THE RELATIONSHIP BETWEEN COMPANIIES' PERFOREMANCES AND FINANCIAL STRUCTURE IN CONSTRUCTION COMPANIES IN SRI LANKA

Sashika Madurangi Aluthwaththa

(118420 K)

Degree of Master of Science in Project Management

Department of Building Economics

University of Moratuwa
Sri Lanka

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Sashika Madurangi Aluthwaththa

(118420 K)

Thesis/Dissertation submitted in partial fulfillment of the requirements for the Degree of Master of Science in Project Management

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DECLARATION

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ABSTRACT

Corporate finance is mainly concerned primarily three types of financial decisions which are investments, financing and dividend decisions. Financing decision which is capital structure decision is the fundamental one because it is directly affect to the profitability of a company. The successful selection and use of financial structure is one of the key elements of the firm's financial strategy.

The success of modern enterprises depends on the adoption and implementation of good management practices. According to the economic condition organizations should be change their corporate strategies to achieve the firms' objective and goals. Therefore proper care and attention need to be given by organizations to determine the financial structure decision.

The purpose of this study is to investigate the relationship between financial structure and performances of construction companies in Sri Lanka. The study is limited for seven corporate construction organizations in Sri Lanka. The study is achieved through three objectives which are organizations' motivation with different financial arrangements, organizations' performance with financial decision making under different economic conditions and relationship between organizations' and financial structures. The data has been analyzed by using descriptive statistics and correlation analysis. Capital structure has been indicated through debt to equity, debt to Assets and Long term Debt to Assets and organizations' performance has been indicated through Return on equity, Return on assets, Net Profit margin and Earnings per share .These measures are in accordance with typical corporate Performa measures.

Results show that Long term and Equity shares are the major sources of finance in Sri Lankan Construction Corporate organizations. Further it has found While during an economic down, the companies are arranging their capital structure with retained earnings, less equities and less debt, it is arranged with equity shares and long term loan in an economic growth. It shows that negative relationship between financial structure and organizations' performance except the association between capital structure indicators and Net Profit margin. Further results show that Sri Lankan

Corporate construction organizations are the geared institutions as average level. Therefore capital structure measures will be a sound basis for financial measures for the corporate management in construction in Sri Lanka.

Key Words: Financial Structure, organizations' performance, Debt, Equity, Corporate Finance

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LIST OF ABBREVIATIONS

Abbreviations	Description
CFROI	Cash Flow Return On Investment
CVA	Cash Value Added
EVA	Economic Value Added
EPS	Earnings per share
GDP	Gross Domestic Product
IRR	internal rate of return
LD	Long term debt
NI	Net income
NP	Net Profit margin
ROA	Return on assets
ROE	Return on equity
ROCE	Return on Capital Employed
TA	Total Asset
TD	Total debt
TE	Total Equity
VAT	Value Added tax

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CHAPTER 1

INTRODUCTION

1.1 Background to the study

The construction industry is an important sector of the economy because it can play a major role of development of the economy. Construction is a major component of investment, hence the expansion in construction activity is closely related to economic growth .It has linkages with the other sectors such as manufacturing, mining, and transporting it can influence behavior of these related sectors. Construction growth has a significant and close relationship with the economic growth of the country. Since the contribution of construction related commodities depends heavily on the performance on the construction industry, it is very important to look at the past trend of the construction industry.

The construction industry is considered as the ideal economic regulator of the most countries (Wells, 1986). The construction sector and other related sectors could play an important role, not only in the provision of shelter but also in national economic growth strategy. Therefore, it is one of the major contributors to the process of development and economic growth. As usual construction industry has contributed a considerable amount to GDP in developing country. Sri Lankan economy has a strong construction industry contributing around 7.2% of GDP during the last decade. (Central Bank Report, 2014).

1.2 Behavior of the construction industry with different economical cycle

There are different cycles of economic situation such as recession, growth, credit crunch, bailout, investment bank collapse, sponsoring bank collapse etc. During past decades, it has shown the different economic trends in the world. Globally, it has shown major financial collapse, in the world which is the Argentinean banking crisis

of 1980–82, the Chilean banking crisis during 1981–83, the Mexican economic crisis during 1995–97, the Asian financial crisis in 1997–98 and the US Sub-prime mortgage crisis starting from 2007 (Kam, Citron,, and Muradoglu 2005).

