducting preferred dividends, are enough to meet up dividend expenditures. A positive ratio is always desirable. Positive value is a healthy indicator of dividend payment per share. The desirable ratio should be greater than one, or to be more accurate, should be equal or greater than two. In 2013, only EMAAR is in the position to meet up the requirement of the above ratio and rest of the companies, as evident, are struggling to make shareholders feel happy about their collections.



The cash flow per share graph illustrates each company's financial strength. In 2011 and 2012, the grey bars are shown in the negative zone, which means that DSI is using its venture capital to pay overhead expenses and that the company is not generating cash from its operations. However, DSI overcame the problem and rose to 0.07 in 2013. Contrariwise, the light blue bars are decreasing over the year, so ARTC needs to put more effort in making more cash from operations. On the other hand, it is clear the navy blue bars are increasing over the year; hence, EMAAR has the best situation amongst the three companies.

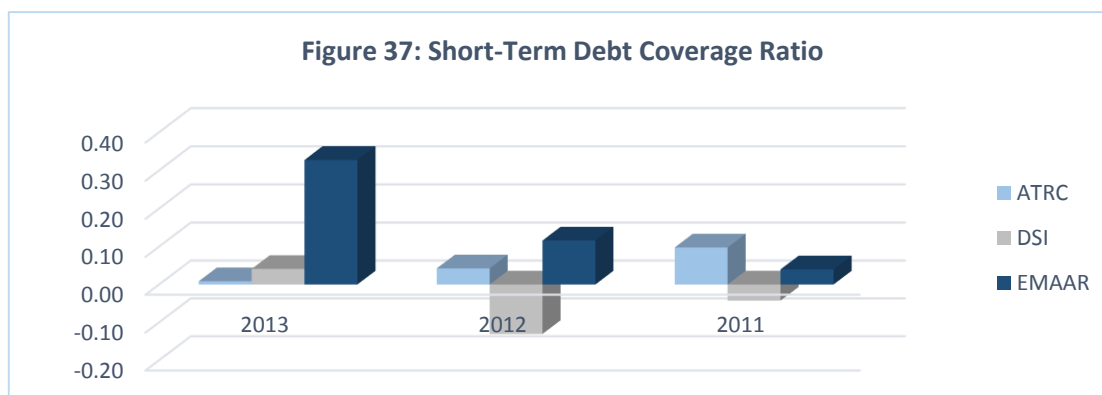
→ Cash Flow Coverage Ratios:

4. SHORT-TERM DEBT COVERAGE RATIO:

Short-Term Debt Coverage =		Operating Cash Flow	x 100	
		Short-Term Debt		
Company	Year 2013	Year 2012	Year 2011	
ATRC	$\frac{57,410.00}{6,693,342.00} = 0.9\%$	$\frac{218,696.00}{5,148,489.00} = 4.2\%$	$\frac{503,440.00}{5,153,422.00} = 9.8\%$	
DSI	$\frac{165,222.00}{4,025,946.00} = 4.1\%$	$\frac{-448,051.00}{3,426,231.00} = -13\%$	$\frac{-121,126.00}{2,846,448.00} = -4.3\%$	
EMAAR	$\frac{6,581,326.00}{20,099,929.00} = 32.7\%$	$\frac{2,134,914.00}{18,394,440.00} = 11.6\%$	$\frac{758,676.00}{19,045,490.00} = 4.0\%$	

Table 36: Short-Term Debt Coverage Ratio Calculations

A company's ability to pay off their current debt portion is the most important aspect to earn a good reputation in the eye of lender. Higher ratio percentage means less effective the company would be to pay off the current year's loan portion or current liability portion. EMAAR's situation is alarming; also, none of the companies is in very good position with respect to current payments for current portion of liabilities. They have to make their operations more efficient to generate more cash for meeting up their liabilities.



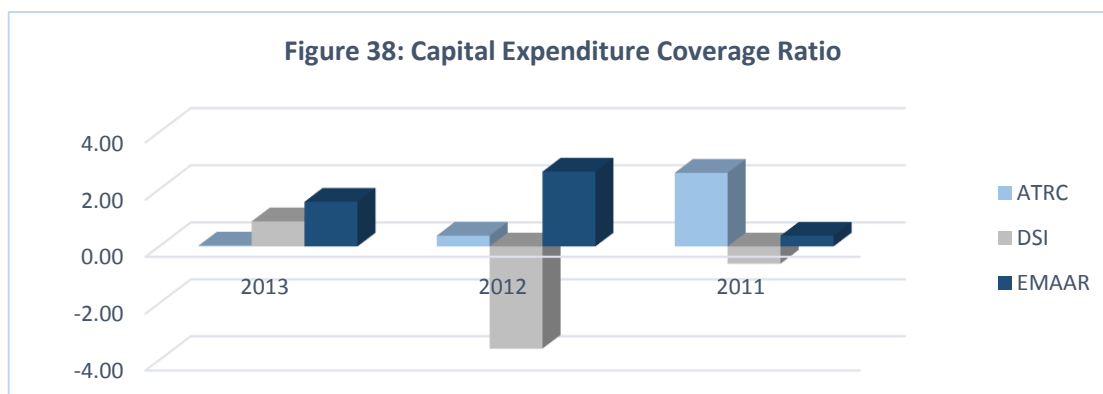
The bar graph exhibits the short-term debt coverage. In order to compare one company to the other, the graph is essential in determining each company's strength. It is shown in the graph that both the grey bars and the light blue bars are either in the decreasing or negative zone, which leaves the navy blue bars increasing, and it indicates that EMAAR is doing well out of the other two companies. Also, it means that EMAAR have enough OCF to make short-term debt holders happy.

5. CAPITAL EXPENDITURE COVERAGE RATIO:

Capital Expenditure Coverage =		Operating Cash Flow	
		Capital Expenditure	
Company	Year 2013	Year 2012	Year 2011
ATRC	$\frac{57,410.00}{1,715,101.00} = 0.03$	$\frac{218,696.00}{577,122.00} = 0.38$	$\frac{503,440.00}{195,273.00} = 2.58$
DSI	$\frac{165,222.00}{187,987.00} = 0.88$	$\frac{-448,051.00}{124,683.00} = -3.59$	$\frac{-121,126.00}{200,019.00} = -0.61$
EMAAR	$\frac{6,581,326.00}{4,200,424.00} = 1.57$	$\frac{2,134,914.00}{814,467.00} = 2.62$	$\frac{758,676.00}{2,009,541.00} = 0.38$

Table 37: Capital Expenditure Coverage Ratio Calculations

In order to expand every company, it needs running cash for more investment. In the above table, the situation is good only for EMAAR, but rest of the companies are struggling a bit. Especially DSI has a negative operating cash flow in the years 2011 and 2012, later recovered but still a lot more to do and find out the aspect following negativity in the previous years. ATRC is losing its position over the years with respect to the ratio mentioned above. Hence, drastic measures are immediately required to patch up the situation.



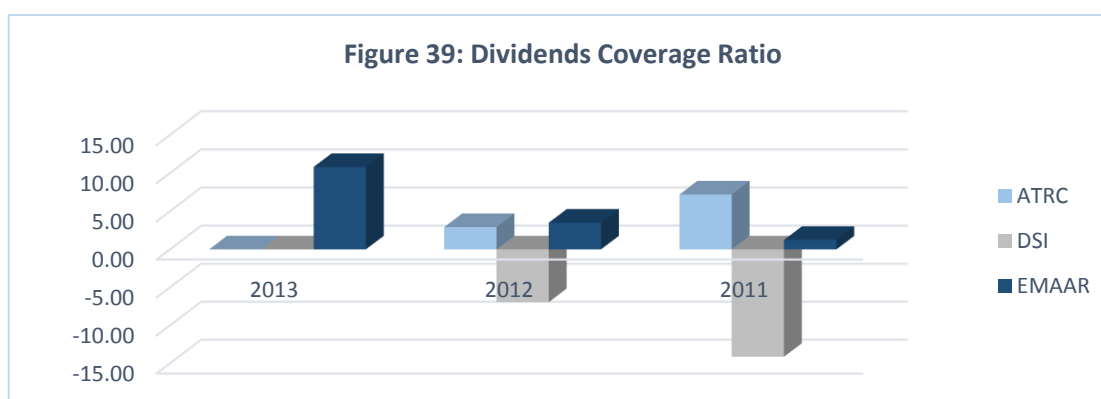
The capital expenditure coverage bar graph shows the measurement of each company's operational cash that needs to cover expenses. It is clear from the grey bars that DSI is struggling in covering their capital expenditures; however, the company overcame the problem in 2013. Conversely, ARTC was doing well in 2011, but the trend line of the light blue bars tends to decrease year after year. On the other hand, EMAAR's situation is the best between the other two companies, but the trend line is fluctuating.

6. DIVIDENDS COVERAGE RATIO:

Dividends Coverage =		Operating Cash Flow Cash Dividends	
Company	Year 2013	Year 2012	Year 2011
ATRC	No Dividends	$\frac{218,696.00}{74,750.00} = 2.93$	$\frac{503,440.00}{69,990.00} = 7.19$
DSI	No Dividends	$\frac{-448,051.00}{64,534.68} = -6.94$	$\frac{-121,126.00}{8,568.00} = -14.14$
EMAAR	$\frac{6,581,326.00}{609,124.00} = 10.80$	$\frac{2,134,914.00}{609,124.00} = 3.50$	$\frac{758,676.00}{609,124.00} = 1.25$

Table 38: Dividends Coverage Ratio Calculations

Dividends coverage ratios analyzes how a company would pay off the liabilities with respect to current approved cash dividend. Higher the ratio higher the ability. In the table above, it is very clear that only EMAAR is doing well. ATRC and DSI not announced or approved any cash dividend in the year 2013, which could be due to the fact or reason of above scenario.



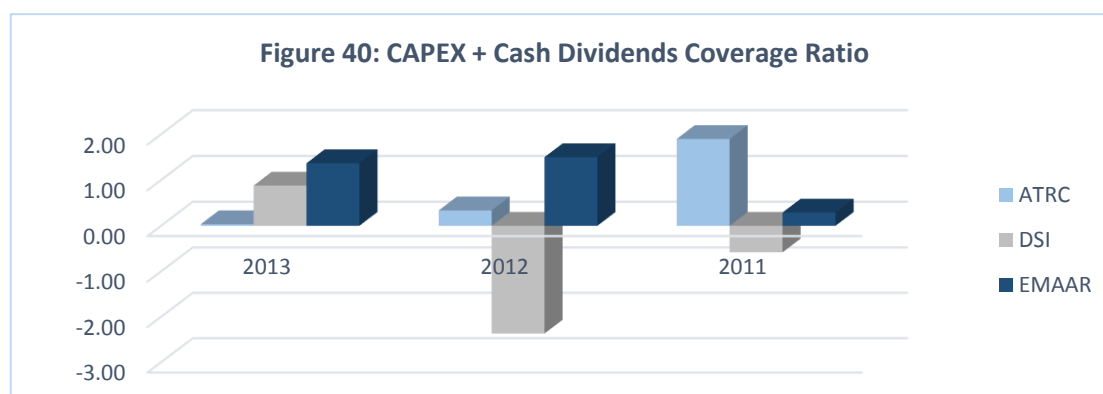
The bar graph illustrates the dividends coverage ratio, which shows the number of times that each company is able to pay dividends to shareholders. Referring to the graph, the navy blue bars and the grey bars are increasing, but EMAAR is in the positive zone and DSI is in the negative zone. Also, it is seen in the graph that the light blue bars are decreasing. Hence, ARTC and DSI board decided not to pay dividends in the year 2013, and EMAAR has the highest dividend coverage amongst the three companies.

7. CAPEX + CASH DIVIDENDS COVERAGE RATIO:

CAPEX + Cash Dividends Coverage =		Operating Cash Flow Capital Expenditure + Cash Dividends	
Company	Year 2013	Year 2012	Year 2011
ATRC	$\frac{57,410.00}{1715101+0} = 0.03$	$\frac{218,696.00}{577122+74750} = 0.34$	$\frac{503,440.00}{195273+69990} = 1.90$
DSI	$\frac{165,222.00}{187987+0} = 0.88$	$\frac{-448,051.00}{124683+64534.68} = -2.37$	$\frac{-121,126.00}{200019+8568} = -0.58$
EMAAR	$\frac{6,581,326.00}{4200424+609124} = 1.37$	$\frac{2,134,914.00}{814467+609124} = 1.50$	$\frac{758,676.00}{2009541+609124} = 0.29$

Table 39: CAPEX + Cash Dividends Coverage Ratio Calculations

CAPEX stands for capital expenditure. The CAPEX + Cash Dividends Coverage is a combination of two ratios; the capital expenditure and the cash coverage ratio. The dividend coverage and capital expenditure coverage ratio out of operating cash calculations was not indicative of timely or prompt payment except EMAAR, which was able to pay only dividends out of operating cash flows. Considering the same facts, if combined above two ratios in one, the table will not be giving a different picture. Operating cash flow is not enough for any of the company to pay off dividends in collaboration with capital expenditures. A critical eye is required by all the companies to analyze the ratio.



The capital expenditure + cash dividends coverage graph shows the investments within the company used from OCF. It is shown that ARTC's trend is decreasing over the years from its best situation at 1.90 in 2011 to 0.03 in 2013. On the other hand, EMAAR's and DSI's trend is fluctuating, but EMAAR is doing better than DSI as it did not reach the negative zone. Nevertheless, DSI's situation got better and it finished itself from the negative zone and reach to 0.88 in 2013.

F- MARKET VALUE RATIOS:

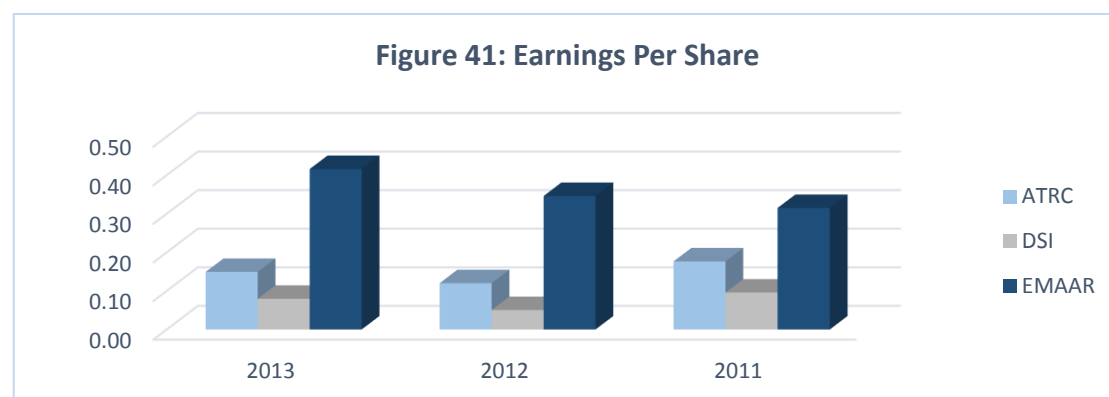
Data to calculate market value ratios are collected from the income statement, the cash flow statement, the changes in equity statement and Dubai Financial market historical prices data.

1. EARNINGS PER SHARE (EPS):

Earnings Per Share =		Net Income	
		Numbers of Shares	
Company	Year 2013	Year 2012	Year 2011
ATRC	$\frac{468,259.00}{3,139,500.00} = 0.15$	$\frac{188,227.00}{1,569,750.00} = 0.12$	$\frac{263,532.00}{1,495,000.00} = 0.18$
DSI	$\frac{181,735.00}{2,285,047.00} = 0.08$	$\frac{115,043.00}{2,285,047.00} = 0.05$	$\frac{208,298.00}{2,177,778.00} = 0.10$
EMAAR	$\frac{2,540,615.00}{6,109,939.00} = 0.42$	$\frac{2,106,924.00}{6,091,239.00} = 0.35$	$\frac{1,917,941.00}{6,091,239.00} = 0.31$

Table 40: Earnings Per Share Ratio Calculations

Clearly EMAAR is earning higher and therefore, able to share good amount of earning per share, which is a good indicator of investor to attract for investment. But the fact of low operating cash flow should not be ignored. All the companies are earning profits, but EMAAR is comparatively good despite the fact that they have higher number of shares.



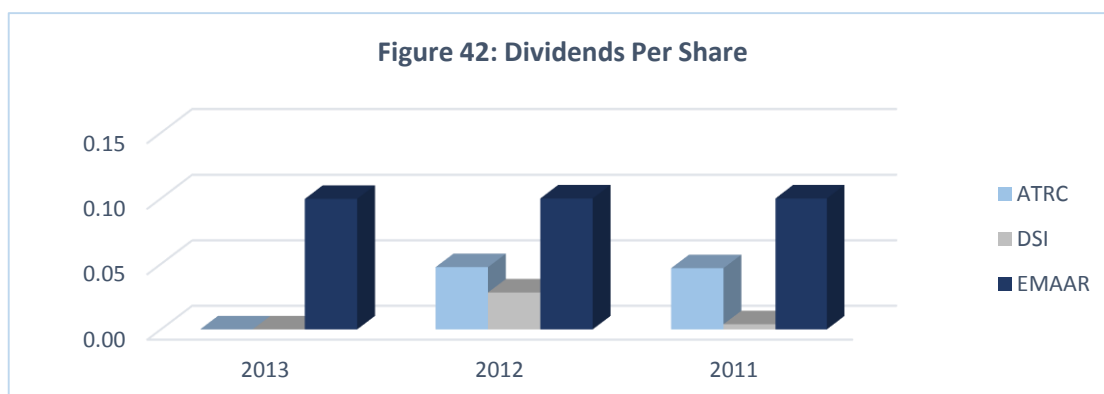
The graph exhibits the portion of each company's profit allocated to each outstanding share of common stock. In all for the three years, EMAAR is the highest in their EPS, and it is followed by ARTC then DSI. Over the years, EMAAR's trend has been increasing, but ATRC's and DSI's trends are fluctuating.

2. DIVIDEND PER SHARE (DPS):

Dividends Per Share =		Dividends Paid to Shareholders Numbers of Shares	
Company	Year 2013	Year 2012	Year 2011
ATRC	No Dividends	$\frac{74,750.00}{1,569,750.00} = 0.05$	$\frac{69,990.00}{1,495,000.00} = 0.05$
DSI	No Dividends	$\frac{64,534.68}{2,285,047.00} = 0.03$	$\frac{8,568.00}{2,177,778.00} = 0.00$
EMAAR	$\frac{609,124.00}{6,109,939.00} = 0.10$	$\frac{609,124.00}{6,091,239.00} = 0.10$	$\frac{609,124.00}{6,091,239.00} = 0.10$

Table 41: Dividends Per Share Ratio Calculations

As evident in the table, EMAAR is more consistent in dividend announcements. Therefore, the company more attraction for investors. ATRC and DSI didn't announced any dividend in the year 2013 due to low earning per share in previous year or low operating cash flow level, which may hamper their performance as it would be difficult to them to attract investors. A consistent policy of dividend, as EMAAR, is always desirable to show a good reputation of the company.



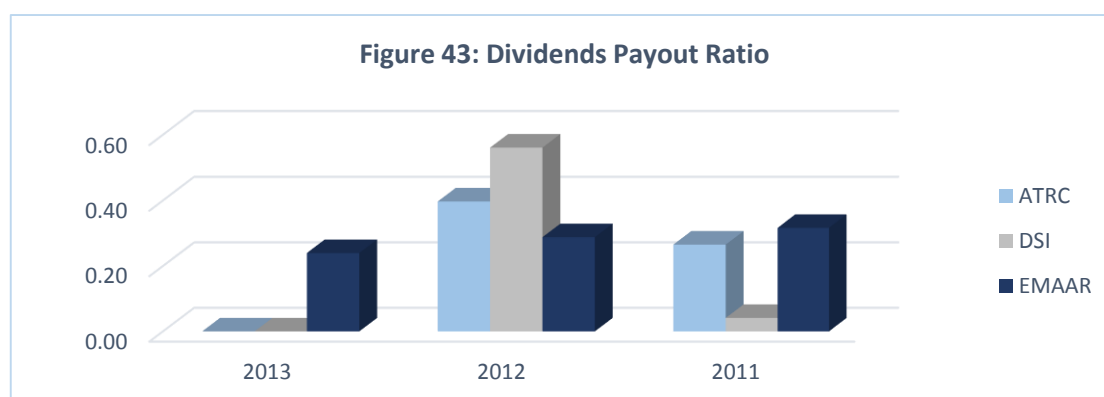
The graphical representation shows the total number of declared dividends for every ordinary share issued for each company. As seen in the graph, EMAAR has issued same number of share in all the past three years; also, they have the same dividends paid to shareholders amount. Hence, the DPS is constant at a ratio of 0.10 throughout the studied years, and it is the highest between all three companies. In 2013, both ARTC and DSI did not issue any share in the year. However, in the previous year, 2012, ARTC and DSI had declared dividends for every ordinary share of 0.05 and 0.03 respectively. Even if ARTC did not issue dividends in 2013, their DPS is constant in 2012 and 2011. Conversely, DSI's DPS increased from 0.004 to 0.03 in 2012.

3. DIVIDEND PAYOUT RATIO:

Dividends Payout Ratio =		Dividends Per Share Earnings Per Share	x 100
Company	Year 2013	Year 2012	Year 2011
ATRC	No Dividends	$\frac{0.05}{0.12} = 40\%$	$\frac{0.05}{0.18} = 27\%$
DSI	No Dividends	$\frac{0.03}{0.05} = 56\%$	$\frac{0.00}{0.10} = 4.1\%$
EMAAR	$\frac{0.10}{0.42} = 24\%$	$\frac{0.10}{0.35} = 29\%$	$\frac{0.10}{0.31} = 32\%$

Table 42: Dividends Payout Ratio Calculations

A percentage of dividend is paid out of percentage of income. EMAAR is having edge here too, which consistently paying off the dividends to its shareholders out of the income portion. Other two companies are not consistent. Also, in 2013, both companies are not paying dividends, which is an unhealthy indicator in the eyes of shareholders.