Financial crises can be banked crises, international financial crises and wider economic crises (*i.e.*, recessions and depressions). A situation where a commercial bank suffers a sudden rush of withdrawals by depositors is called a bank run. In such situations, banks cannot immediately fulfill the entire demand for money by the general public, because the bank may have invested its money in a variety of assets, gains of which may be realized during a long period of time. This may lead to a bank panic or banking crisis. The credit crunch in the US during 2007–2009 was one of the causes that led to a financial crisis and extended to a global financial crisis. Many leading financial institutions in the US failed during the crisis in 2007–2009 as a result of their inability to recover the loan repayments (Oksana, Kevin, and Shantanu 2012).

1.2.1 Behavior of Sri Lankan construction industry with different economical cycle.

The contribution has been changed as several patterns during last years. Economic growth has focused mainly on the manufacturing and services sectors rather than the dominant agricultural sector. After a moderate growth period from 1983 to 1988 and the economic boom in the first half of the 1990s, construction growth has increased again. At its peak in 1992, the construction growth prevailed in 8.1% (Central Bank, 1998). Construction had seen a steady boom; specially in the post-tsunami period .The rebuilding activities took precedence in national agendas. Not only had residential construction been on the rise, the number of commercial building projects had expanded concurrently with this trend. After the war there was a huge economic change within Sri Lanka. There was a major increment of new investment in the tourism industry and infrastructure sector. Therefore, it was highly affected of development in the construction industry. Also, there was a major downturn in the world economy around 2009.At that time all sectors faced for a down word situation and it was significantly affected for investments and financial activities.

In such unfavorable economic situation government tried to change their policies to avoid this bad situation and to develop the each sector, which are reduction of fuel price reduction of standard VAT and increase in public sector salaries. The Industry sector grew by 10.3 per cent, contributing substantially to the expansion of the economy in 2012 (Central bank, 2012). The sustained increase in construction activities, which accelerated the growth momentum of the construction sub sector, spurred the growth in the industry sector. The continuation of major government funded infrastructure development projects and increased construction activities of the private sector, including tourism related new construction and renovation activities, contributed to this growth. A high level of activity in the construction sector bolstered demand for minerals and construction material enabling the mining and quarrying sub sector to increase its share in GDP (Central bank, 2012).By 2013 it has a boom period of the economy. With the commonwealth heads of government meeting of 2013 there are lots of proposal for development of the Sri Lankan economy. There for now it has directly affected for development of the construction sector.

In parallel global crisis Sri Lanka also faced some difficult economic situations, particularly in the finance sector. Several financial companies in the country collapsed during 1988 and 1989. The effect of global crisis to Sri Lanka was depended on the level of interactions with the global economy. As a result of the financial crisis, many foreign investors who had invested in short-term investments repatriated their investments back to their countries for meeting rising liquidity requirements in their countries. The foreign funds which were invested in debt instruments, such as treasury bills and long-term bonds in Sri Lanka were withdrawn from the country partly as a result of the global financial crisis. The impact on economic growth due to crisis and recession in the world was severely felt during the last quarter of 2008 and first half of 2009. The GDP growth dropped to 4.3 per cent in Q4 of 2008 compared to 6.3 percent in Q3 and 7.0 per cent in Q2 of 2008. The lowest economic growth of 1.6 per cent in the first quarter 2009 indicated the adverse effects of the global crisis on the Sri Lanka economy (Hemachadra, 2012).

1.2.2 Mechanism implemented by Government for different economical cycle

Government control on the stability of the financial system, avoid collapse and control of business environment tare an important during a crisis period. The different policies suggested by many countries to tackle the issues that arose from the crisis. They are ease monitory policy, introduce a fiscal stimulus, liquidity assistance in local, lend foreign exchange currency, expand deposit insurance, guarantee on non deposit liability, prepare bank capital injection, create demand for assets, impose short sale restrictions and relax mark to market rules. The following are some of the measures which helped to maintain the system stability in Sri Lanka during and after the difficult time. The Central Bank responded to this crisis by extending financial support for distressed financial companies.IMF fund arrangement is a one of solution to overcome difficult situations in Sri Lanka. Opening Treasury bill and Treasury bond market to foreigners were helpful in preserving Sri Lanka's reserve position. The regulatory mechanisms implemented in the country for releasing of foreign exchange only for importers who have licenses issued by the controller of imports and these policy measures have been helpful in preventing sudden capital outflows from Sri Lanka. The imposition of 100 per cent cash requirement on letters of credit opened for the imports of some specific items was also helpful to reduce the outflow of foreign exchange during the crisis period. Also exchange rate depreciation is also assisting to bring down the interest rates. Monetary and fiscal policies implemented during 2008–2010 also helped in achieving a remarkable performance of the economy during 2010 (Hemaachndra, Kelegama 2012).