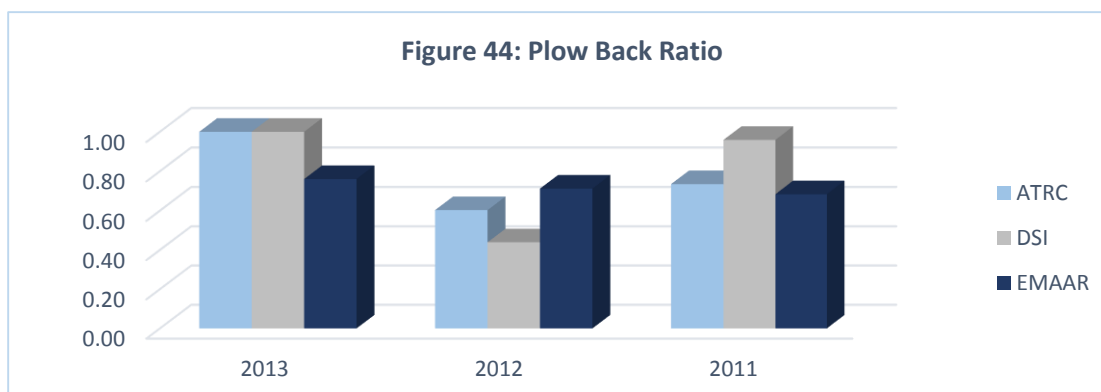
The dividends payout ratio bar graph shows the earnings paid to shareholders in dividends. As seen in the graph, EMAAR's dividends payout ratio is decreasing from one year to the other. Hence, EMAAR's net income is increasing throughout the years because the denominator is constant and the numerator is increasing. As seen in the graph, all companies are paying less than 100%, which is a healthy indicator that all companies' net income is more than the dividends payout. Moreover, since ATRC and DSI had high dividends payout ratio in 2012, as seen in the light blue and grey bars, the board directors of both companies decided not to issue dividends in the year 2013.

4. PLOW BACK RATIO / RETENTION RATIO:

$\text{Plow Back Ratio} = 1 - \frac{\text{Dividends Per Share}}{\text{Earnings Per Share}} \times 100$			
Company	Year 2013	Year 2012	Year 2011
ATRC	100%	$1 - \frac{0.05}{0.12} = 60\%$	$1 - \frac{0.05}{0.18} = 73\%$
DSI	100%	$1 - \frac{0.03}{0.05} = 44\%$	$1 - \frac{0.004}{0.10} = 96\%$
EMAAR	$1 - \frac{0.10}{0.42} = 76\%$	$1 - \frac{0.10}{0.35} = 71\%$	$1 - \frac{0.10}{0.31} = 68\%$

Table 43: Plow Back Ratio Calculations

The income portion that company doesn't pay off or keep it as reserves is usually termed as plowback. EMAAR is paying consistently to its shareholders, the dividends, out of earnings. Higher the retained earnings, higher the equity balance. A consistent value is the indication of company's strong policy with respect to dividends and retention, which EMAAR is achieving successfully. Also, DSI and ATRC are keeping a healthy proportion as retained earnings, especially in 2013 the retention ratio was 100% as they have not pay dividends.



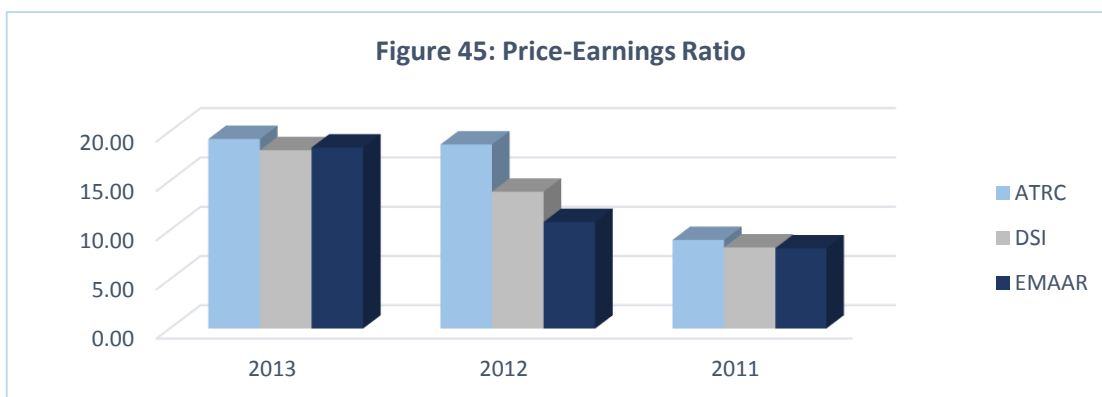
The graphical representation shows the opposite of the previous graph, which the ratio is the net income that a company does not payout as dividends. It is a shows how much of the total earnings for a period each company is reinvesting as compared with paying out to shareholders. The ratio of each company in the same year of the ratio and the previous ratio is equal to 100%. For instance, EMAAR's dividend payout ratio in 2013 was 24%, so its plow back ratio is 76%. As ARTC and DSI did not pay dividends, the retained earnings was 100% in 2013. Referring to the graph, EMAAR is almost constant throughout the years. Conversely, it is clear that both ARTC and DSI are fluctuating. From 2011 to 2012, both ARTC's and DSI's trend is decreasing. Hence, ARTC and DSI are growing slowly, so investors would prefer a large payout ratio.

5. PRICE-EARNINGS RATIO / (P/E) RATIO:

Price-Earnings Ratio =		Market Price Per Share Earnings Per Share	
Company	Year 2013	Year 2012	Year 2011
ATRC	$\frac{2.87}{0.15} = 19.24$	$\frac{2.24}{0.12} = 18.68$	$\frac{1.59}{0.18} = 9.02$
DSI	$\frac{1.44}{0.08} = 18.11$	$\frac{0.70}{0.05} = 13.90$	$\frac{0.79}{0.10} = 8.26$
EMAAR	$\frac{7.64}{0.42} = 18.37$	$\frac{3.75}{0.35} = 10.84$	$\frac{2.57}{0.31} = 8.16$

Table 44: Price-Earnings Ratio Calculations

High price earnings ratio is always a cause of attraction to investors in order to make their rational judgments about the probable investment in the company. All the three companies have been showing an increasing effect over the years, but the rate of increase is little different for each company. For ATRC, the rate of increase from 2011 to 2012 is more than other companies; however, from 2012 to 2013 the rate has significantly decreased. DSI is showing almost constant increase i.e. almost 4 to 5 each year from 2011 to 2012. In case of EMAAR there is perfect increase in rate over the year which shows consistency and good indication for the investors.



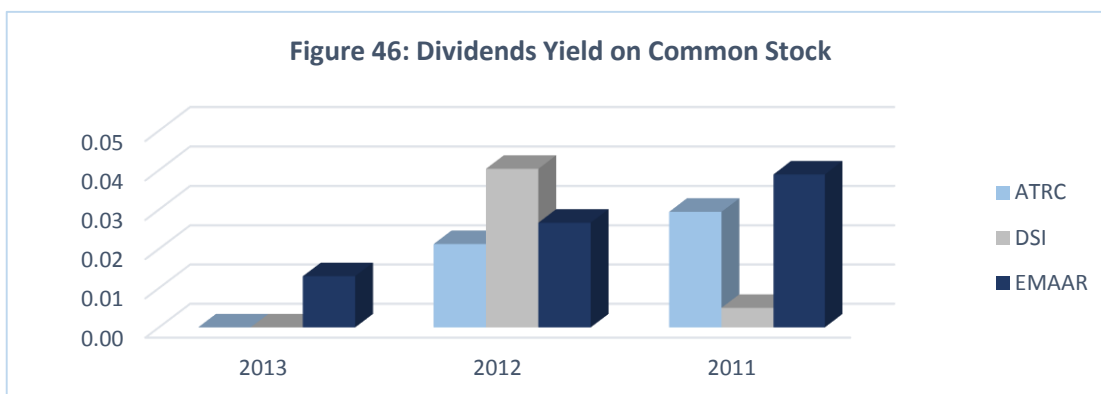
The graph shows the current share price in relative to its earnings per share earnings of each company. It is easy to compare the three companies together as they are from the same industry. As seen in the graph, all three companies have improved from 2011 to 2013. When comparing 2011 to 2013, the bars increase by 80%. It is clear that light blue bars are the highest, which indicates that ARTC's investors have higher expectation to earnings growth in the future compared to EMAAR and DSI that has a lower P/E.

6. DIVIDENDS YIELD ON COMMON STOCK:

Dividends Yield on Common Stock = $\frac{\text{Annual Dividends Per Share}}{\text{Market Price Per Share}} \times 100$			
Company	Year 2013	Year 2012	Year 2011
ATRC	No Dividends	$\frac{0.05}{2.24} = 2.1\%$	$\frac{0.05}{1.59} = 2.9\%$
DSI	No Dividends	$\frac{0.03}{0.70} = 4.0\%$	$\frac{0.00}{0.79} = 0.5\%$
EMAAR	$\frac{0.10}{7.64} = 1.3\%$	$\frac{0.10}{3.75} = 2.7\%$	$\frac{0.10}{2.57} = 3.9\%$

Table 45: Dividends Yield on Common Stock Ratio Calculations

Dividend yield for all the companies is round-about 1% to 4%; however, the trend is decreasing for all the companies and even in 2013 for ATRC and DSI no dividend has been announced or approved. From the results in the table above, a lower yield is observed over the years due to the decreasing trend. However, a positive percentage is always desirable observed for all the companies except in the year 2013, where ATRC and DSI have not announced or approved the dividends; hence, there is no dividends yield for the companies in that year.



The dividends yield ratio graph demonstrates how each company pays out in dividends annually in relation to its share price. As seen in the graph, the navy blue bars are the highest dividends yield in the year 2011 and 2013, which indicates that EMAAR is more desirable among investors in the year 2011 and 2013. However, the desirability of EMAAR decreased from 2011 to 2012, which could mean that the stock was underpriced as it was with a higher dividend yield in 2011. The graph also shows that the grey bar is the highest in 2012. On the other hand, ATRC's desirability to investors is decreasing over the years regarding the dividends yield ratio.

CHAPTER 6:

Findings, Suggestions and Recommendations

CHAPTER 6: FINDINGS, SUGGESTIONS AND RECOMMENDATIONS

The chapter will highlight the findings on each company based on the analyzed ratios in the previous chapter. Then, possible suggestions are laid down in the following sections. Finally, recommendations on each company will follow later.

6.1 FINDINGS AND SUGGESTIONS ON PROFITABILITY:

FINDINGS ON PROFITABILITY:

In general, the construction industry's net profit should be 10% to 20 % based on persisting competition, which is evident from the study conducted by CSI market and Business Economic websites. EMAAR is doing well because of their profitability ratios that is meeting the market standards, which has a net profit margin ratio more than 20%. On the other hand, ARTC's and DSI's net profit margin ratios is less than the market standards, which are less than 10%. Even if sometimes EMAAR's trend is decreasing from one year to the other, it is still meeting the market standards, and it is still doing better than the other two companies. In general, EMAAR's profitability ratios are the best amongst the three companies. This is because EMAAR's direct cost is very low in comparison to the other two companies, which explains its high net profit ratio.

SUGGESTIONS ON PROFITABILITY:

A weaknesses in the profitability of ARTC and DSI is clear. Their operating cost is too high, which causes their gross profit to decrease. Even though the revenue of both companies is close to EMAAR, they should minimize their direct cost as the cost of production (COR) of both companies is really high. High direct cost is caused by delayed projects/process or by inefficient methods of using productions/operational activities. Their operation are not doing well so their operational cost are going higher, which indicates that the profitability share becomes at minimum that means the gap between revenue and cost is very low, and that they should to maximize and increase the gap. The gap could be minimized by shortening the operational cycle in order to submit projects on time or finishing is a shorter period.

6.2 FINDINGS AND SUGGESTIONS ON LIQUIDITY:

FINDINGS ON LIQUIDITY:

In liquidity ratios, the ideal current ratio and quick ratio should be around 2; if the ratio is between 1.5 and 2, it indicates a health liquidity ratio. In the analysis conducted of the previous chapter, liquidity ratios are incorrigible for all the companies; again, EMAAR is exceptionally well EMAAR as it has a liquidity ratio that is above 1.50 and less than 2. Though, ARTC and DSI are having a liquidity ratio of 1.5 and below. However, EMAAR is using their assets very efficiently in comparison to ARTC and DSI. ARTC and DSI are having an edge over EMAAR in respect to cash coverage ratio. Even though ARTC and DSI are better than EMAAR, EMAAR is nevertheless. The possible reason is that either the interest expense or the finance cost of EMAAR is on the higher side. It means that the company is heavily depending on the debt.

SUGGESTIONS ON LIQUIDITY:

ARTC and DSI should try to increase their current and quick ratio in order to become healthier firms. ARTC and DSI could use their assets more efficiently in order to increase the current and quick ratio by better utilization of their current resources. For instance, in the current ratio, inventory is one of the most important elements; hence, if a company converts its inventory into a final product in short period, they will be able to pay off their liabilities faster. Also, the company can decrease their receivables by early collection. Upon that, the ratio will improved. On the other hand, EMAAR should put effort to make its cash coverage better in order to cover up its interest out of profitability well. EMAAR could reduce its debt reliance to enhance the cash coverage ratio.

6.3 FINDINGS AND SUGGESTIONS ON LEVERAGE:

FINDINGS ON LEVERAGE:

As seen in liquidity ratios, EMAAR has a high interest expense and finance cost, which means that it is highly depending on debt unlike ARTC and DSI. Hence, the result will be reflected on leverage ratios. It is shown from the previous chapter that ARTC, DSI and EMAAR depends in debt with 19%, 7% and 61% respectively. This indicates that EMAAR is depending more on the external financing, and that it is using external funding, (Working Capital Management), to make return which shows the debt utilization policy of EMAAR is viable. Although EMAAR is heavily depending on debt, but it is using its debt well and wisely. However, as EMAAR have higher returns, it has a higher risk of facing bankruptcy than ARTC and DSI. For example, if the market crashed as in 2008, EMAAR will suffer comparatively more than the other two companies, which will be a huge downfall for the company because it is heavily depending on debts. In this case, the company will not be able to pay its debts, and it will not be able to collect their money from the market as the money supply will decrease.

SUGGESTIONS ON LEVERAGE:

Leverage ratio shows how much a company is depending on debt and how much on equity. The higher the leverage ratio, the higher the company dependency on debt. In common practice, the ideal scenario can be to use 40% debt and 60% equity (Small Enterprises Research and Development Foundation, 2013), which changes from one industry to another. In the country like UAE, where interest rate is at the lower side, most of the company rely heavily on debt financing rather than equity; in this way, they diversify their investment in different businesses. However, most of the companies in the UAE take maximum financing through loan because interest rates are very low and taxation is not applied in the UAE. As ARTC and DSI are most reliant on equity rather than debt, they may increase their debt to certain extent to gain some benefits like EMAAR. On the other hand, EMAAR is more reliant on debt rather than equity, so they should reduce their debt step by step to go more into equity financing even if it would take them a longer period as the construction projects take more time; for instance, Burj Khalifa construction started on 6th of January 2004 and was completed on 30th of December 2009. Also, Dubai Metro construction started on 21st March 2006,

and the last station was fully completed on 1st of March 2014 while other stations are planned to be finished in the future. ARTC and DSI should introduce a policy of balanced debt equity investment. EMAAR has been tilted to debt financing behavior, which is attracting higher amount of interest they are paying towards debt servicing, which can be healthy at present circumstances; however, if we analyze the situation of Financial Crisis, emerged in 2008 to 2009, it can be concluded that the situation can be even verse for EMAAR. Therefore, it is suggested that EMAAR should be more concerned about their higher debt and to replace their policy from debt financing to equity financing. ARTC and DSI can get debt financing by selling bonds, bills or notes to the public, which can bring some financing as their operating cash flow is very low. The other way for ARTC and DSI is to obtain banks borrowings; however, they need a further analysis and evaluation for implementation. On the other hand, when the company attracts more shareholder, it can take money from them rather than debt which is high interest demanding. Hence, EMAAR can go into equity by attracting shareholders as they may trust the company because of its high profitability. In this way, EMAAR can control high debt to equity ratio, and it can be more beneficial to the shareholders in increasing their wealth.

6.4 FINDINGS AND SUGGESTIONS ON ACTIVITY:

FINDINGS ON ACTIVITY:

From the activity ratios analysis in the previous chapter, it can be easily seen that ARTC and DSI have low revenue, high cost of sales and long collection period; on the other hand, EMAAR have high revenue, low cost of sales and short collection period, which gives it an edge over the other two companies, which shows that ARTC and DSI are not financially healthy in working capital management as compared to EMAAR. EMAAR is more efficient than ARTC and DSI as it keeps its money in circulation rather than delaying projects and keeping money with customers. Also, EMAAR'S operating cycle is too short, which means that their progress billing is fast and that it claims its money immediately after the project is finished.

SUGGESTIONS ON ACTIVITY:

Activity Ratios tell us how perfectly the use of operating capabilities and operating current assets, and it tells how much time each company is taking to collect debts to make payment to suppliers and make their inventory into a final product. ARTC and DSI are not converting their current assets efficiently, which is the reason of taking longer time in collecting debts in order to make payment. On the other hand, it is clear that EMAAR's operational activities in respect to conversion is efficient. For that, ARTC and DSI should be as efficient in every single matter regarding collection and conversion; hence, ARTC and DSI should put their concentration towards operations, see the ways that can make operations better to minimize the cost of production to compete EMAAR. They can minimize the cost of production by minimizing the operating cycle in order to collect money faster from customers as less time will allow them to reduce the cost and to pay suppliers to make their inventory into a final product.

6.5 FINDINGS AND SUGGESTIONS ON MAREKT RATIOS:

FINDINGS ON MARKET RATIOS:

The dividend issue policy of EMAAR is consistent; however, ARTC and DSI are having inconsistent dividends policy. Due to the low profitability of both companies, they predicted that they will not be able to pay their dividends next year because of low EPS and low operating cash flow; hence, both companies did not approve issuing dividends in 2013 to avoid further liabilities. As EMAAR's dividends are constant, investors will be attracted to the company and will increase the demand on its shares. There is a high demand on EMAAR's shares in the market as compared to low supply. The limited supply that is followed by high demand causes the stock prices of EMAAR to be higher than the other two companies. Another reason for EMAAR's high market prices is that it has higher profitability and higher dividends than the other two companies.

SUGGESTIONS ON MARKET RATIOS:

ATRC and DSI have low market prices. If they want to increase their market prices, they should have higher profits. Higher profits can be gained by increasing turnover. Moreover, it can be gained by reducing direct costs as it will drastically increase the profit. Reducing direct costs can be achieved by eliminating or decreasing cost of materials, labor and expenses related to the production of a product. Such costs can be eliminated or reduced by finding cheaper supplier, minimizing wastage, trading time for discounts, transforming buyers into suppliers, offering early payments for lower prices and late receipts for higher prices. By then, both companies would be able to announce and approve dividends. When they consistently and regularly announce dividend, this will attract investors. More investment from shareholder, with constant or decreasing debt, will decrease the leverage. This leverage structure is healthy and that they are less reliant on long-term debt.

6.6 FINDINGS AND SUGGESTIONS ON CASH FLOW:

FINDINGS ON CASH FLOW:

Cash flow is the lifeblood of any organization. As the money is well circulated, the company will have a healthy cash flow. Specifically, if the operating cash flow is doing well, then the other factors are also doing well; whereas most of the cash flow relates to operating cash flow and free cash flow. It is clear from the analysis in the previous chapter that ARTC's operating cash flow was good in 2011, but it was decreasing over the years. In addition, DSI is having negative operating cash flows. Both companies are not converting working capital into money, which points out that they have less cash with them from operating activities. Hence, both companies have a long operating cycle; however, EMAAR has the shortest operating cycle amongst all. Also, it has 63% operating cash from sales, which indicates that EMAAR is using its operations wisely and generating high profits followed by an excellent policy regarding operations, cash collection, profitability and debt financing.

SUGGESTIONS ON CASH FLOW:

ARTC and DSI should investigate the wellbeing of EMAAR. They should also not allow projects to be extended or to let their money with customers for long periods. However, they should finish project on time and collect their money immediately as generating and keeping cash in circulation gives efficient operations and shorter operating cycle.

6.7 RECOMMENDATION:

ARTC and DSI should put their concentration towards operating activities. In addition, they should minimize the operating cycle in order to minimize the cost of production. Therefore, they need to convert their inventory fast into final constructed product.

In order to increase revenue and decrease cost, an efficient operating cycle is desired i.e. collect their money as early as possible and put it into further cycle, which is very important in construction as it dependent on variable factors. Delaying project increases cost because construction industry is related to too many remote things such as market inflation and variable cost. These two factors affect cost by increasing. In other words, as time increases, variable cost such as labor and machinery cost will increase. For instance, if labors are not efficient, the work that finishes in 30 days will be delayed into 35 days, which means the operating cycle is extended and consequently the cost will increase of 5 additional days. The additional 5 days will include costs such as labor cost, ancillary material cost and overhead cost. In the construction industry, accuracy is favorable as delaying projects indicates poor management.

→ It is recommend that both ARTC and DSI to look up on the following:

- ✓ According to the activity ratios' analysis, it is concluded that both companies are not collection their money as early as they should. The possible reasons are that either their collection department is not performing well, or that there is a lack of operational activities, which is allowing the project to take longer period than usual.
- ✓ The operational cost of both companies are on the higher side, which is a consequence of their low profitability margin. In order to minimize the cost, a concentration towards the operational department. The possible reasons for higher operational costs might be the delayed in the projects and poor efficiency.
- ✓ The operational cash flow of both companies is not up to the standards, and it is concluded that the companies are in short of cash inflows. All this is contributing in delayed payments and consequently a poor operational activities.
- ✓ As per conclusion, the focus of both companies should be either to increase their revenue or to decrease their direct cost. Furthermore, they should meet the short fall of cash through external funding with assurance of efficient utilization. Apart from above, the operating cycle also needs to be decreased, which will indirectly bring in more cash, complete projects early and minimize direct cost.

EMAAR has a strong policy regarding operations, cash collection, profitability and debt, which indicates that EMAAR's policy is very clear, and that the company is earning higher revenue and incurring less cost. Also, EMAAR is processing each process efficiently, which shows that its earnings are high, cost is low, getting early money, paying late and converting inventory in final product faster. However, EMAAR should take into consideration to change their policy from debt reliance into equity reliance as it will increase their profitability further. If EMAAR goes more into equity rather than debt, its finance cost will decrease and consequently its profit will increase.

→ It is recommend that EMAAR to look up on the following:

- ✓ The debt to equity ratio is on the higher side, and it is concluded that a ratio above 60:40 needs to be maintained to avoid risk.
- ✓ Equity financing should be more in focus rather than debt financing as it will enhance their established credibility.

CHAPTER 7:

Conclusion

CHAPTER 7: CONCLUSION

Ultimately, to apply the analysis on the research, the research questions must be answered. As questioned that is the company's performance evaluation process is based on profitability, the answer is that gross profit is an indicator of direct profit after deducting direct cost. In the conducted study, it is proved that EMAAR is performing exceptionally well with having gross profit percentage of an average 51%, which shows that EMAAR is using its operating assets very well to incur operating expenditures. A lower direct cost causing them earn higher profit. On the other hand, the other two companies i.e. DSI and ATRC are facing a different situation with higher direct cost and comparatively low gross profit margin. Furthermore, it is found that EMAAR is having an edge over the other companies in respect to profitability after tax and interest, as it is generating more than 25%, which is higher than the ideal net profit of the construction industry market. So, it is analyzed that operational expenditure to run the business are well controlled by EMAAR than the others, which is a healthy indicator of a company's performance.

Financing is the major factor in a business. A healthy financing policy and capital budgeting technique, earn higher returns for the company. In the study, it is described that financing originates through debt and equity with an acceptable ratio of 40% debt and 60% equity, which is considered as benchmark for the study. Higher debts means higher debt servicing, which indirectly minimize the operating cash flow and profitability. In the study, it is observed that EMAAR is heavily depending on debts. Though, it is using its debt efficiently and paying off its liability well, but there is a risk factor if a situation as 2008 is repeated. On the other hand, the other two companies i.e. DSI and ATRC are less reliant on debt, and they are heavily depending on equity. It is further observed that both companies need some investment for further capital budgeting, which can be obtained through debts as their debt to equity ratio is on the lower side. It is concluded that the companies may rely on the debt to equity ratio as 40/60 and make their decisions accordingly.

Working capital management has always been a concern for many businesses to maintain healthy liquidity and activity ratios. It is desirable for every company to collect their money early and convert their inventory into final product efficiently. Furthermore, payment to suppliers may be planned in a way that the reputation of the company is not affected in the market. The issue regarding operations as far financial

statement concern is that ARTC and DSI are not able to convert their inventory into final product as early as possible, so they are not able to collect their money from customers, which is an unhealthy indicator because cash is needed at all times in the construction industry. If a company is doing its operational activities well, it means that it is converting its inventory into final product, and from there it can collect its cash again to create an efficient cycle. In the study, it is concluded that EMAAR is efficient in utilization of its operational assets with healthy liquidity and activity ratios. EMAAR is collecting and converting early and realizing it in cash to use it again. On the other hand, DSI and ARTC are facing issues regarding conversion and collection, which indirectly is effecting their liquidity.

Like a car can't run without fuel, similarly a business can't run without cash. With adequate fuel in the car (a business) one may go the desirable place. The answer is evident if someone is short-fall of cash in the business. It is observed in the study that EMAAR has enough cash to run its activity but DSI and ARTC are in trouble to meet their requirements. Low availability of cash has also been proved in preceding paragraphs for ARTC and DSI due to poor activity and liquidity ratios. Furthermore, the operating cash flows for both the companies are not healthier over the years. The reasons may be multiple i.e. poor control over liquidity and operations. Furthermore, both the companies need more investment in the form of debt or equity to carry on existing projects, and they need to make their operations more efficient by converting and collecting early and utilizing the collected cash in the operating cycle to earn more. Hence, cash is the life blood is proved as EMAAR with healthy cash is earning well, and the other two companies with weaker cash position are suffering and losing.

Market ratios provide an idea for investment decision making. A healthy and consistent dividend policy is eye catching for the investors because they are always looking for wealth maximization. Market ratios are effected with too many remote factors such as inflation and variable cost. But, if a company adopts a consistent policy for dividend issue and subsidize the factor of inflation, it may overcome the problem of lack of investment opportunities. It is seen a flayer of consistency in the dividend issue policy of EMAAR, which is leading their share price to be higher in the market with more reliability. On the other hand, inconsistency from DSI and ARTC regarding dividend and profitability create concerns for the investors as it is unfavorable to invest in a place where there is uncertainty of returns.

On a final note, in the construction industry of the UAE, one can earn more than 20% net profit, and one can earn a good reputation in the market with respect to shares if operations are well efficient. However, if operations are not doing well, one can suffer, and might lose their value in the future.

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APPENDICES

APPENDIX 1: (ARABTEC HOLDING PJSC) ANNUAL REPORTS

A- BALANCE SHEET STATEMENT

Arabtec Holding PJSC and its Subsidiaries CONSOLIDATED STATEMENT OF FINANCIAL POSITION Year ended 31 December 2013				
	2013 AED 000	2012 AED 000	2011 AED 000	2010 AED 000
ASSETS				
Non-current assets				
Property, plant and equipment	1,159,033	1,108,245	1,180,912	1,272,433
Investment properties	619,106	95,867		
Investment in associates	299,464	268,738		3,200
Goodwill	248,741	248,666	248,629	246,836
Other intangible assets	40,320	44,740	94,211	143,741
Trade and other receivables - non-current portion	325,345	668,235	797,719	774,524
Other financial assets	35,490	25,037	207,365	43,958
Other non-current assets	339	5,093	9,925	10,396
Deferred Tax Assets			331	331
	2,727,838	2,464,621	2,539,092	2,495,419
Current assets				
Trade and other receivables	6,324,872	4,144,594	3,856,063	4,201,860
Other financial assets	131,873	104,725	151,028	178,106
Inventories	220,904	202,731	319,016	369,009
Other current assets	348,137	161,873	110,629	128,324
Due from related parties	593,725	1,060,724	1,057,806	723,563
Cash and cash equivalents	2,452,981	812,400	688,057	592,745
	10,072,492	6,487,047	6,182,599	6,193,607
Total Assets	12,800,330	8,951,668	8,721,691	8,689,026
EQUITY AND LIABILITIES				
Equity				
Share capital	3,139,500	1,569,750	1,495,000	1,196,000
Statutory reserve	1,131,138	308,486	293,873	267,819
Fair value adjustment reserve	9,465	300	16	69
Foreign currency translation reserve	5,894	2,315	(264)	
Other reserves	(185,065)	(2,201)		
Retained earnings	1,413,636	1,067,903	1,107,072	1,215,864
Equity attribute to equity holders of the parent	5,514,568	2,946,553	2,895,697	2,679,752
Non-controlling interests	249,458	398,792	398,433	417,926
Total equity	5,764,026	3,345,345	3,294,130	3,097,678
Liabilities				
Non-current liabilities				
Bank borrowings	57,894	152,707	55,650	110,379
Provision for employees' end of service indemnity	182,530	165,508	126,729	113,868
Retentions payable - non-current portion	98,765	138,558	91,760	203,832
Deferred tax liabilities	3,773	1,061		
	342,962	457,834	274,139	428,079
Current liabilities				
Bank borrowings	862,537	647,215	468,308	626,672
Trade and other payables	5,286,381	3,929,632	3,865,945	4,182,956
Due to related parties	540,757	571,154	817,135	348,075
Income tax payable	3,667	488	2,034	5,566
	6,693,342	5,148,489	5,153,422	5,163,269
Total liabilities	7,036,304	5,606,323	5,427,561	5,591,348
TOTAL EQUITY AND LIABILITIES	12,800,330	8,951,668	8,721,691	8,689,026

B- INCOME STATEMENT

Arabtec Holding PJSC and its Subsidiaries CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME Year ended 31 December 2013				
	2013	2012	2011	2010
	AED 000	AED 000	AED 000	AED 000
Revenue	7,369,328	5,659,944	4,923,558	5,463,698
Direct costs	(6,516,351)	(5,084,345)	(4,375,317)	(4,636,675)
Gross Profit	852,977	575,599	548,241	827,023
Other operating income	18,861	17,332	36,545	46,508
General and administrative expenses	(493,733)	(484,776)	(446,240)	(448,988)
Gain on derecognition of financial assets			19,707	
Other income	111,083	33,764	142,307	34,176
Interest income on non-current receivables and payables, net	14,321	5,318	(11,518)	2,140
Net investment income	6,882	86,052	11,026	18,573
Finance costs	(51,452)	(41,531)	(34,248)	(41,701)
Share of profit / (loss) of associate	19,638	(2,025)		
Profit Before Tax	478,577	189,733	265,820	437,731
Income tax expense	(10,318)	(1,506)	(2,288)	(6,131)
Profit For The Year	468,259	188,227	263,532	431,600
Profit Attributed to:				
- Owners of the Parent	377,777	139,171	221,095	307,118
- Non-Controlling Interests	90,482	49,056	42,437	124,482
	468,259	188,227	263,532	431,600
BASIC EARNINGS PER SHARE (AED)	0.16	0.09	0.14	0.21
DILUTED EARNINGS PER SHARE (AED)	0.16	0.09	0.14	0.21

C- CASH FLOW STATEMENT

Arabtec Holding PJSC and its Subsidiaries CONSOLIDATED STATEMENT OF CASH FLOWS Year ended 31 December 2013			
	2013	2012	2011
	AED 000	AED 000	AED 000
<u>OPERATING ACTIVITIES</u>			
Profit before tax	478,577	189,733	265,820
Adjustments for:			
Depreciation of property, plant and equipment	249,468	229,834	223,098
Depreciation of investment properties	3,991	1,668	
Amortisation of intangible assets	5,865	49,471	49,530
Provision for employees' end of service indemnity	54,625	37,887	34,269
Accrued discretionary bonus		41,373	18,044
Write back of provision for bonus	(32,958)	(44,014)	
Impairment of due from related party		7,377	
Impairment loss on available-for-sale investments		1,289	5,002
Impairment of Goodwill		1,786	
Loss on sale of steel inventory	909	33,592	10,211
Provision for impairment of slow-moving inventories		2,399	12,952
Gain on sale of property, plant and equipment	(1,272)	(8,765)	(6,218)
Gain on derecognition of financial assets		(60,070)	(19,707)
Interest income	(6,882)	(6,754)	(11,010)
Profit income on Sukuk		(20,517)	
Finance costs	51,452	41,531	34,248
Interest income on non-current receivables and payables	(14,321)	(5,318)	
Share of profit / (loss) from associate	(19,638)	2,025	11,518
	769,816	494,527	627,757
Working capital change:			
Other financial assets	(27,148)	46,587	45,723
Trade and other receivables	(2,274,528)	(153,729)	145,875
Due from related parties	454,845	1,043	(334,243)
Inventories	(19,082)	80,294	26,830
Other current assets	(186,339)	(47,261)	17,695
Trade and other payables	1,118,551	61,966	(335,369)
Due to related parties	(18,243)	(258,135)	469,060
Retentions payable - non-current portion	317,418	46,798	(112,072)
	(634,526)	(222,437)	(76,501)
Cash from operating activities	135,290	272,090	551,256
Employees' end of service indemnity paid	(28,883)	(15,565)	(18,758)
Interest received	6,882	6,754	11,010
Interest paid	(51,452)	(41,531)	(34,248)
Income tax paid	(4,427)	(3,052)	(5,820)
	(77,880)	(53,394)	(47,816)
Net cash flows from operating activities	57,410	218,696	503,440
<u>INVESTING ACTIVITIES</u>			
Purchase of property, plant and equipment	(316,838)	(288,352)	(195,273)
Purchase of investment properties	(527,230)		
Acquisition of intangible assets	(1,445)		
Investment in associates	(11,088)	(270,763)	
Proceeds from sale of financial assets		264,205	
Proceeds from disposal of property, plant and equipment	17,854	42,415	69,914
Paid for additional acquisition of non-controlling interests	(58,500)	(18,007)	
Net movement in other financial assets	4,638		
Deposit maturing after three months	(800,000)		
Net cash flows used in investing activities	(1,692,609)	(270,502)	(125,359)
<u>FINANCING ACTIVITIES</u>			
Proceeds/ repayments of borrowings (net)	(51,347)	82,779	(130,087)
Issue of share capital	2,354,625		
Transaction cost of issue of share capital	(2,054)		
Dividends paid to equity holders of the parent		(74,750)	578
Dividends paid to non-controlling interests		(27,644)	(69,990)
Net cash flows used in financing activities	2,301,224	(19,615)	(199,499)
NET INCREASE / (DECREASE) IN CASH AND CASH EQUIVALENTS	666,025	(71,421)	178,582
Cash and cash equivalents at 1 January	345,186	414,028	235,710
Net foreign exchange difference	2,700	2,579	(264)
CASH AND CASH EQUIVALENTS AT 31 DECEMBER	1,013,911	345,186	414,028

D- CHANGES IN EQUITY STATEMENT

Arabtec Holding PJSC and its Subsidiaries CONSOLIDATED STATEMENT OF CHANGES IN EQUITY Year ended 31 December 2013									
	Share Capital AED 000	Statutory Reserve AED 000	Fair value Adjustment Reserve AED 000	Currency Translation Reserve AED 000	Other Reserves AED 000	Retained Earnings AED 000	Total AED 000	Non-Controlling Interests AED 000	Total Equity AED 000
Balance at 1 January 2013	1,569,750	308,486	300	2,315	(2,201)	1,067,903	2,946,553	398,792	3,345,345
Profit for the year						377,777	377,777	90,482	468,259
Other comprehensive income			9,165	3,579		7,787	20,531	1,226	21,757
Total comprehensive income for the year			9,165	3,579		385,564	398,308	91,708	490,016
Issue of share capital (Note 23)	1,569,750	784,875					2,354,625		2,354,625
Transaction costs (Note 23)						(2,054)	(2,054)		(2,054)
Transfer to statutory reserve		37,777				(37,777)			
Acquisition of non-controlling interests (Note 35)					(182,864)		(182,864)	(241,042)	(423,906)
Balance at 31 December 2013	3,139,500	1,131,138	9,465	5,894	(185,065)	1,413,636	5,514,568	249,458	5,764,026
	Share Capital AED 000	Statutory Reserve AED 000	Fair value Adjustment Reserve AED 000	Currency Translation Reserve AED 000	Other Reserves AED 000	Retained Earnings AED 000	Total AED 000	Non-Controlling Interests AED 000	Total Equity AED 000
Balance at 1 January 2012	1,495,000	293,873	16	(264)		1,107,072	2,895,697	398,433	3,294,130
Profit for the year			284	2,579		139,171	139,171	49,056	188,227
Other comprehensive income						(14,227)	(11,364)	(3,046)	(14,410)
Total comprehensive income for the year			284	2,579		124,944	127,807	46,010	173,817
Issue of bonus shares (Note 34)	74,750					(74,750)			
Transfer to statutory reserve		14,613				(14,613)			
Dividends paid (Note 34)						(74,750)	(74,750)		(74,750)
Dividends paid to non-controlling interests								(27,644)	(27,644)
Acquisition of non-controlling interests (Note 35)					(2,201)		(2,201)	(18,007)	(20,208)
Balance at 31 December 2012	1,569,750	308,486	300	2,315	(2,201)	1,067,903	2,946,553	398,792	3,345,345
	Share Capital AED 000	Statutory Reserve AED 000	Fair value Adjustment Reserve AED 000	Currency Translation Reserve AED 000	Other Reserves AED 000	Retained Earnings AED 000	Total AED 000	Non-Controlling Interests AED 000	Total Equity AED 000
Balance at 1 January 2011	1,196,000	267,819	(7,494)			1,241,549	2,697,874	404,444	3,102,318
Prior year adjustments (Note 39)			7,563			(25,685)	(18,122)	13,482	(5)
Balance at 1 January 2011	1,196,000	267,819	69			1,215,864	2,679,752	417,926	3,097,678
Profit for the year						221,095	221,095	42,437	263,532
Other comprehensive income			(53)	(264)		2,346	2,029	303	2
Total comprehensive income for the year			(53)	(264)		223,441	223,124	42,740	266
Issue of bonus shares (Note 34)						(299,000)			
Transfer to statutory reserve						(26,054)			
Dividends paid to non-controlling interests		26,054						(69,990)	(69,990)
Adjustment to non-controlling interests (Note 39)						(7,179)	(7,179)	578	
Acquisition of non-controlling interests									
Balance at 31 December 2011	1,495,000	293,873	16	(264)		1,107,072	2,895,697	398,433	3,294,130

APPENDIX 2: (DRAKE & SCULL PJSC) ANNUAL REPORTS

A- BALANCE SHEET STATEMENT

Drake and Scull International PJSC CONSOLIDATED STATEMENT OF FINANCIAL POSITION Year ended 31 December 2013				
	2013 AED 000	2012 AED 000	2011 AED 000	2010 AED 000
ASSETS				
Non-current assets				
Property and equipment	510680	504200	423412	249689
Intangible assets	1098469	1136219	1173969	1149435
Investment property	29376			
Investment accounted for using the equity method	93249			
Deterred income tax assets	5646	17630	12374	12132
Available-for-sale financial assets	75159	2384	24707	5967
Trade and other receivables	212503	174415	27978	89913
Held-to-maturity investments			332674	89955
	2025082	1834848	1995114	1597091
Current assets				
Inventories	30259	26510	26163	24889
Development properties	19111	64830	50932	45315
Trade and other receivables	4256323	3741861	2901110	2238605
Due from related parties	268628	25990	25466	23709
Held-to-maturity investments			211221	312125
Financial assets at fair value through profit or loss	4678	4821	5189	6675
Cash and bank balances	558217	730700	525487	622150
	5137216	4594712	3745568	3273468
Total assets	7162298	6429560	5740682	4870559
EQUITY AND LIABILITIES				
Equity				
Share capital	2285047	2285047	2177778	2177778
Share premium	3026			
Treasury shares		-28622	-28622	-28622
Statutory reserve	93722	79219	73753	49116
Other reserve	24543	24543	24543	
Retained earnings	515801	363835	446639	279838
Foreign currency translation reserve	-15685	-8346	-8778	-8443
Equity attribute to equity holders of the parent	2906454	2715676	2685313	2469667
Non-controlling interests	68372	53106	32244	72097
Total equity	2974826	2768782	2717557	2541764
Liabilities				
Non-current liabilities				
Bank borrowings	48878	119384	106398	2149
Derivative financial instruments		21659		
Deferred income tax liabilities	2414	8835	3842	
Employees' end of service benefits	110234	84669	65108	49679
Other Payables			1329	1526
	161526	234547	176677	53354
Current liabilities				
Trade and other payables	2938909	2205158	2080884	1298800
Bank borrowings	1067592	1209374	722470	787220
Due to related parties	19445	11699	43094	189421
	4025946	3426231	2846448	2275441
Total liabilities	4187472	3660778	3023125	2328795
Total equity and liabilities	7162298	6429560	5740682	4870559

B- INCOME STATEMENT

Drake and Scull International PJSC CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME Year ended 31 December 2013				
	2013	2012	2011	2010
	AED 000	AED 000	AED 000	AED 000
Contract Revenue	4,879,189	3,321,268	3,109,618	1,854,572
Contract Cost	(4,382,296)	(2,938,354)	(2,672,529)	(1,507,467)
Gross Profit	496,893	382,914	437,089	347,105
Other Income	20,658	12,123	18,494	22,637
General and Administrative Expenses	(328,581)	(265,293)	(254,878)	(227,347)
Other Losses	(3,070)	(11,977)		
Operating Profit	185,900	117,767	200,705	142,395
Finance Income	23,147	33,687	44,335	47,024
Finance Cost	(36,032)	(17,078)	(25,553)	(33,292)
Finance (Costs)/Income - net	(12,885)	16,609	18,782	13,732
Share of profit from investment accounted for Using Equity Method	64,043			
Profit Before Tax	237,058	134,376	219,487	156,127
Income tax expense	(55,323)	(19,333)	(11,189)	5,379
Profit For The Year	181,735	115,043	208,298	161,506
Profit Attributed to:				
- Owners of the Parent	166,469	94,293	193,164	154,618
- Non-Controlling Interests	15,266	20,750	15,134	6,888
	181,735	115,043	208,298	161,506
BASIC EARNINGS PER SHARE (AED)				
DILUTED EARNINGS PER SHARE (AED)	0.07	0.04	0.09	0.07

C- CASH FLOW STATEMENT

Arabtec Holding PJSC and its Subsidiaries CONSOLIDATED STATEMENT OF CASH FLOWS Year ended 31 December 2013			
	2013 AED 000	2012 AED 000	2011 AED 000
<u>OPERATING ACTIVITIES</u>			
Profit for the year before tax	237,058	134,376	219,487
Adjustments for:			
Share of profits of investment accounted for using the equity method	(64,043)		
Depreciation	47,388	42,567	35,182
Amortisation of intangible assets	37,750	37,750	37,750
Provision for employees' end of service benefits	41,665	29,537	26,212
Management fee expense		14,800	14,800
Gain on sale of available-for-sale financial assets		(8,815)	
Gain on sale of held-to-maturity investments		(4,450)	
Loss on sale of development properties	5,160		
Impairment (reversal)/loss on available-for-sale financial	(727)	3,583	1,486
Fair value loss on financial assets at fair value through profit or loss	143		
Fair value gain on settlement of share swaps	(5,583)		
Fair value loss on interest rate swaps	4,050	21,174	
Loss on settlement of equity warrants	27	485	
Finance income	(23,147)	(33,687)	(44,335)
Finance costs	36,032	17,078	24,067
Gain on disposal of property and equipment	(982)	(1,218)	(4,314)
Provision for impairment on trade receivables and retentions - net	22,509	12,081	19,997
Operating cash flows before payment of employees' end of	100,242	130,885	110,845
Service benefits, income tax and changes in working capital	<u>337,300</u>	<u>265,261</u>	<u>331,818</u>
Working capital change:			
Inventories	(3,749)	(347)	(1,274)
Development properties	(1,306)	(13,898)	(5,617)
Trade and other receivables before provisions and excluding			
interest receivable and loans and advances	(578,182)	(741,122)	(802,384)
Due from related parties	(242,638)	(524)	3,630
Trade and other payables excluding income tax, interest and			
group management fee payable	732,064	107,741	528,708
Derivative financial instruments	(20,153)		
Due to related parties	7,746	(31,395)	(146,614)
	<u>(106,218)</u>	<u>(679,545)</u>	<u>(423,551)</u>
Employees' end of service benefits paid	(16,100)	(14,171)	(18,445)
Income tax paid	(49,760)	(19,596)	(10,948)
	<u>(65,860)</u>	<u>(33,767)</u>	<u>(29,393)</u>
Net cash flows from operating activities	<u>165,222</u>	<u>(448,051)</u>	<u>(121,126)</u>
<u>INVESTING ACTIVITIES</u>			
Purchase of property and equipment	(86,733)	(124,683)	(134,607)
Proceeds from disposal of property and equipment	32,229	2,938	10,271
Investment accounted for using the equity method	(29,206)		
Business Combination cash flow			(44,032)
Non Controlling Interest in Subsidiaries			(21,380)
(Purchase of)/proceeds from sale of available-for-sale investments	(72,048)	271,572	144,141
Loans and advances	9,683	51,346	28,275
Interest received	15,083	33,045	42,653
Net cash flows used in investing activities	<u>(130,992)</u>	<u>234,218</u>	<u>25,321</u>
<u>FINANCING ACTIVITIES</u>			
Term deposits under lien	(68,608)	219,745	208,777
Dividends paid		(64,361)	(8,568)
Proceeds from re-issue of treasury shares	31,648		
Net proceeds from trust receipts and other borrowings	277,477	336,279	80,464
Proceeds from term loans	24,350	604,817	371,463
Payment of term loans	(577,659)	(462,633)	(352,806)
Non-controlling interest's contribution to subsidiary's capital		112	672
Interest paid	(21,856)	(16,674)	(23,698)
Net cash flows used in financing activities	<u>(334,648)</u>	<u>617,285</u>	<u>276,304</u>
NET INCREASE / (DECREASE) IN CASH AND CASH EQUIVALENTS	<u>(300,418)</u>	<u>403,452</u>	<u>180,499</u>
Net foreign currency translation difference	(4,217)	79	2,751
Movement in restricted cash	444,867	(444,867)	
Cash and cash equivalents, at the beginning of the year	182,034	223,370	40,120
CASH AND CASH EQUIVALENTS AT 31 DECEMBER	<u>322,266</u>	<u>182,034</u>	<u>123,370</u>

D- CHANGES IN EQUITY STATEMENT

Arabtec Holding PJSC and its Subsidiaries CONSOLIDATED STATEMENT OF CHANGES IN EQUITY Year ended 31 December 2013									
	Share Capital AED 000	Treasury Shares AED 000	Share Premium AED 000	Statutory Reserve AED 000	Other Reserves AED 000	Retained Translation Earnings AED 000	Foreign Currency Translation Reserve AED 000	Total AED 000	Non- Controlling Interests AED 000
Balance at 1 January 2013	2,285,047	(28,622)		79,219	24,543	363,835	(8,346)	2,715,676	53,106
Profit for the year						166,469	(7,339)	166,469	15,266
Other comprehensive income for the year								(7,339)	
Total comprehensive income for the year						166,469	(7,339)	159,130	15,266
Transaction with owners Re-issue of treasury shares (Note 17)		28,622	3,026					31,648	31,648
Total transaction with owners		28,622	3,026					31,648	31,648
Transfer from retained earnings to statutory reserve				14,503		(14,503)			
Balance at 31 December 2013	2,285,047		3,026	93,722	24,543	515,801	(15,685)	2,906,454	68,372
Balance at 1 January 2012	2,177,778	(28,622)		73,753	24,543	446,639	(8,778)	2,685,313	32,244
Profit for the year						94,293	432	94,293	20,750
Other comprehensive income for the year								432	
Total comprehensive income for the year						94,293	432	94,725	20,750
Transaction with owners Dividends (Note 34)						(171,631)		(171,631)	
Bonus shares issued to shareholders (Note 34)	107,269							107,269	
Non-controlling interests contribution to subsidiary's capital	107,269					(171,631)		(64,362)	112
Total transaction with owners				5,466		(5,466)			112
Transfer from retained earnings to statutory reserve									
Balance at 31 December 2012	2,285,047	(28,622)		79,219	24,543	363,835	(8,346)	2,715,676	53,106
Balance at 1 January 2011									
Profit for the year									
Other comprehensive loss									
Total comprehensive loss									
Dividend									
Non-controlling interest arising on business combinations									
Non-controlling interests contribution to subsidiary's capital									
Non-controlling interest acquired in a subsidiary									
Interest in subsidiary transferred to non-controlling interest									
Transfer from retained earnings to statutory reserve				24,637		(24,637)			
Balance at 31 December 2011	2,177,778	(28,622)		73,753	24,543	446,639	(8,778)	2,685,313	32,244
Balance at 1 January 2010									
Profit for the year									
Other comprehensive loss									
Total comprehensive loss									
Dividend									
Non-controlling interest arising on business combinations									
Non-controlling interests contribution to subsidiary's capital									
Non-controlling interest acquired in a subsidiary									
Interest in subsidiary transferred to non-controlling interest									
Transfer from retained earnings to statutory reserve									
Balance at 31 December 2009	2,177,778	(28,622)		73,753	24,543	446,639	(8,778)	2,685,313	32,244
Balance at 1 January 2008									
Profit for the year									
Other comprehensive loss									
Total comprehensive loss									
Dividend									
Non-controlling interest arising on business combinations									
Non-controlling interests contribution to subsidiary's capital									
Non-controlling interest acquired in a subsidiary									
Interest in subsidiary transferred to non-controlling interest									
Transfer from retained earnings to statutory reserve									
Balance at 31 December 2007	2,177,778	(28,622)		73,753	24,543	446,639	(8,778)	2,685,313	32,244
Balance at 1 January 2006									
Profit for the year									
Other comprehensive loss									
Total comprehensive loss									
Dividend									
Non-controlling interest arising on business combinations									
Non-controlling interests contribution to subsidiary's capital									
Non-controlling interest acquired in a subsidiary									
Interest in subsidiary transferred to non-controlling interest									
Transfer from retained earnings to statutory reserve									
Balance at 31 December 2005	2,177,778	(28,622)		73,753	24,543	446,639	(8,778)	2,685,313	32,244
Balance at 1 January 2004									
Profit for the year									
Other comprehensive loss									
Total comprehensive loss									
Dividend									
Non-controlling interest arising on business combinations									
Non-controlling interests contribution to subsidiary's capital									
Non-controlling interest acquired in a subsidiary									
Interest in subsidiary transferred to non-controlling interest									
Transfer from retained earnings to statutory reserve									
Balance at 31 December 2003	2,177,778	(28,622)		73,753	24,543	446,639	(8,778)	2,685,313	32,244
Balance at 1 January 2002									
Profit for the year									
Other comprehensive loss									
Total comprehensive loss									
Dividend									
Non-controlling interest arising on business combinations									
Non-controlling interests contribution to subsidiary's capital									
Non-controlling interest acquired in a subsidiary									
Interest in subsidiary transferred to non-controlling interest									
Transfer from retained earnings to statutory reserve									
Balance at 31 December 2001	2,177,778	(28,622)		73,753	24,543	446,639	(8,778)	2,685,313	32,244
Balance at 1 January 2000									
Profit for the year									
Other comprehensive loss									
Total comprehensive loss									
Dividend									
Non-controlling interest arising on business combinations									
Non-controlling interests contribution to subsidiary's capital									
Non-controlling interest acquired in a subsidiary									
Interest in subsidiary transferred to non-controlling interest									
Transfer from retained earnings to statutory reserve									
Balance at 31 December 1999	2,177,778	(28,622)		73,753	24,543	446,639	(8,778)	2,685,313	32,244
Balance at 1 January 1998									
Profit for the year									
Other comprehensive loss									
Total comprehensive loss									
Dividend									
Non-controlling interest arising on business combinations									
Non-controlling interests contribution to subsidiary's capital									
Non-controlling interest acquired in a subsidiary									
Interest in subsidiary transferred to non-controlling interest									
Transfer from retained earnings to statutory reserve									
Balance at 31 December 1997	2,177,778	(28,622)		73,753	24,543	446,639	(8,778)	2,685,313	32,244
Balance at 1 January 1996									
Profit for the year									
Other comprehensive loss									
Total comprehensive loss									
Dividend									
Non-controlling interest arising on business combinations									
Non-controlling interests contribution to subsidiary's capital									
Non-controlling interest acquired in a subsidiary									
Interest in subsidiary transferred to non-controlling interest									
Transfer from retained earnings to statutory reserve									
Balance at 31 December 1995	2,177,778	(28,622)		73,753	24,543	446,639	(8,778)	2,685,313	32,244
Balance at 1 January 1994									
Profit for the year									
Other comprehensive loss									
Total comprehensive loss									
Dividend									
Non-controlling interest arising on business combinations									
Non-controlling interests contribution to subsidiary's capital									
Non-controlling interest acquired in a subsidiary									
Interest in subsidiary transferred to non-controlling interest									
Transfer from retained earnings to statutory reserve									
Balance at 31 December 1993	2,177,778	(28,622)		73,753	24,543	446,639	(8,778)	2,685,313	32,244
Balance at 1 January 1992									
Profit for the year									
Other comprehensive loss									
Total comprehensive loss									
Dividend									
Non-controlling interest arising on business combinations									
Non-controlling interests contribution to subsidiary's capital									
Non-controlling interest acquired in a subsidiary									
Interest in subsidiary transferred to non-controlling interest									
Transfer from retained earnings to statutory reserve									
Balance at 31 December 1991	2,177,778	(28,622)		73,753	24,543	446,639	(8,778)	2,685,313	32,244
Balance at 1 January 1990									
Profit for the year									
Other comprehensive loss									
Total comprehensive loss									
Dividend									
Non-controlling interest arising on business combinations									
Non-controlling interests contribution to subsidiary's capital									
Non-controlling interest acquired in a subsidiary									
Interest in subsidiary transferred to non-controlling interest									
Transfer from retained earnings to statutory reserve									
Balance at 31 December 1989	2,177,778	(28,622)		73,753	24,543	446,639	(8,778)	2,685,313	32,244
Balance at 1 January 1988									
Profit for the year									
Other comprehensive loss									
Total comprehensive loss									
Dividend									
Non-controlling interest arising on business combinations									
Non-controlling interests contribution to subsidiary's capital									
Non-controlling interest acquired in a subsidiary									
Interest in subsidiary transferred to non-controlling interest									
Transfer from retained earnings to statutory reserve									
Balance at 31 December 1987	2,177,778	(28,622)		73,753	24,543	446,639	(8,778)	2,685,313	32,244
Balance at 1 January 1986									
Profit for the year									
Other comprehensive loss									
Total comprehensive loss									
Dividend									
Non-controlling interest arising on business combinations									
Non-controlling interests contribution to subsidiary's capital									
Non-controlling interest acquired in a subsidiary									
Interest in subsidiary transferred to non-controlling interest									
Transfer from retained earnings to statutory reserve									
Balance at 31 December 1985	2,177,778	(28,622)		73,753	24,543				

APPENDIX 3: (EMAAR PROPERTIES PSJC) ANNUAL REPORTS

A- BALANCE SHEET STATEMENT

Emaar Properties PJSC and its Subsidiaries CONSOLIDATED STATEMENT OF FINANCIAL POSITION Year ended 31 December 2013				
	2013 AED 000	2012 AED 000	2011 AED 000	2010 AED 000
ASSETS				
Bank balances and cash	8,572,804	3,710,561	2,865,272	5,041,701
Trade receivables	547,391	958,608	776,485	902,022
Other assets, receivables, deposits and prepayments	2,867,321	2,600,569	2,757,996	2,854,687
Development properties	25,866,716	26,998,226	26,611,285	26,492,486
Investments in securities	2,160,027	1,264,924	896,895	694,183
Loans to associates and joint ventures	3,145,148	3,104,026	3,116,627	2,231,724
Investments in associates and joint ventures	5,819,666	6,428,367	6,684,476	7,592,088
Property, plant and equipment	8,015,681	8,209,114	8,300,420	8,539,290
Investment properties	7,891,111	7,830,730	7,998,584	8,110,081
Goodwill	46,066	46,066	46,066	46,066
Total Assets	64,931,931	61,151,191	60,054,106	62,504,328
EQUITY AND LIABILITIES				
Equity				
Equity attributable to owners of the parent				
Share capital	6,109,939	6,091,239	6,091,239	6,091,239
Employees' performance share program	(1,684)	(1,684)	(1,684)	(1,684)
Reserves	14,876,113	14,599,863	14,706,735	14,924,271
Convertible notes - equity component	35,498	37,155	37,155	37,155
Retained earnings	13,522,353	11,807,367	10,474,790	10,017,943
Equity attribute to equity holders of the parent	34,542,219	32,533,940	31,308,235	31,068,924
Non-controlling interests	190,773	285,390	280,672	231,107
Total equity	34,732,992	32,819,330	31,588,907	31,300,031
Liabilities				
Non-current liabilities				
Interest-bearing loans and borrowings	6,356,918	6,212,555	7,528,718	9,410,112
Sukuk	3,652,403	3,647,597	1,820,509	
Provision for employees' end-of-service benefits	89,689	77,269	70,482	58,500
	10,099,010	9,937,421	9,419,709	9,468,612
Current liabilities				
Trade and other payables	8,022,810	8,277,985	8,313,847	8,938,956
Advances from customers	9,763,407	7,631,764	8,145,142	9,889,394
Convertible notes - liability component	1,721,133	1,785,947	1,771,584	1,758,431
Retentions payable	592,579	698,744	814,917	1,148,904
	20,099,929	18,394,440	19,045,490	21,735,685
Total liabilities	30,198,939	28,331,861	28,465,199	31,204,297
TOTAL EQUITY AND LIABILITIES	64,931,931	61,151,191	60,054,106	62,504,328

B- INCOME STATEMENT

Emaar Properties PJSC and its Subsidiaries CONSOLIDATED INCOME STATEMENT For the year ended 31 December 2013				
	2013 AED 000	2012 AED 000	2011 AED 000	2010 AED 000
Revenue	10,328,472	8,239,928	8,112,332	12,150,274
Cost of revenue	(5,179,347)	(4,061,051)	(3,876,781)	(7,603,530)
Gross Profit	5,149,125	4,178,877	4,235,551	4,546,744
Other operating income	326,644	280,495	173,473	345,808
Other operating expenses	(176,148)	(148,203)	(116,142)	(233,203)
Selling, general and administrative expenses	(2,440,119)	(1,919,288)	(1,924,680)	(2,028,190)
Finance income	284,428	344,140	392,336	265,007
Finance costs	(603,669)	(705,115)	(562,255)	(355,006)
Other income	110,665	176,856	160,249	612,348
Share of results of associates and joint ventures	(97,538)	(96,601)	(231,266)	(430,484)
Loss on disposal of subsidiaries				(52,522)
Impairment of assets			(173,516)	(192,052)
Profit Before Tax	2,553,388	2,111,161	1,953,750	2,478,450
Income tax expense	(12,773)	(4,237)	(35,809)	(1,439)
Profit For The Year	2,540,615	2,106,924	1,917,941	2,477,011
Profit Attributed to:				
- Owners of the Parent	2,568,136	2,119,124	1,793,535	2,448,229
- Non-Controlling Interests	(27,521)	(12,200)	124,406	28,782
	2,540,615	2,106,924	1,917,941	2,477,011
BASIC EARNINGS PER SHARE (AED)				
DILUTED EARNINGS PER SHARE (AED)	0.42	0.35	0.29	0.40

C- CASH FLOW STATEMENT

Emaar Properties PJSC and its Subsidiaries CONSOLIDATED STATEMENT OF CASH FLOWS Year ended 31 December 2013			
	2013 AED 000	2012 AED 000	2011 AED 000
<u>OPERATING ACTIVITIES</u>			
Profit before tax	2,553,388	2,111,161	1,953,750
Adjustments for:			
Share of results of associates and joint ventures	97,538	96,601	231,266
Depreciation	813,975	767,217	762,479
Provision for employees' end-of-service benefits, net	12,420	6,787	11,982
Loss on disposal of property, plant and equipment	2,129	10,043	(1,272)
Finance costs	603,669	705,115	562,255
Finance income	(284,428)	(344,140)	(392,336)
Impairment of assets/provision for doubtful debts/write off	90,824	23,422	264,193
	1,336,127	1,265,045	1,438,567
Working capital change:			
Trade receivables	365,058	(189,210)	70,388
Other assets, receivables, deposits and prepayments	(371,112)	164,171	172,494
Development properties, net	954,887	(407,011)	(41,088)
Advances from customers, net	2,154,179	(513,378)	(1,806,474)
Trade and other payables	(308,788)	(188,141)	(681,295)
Retentions payable	(106,165)	(116,173)	(333,987)
Income tax, net	3,752	8,450	(13,679)
	2,691,811	(1,241,292)	(2,633,641)
Cash from operations before working capital changes:	3,889,515	3,376,206	3,392,317
Net cash flows from operating activities	6,581,326	2,134,914	758,676
<u>INVESTING ACTIVITIES</u>			
Purchase of securities	(486,659)	(296,152)	(450,233)
Proceeds from disposal of securities	25,156	65,709	26,438
Finance income received	227,390	111,727	279,669
Dividend received from associates and joint ventures	71,130	86,218	51,304
Additional investments in and loans to associates and joint ventures, net	65,969	11,523	(1,133,393)
Amounts incurred on investment properties	(64,748)	(14,266)	(17,984)
Purchase of property, plant and equipment	(473,915)	(504,049)	(407,931)
Proceeds from sale of property, plant and equipment	3,793	2,393	50,864
Deposits maturing after three months (including deposits under lien)	(3,175,102)	426,895	1,482,496
Net cash flows used in investing activities	(3,806,986)	(110,002)	(118,770)
<u>FINANCING ACTIVITIES</u>			
Dividend paid	(595,582)	(593,626)	(588,302)
Proceeds from interest-bearing loans and borrowings	575,407	5,967,144	883,877
Repayment of interest-bearing loans and borrowings	(431,044)	(7,283,307)	(2,765,271)
Proceeds from issuance of sukuk		1,836,500	1,836,500
Funds invested by non-controlling interests, net		37,085	(45,526)
Finance costs paid	(564,925)	(662,732)	(613,874)
Net cash flows used in financing activities	(1,016,144)	(698,936)	(1,292,596)
NET INCREASE / (DECREASE) IN CASH AND CASH EQUIVALENTS	1,758,196	1,325,976	(652,690)
Net foreign exchange difference	(71,055)	(53,792)	(41,243)
CASH AND CASH EQUIVALENTS AT 1 JANUARY	2,351,743	1,079,559	1,773,492
CASH AND CASH EQUIVALENTS AT 31 DECEMBER	4,038,884	2,351,743	1,079,559

D- CHANGES IN EQUITY STATEMENT

Enaar Properties PJSC and its Subsidiaries CONSOLIDATED STATEMENT OF CHANGES IN EQUITY Year ended 31 December 2013									
	Share Capital AED 000	Employees' Performance Share Program AED 000	Reserves AED 000	Convertible Notes - Equity Component AED 000	Retained Earnings AED 000	Total AED 000	Non- Controlling Interests AED 000	Total Equity AED 000	
Balance at 1 January 2013	6,091,239	(1,684)	14,599,863	37,155	11,807,367	32,533,940	285,390	32,819,330	
Profit / (loss) for the year					2,568,136	2,568,136	(27,521)	2,540,615	
Other comprehensive income for the year			(43,771)		12,788	(30,983)	(64,726)	(95,709)	
Total comprehensive income for the year					2,580,924	2,537,153	(92,247)	2,444,906	
Transfer to reserves (Note 26)			256,814		(256,814)				
Dividend (Note 30)			63,207		(609,124)	(609,124)		(609,124)	
Conversion of convertible notes (Notes 22, 25 & 26)	18,700			(1,657)		80,250		80,250	
Movement in non-controlling interests (net)							(2,370)	(2,370)	
Balance at 31 December 2013	6,109,939	(1,684)	14,876,113	35,498	13,522,353	34,542,219	190,773	34,732,992	
	Share Capital AED 000	Employees' Performance Share Program AED 000	Reserves AED 000	Convertible Notes - Equity Component AED 000	Retained Earnings AED 000	Total AED 000	Non- Controlling Interests AED 000	Total Equity AED 000	
Balance at 1 January 2012	6,091,239	(1,684)	14,706,735	37,155	10,474,790	31,308,235	280,672	31,588,907	
Profit for the year					2,119,124	2,119,124	(12,200)	2,106,924	
Other comprehensive income for the year			(318,784)		34,489	(284,295)	(20,167)	(304,462)	
Total comprehensive income for the year					2,153,613	1,834,829	(32,367)	1,802,462	
Transfer to reserves (Note 26)			211,912		(211,912)				
Dividend (Note 30)					(609,124)	(609,124)		(609,124)	
Movement in non-controlling interests (net)							37,085	37,085	
Balance at 31 December 2012	6,091,239	(1,684)	14,599,863	37,155	11,807,367	32,533,940	285,390	32,819,330	
	Share Capital AED 000	Employees' Performance Share Program AED 000	Reserves AED 000	Convertible Notes - Equity Component AED 000	Retained Earnings AED 000	Total AED 000	Non- Controlling Interests AED 000	Total Equity AED 000	
Balance at 1 January 2011	6,091,239	(1,684)	14,924,271	37,155	10,017,943	31,068,924	231,107	31,300,031	
Correction of a prior period error*					(138,289)	(138,289)		(138,289)	
Balance at 1 January 2011	6,091,239	(1,684)	14,924,271	37,155	9,879,654	30,930,635	231,107	31,161,742	
Profit for the year					1,793,535	1,793,535	124,406	1,917,941	
Other comprehensive income for the year			(396,890)		(409,921)	(806,811)	(29,315)	(836,126)	
Total comprehensive income for the year					1,383,614	986,724	95,091	1,081,815	
Transfer to reserves (Note 26)			(396,890)		(179,354)				
Dividend (Note 30)			179,354		(609,124)	(609,124)		(609,124)	
Movement in non-controlling interests (net)							(45,526)	(45,526)	
Balance at 31 December 2011	6,091,239	(1,684)	14,706,735	37,155	10,474,790	31,308,235	280,672	31,588,907	