Also, due to this huge development of the industry it can lead to a sudden drop of the industry in the future. Therefore, companies have attempted to contain the effect of the global economic slump and financial crisis through monetary policy (liquidity injections and interest rate cuts), fiscal policy (fiscal stimulus packages on the expenditure or revenue side), and financial policy (deposit guarantees and bailouts). Asia is more resilient to external shocks than it was a decade ago for several reasons:

(i) Many countries have better external positions and larger internal reserves;

(ii) The region's financial institutions have had less exposure to the United States subprime mortgages and structured credit products than those in other parts of the world; and

(iii) In most Asian economies, improvements have been made to financial regulation and to macroeconomic management since the 1997/1998 financial crisis.

1.3 Organizations' behavior with different economical cycle

1.3.1 Corporate Organizations

"A corporation is a legal "person" separate and distinct from its owners, and it has many rights, duties, and privileges of an actual person. Corporations can borrow money and own property, can sue and be sued, and can enter in to contracts." (Ross, Westerfield and Jordan, 1995).The main feature of corporations is that the owners are not directly involved in making business decisions on day to day basis. The corporation employs managers represent the owners' interests and make decision on behalf. In a company profit maximize is not the only objective. Organizations should have goals which might come up with some ideas such as survive, avoid financial distress and bankruptcy, beat the completion, maximize sales or market share, maximize costs, maximize profits and maintain steady earnings growth (Ross et al.,1995).Through those financial goals it has identified four main strategies which are growth and diversification, merge and acquisition, sponsoring role and project companies and dynamic engagement under globalization , economic recession and international trend.

1.3.2 Organizations' behavior with different economical cycle

A crisis is an unexpected event in an organization's life which represents a significant threat to its high priority values and demands a time pressured response (Loosemore, 1998). It is a recurring fact of a life in every industry. During a crisis most of industries suffer and trouble to recover this downturn. The management of behavioral changed and conflict are key aspects of the crisis management process because crisis has a destabilizing effect. They do so exacerbating natural tensions within organizations and creating conditions which desensitize people to the advance signs of change (Loose more, 1998). Lossmore (1998) has said that the construction crisis is likely to be characterized by different phases which are depending on attitudes and interests. Effective crisis management demands that project managers develop a sense of collective responsibility, mutual sensitivity and responsiveness.

The rapid growth companies named as bubblegum companies show the highest growth in a short period and then it shows the decline in the business cycle. The Bubble company shares often become worthless once the speculative bubble burst. Therefore, managers should apply the separate strategies for keeping the company growth and avoiding collapse. Managing cash flow during growth, obtaining employee buy-in and choosing strategic partners are three major challenges of a growth organization. In a rapid growth company managers should have proper strategies for risk management, target profit margin and business plan. Developing a corporate risk management approach at an earlier life cycle is more important for continued interest by investors and strategic partners. Managers should know how to seek out new markets and develop new products and keep risk management central to those decisions. Diversification of new product is one of key strategy for risk management of these types of companies. Therefore, managers should use their strategies to keep shareholders value without any collapse (Martin, 2010).

1.4 Corporate performance management

Corporate performance management is a framework that integrates strategy with business operations. It gives management a prospective and real-time picture of what is actually going on across the value chain and provides a robust platform to support future growth. Therefore, organization should have a proper performance management system to measure the level of company strength of current and future, to measure the financial strength of the organization (Paramasivam and Subramanina 2008).

In the construction, architectural and engineering industry, construction companies conduct different types of business strategies to increase the performance of the companies. The construction industry is a type of a business which is labour incentive. The one of major different than other industry is operation is conducted at the outdoor places. Therefore, these unique features are leaded to special business strategies in the construction industry to rely with different economic cycles. As Chithra and Kapila (2001) say joint venturing with foreign contractors is one of major strategy for involving with larger scale project and it helps to enhance to technology and management and requirement of funds. There are some government procedures in Sri Lanka to increase the funds requirement of the local contractors. As Chithra and Kapila (2001) say guarantee fund in Sri Lanka will boost the local contracting sector, since it will provide assistance to the contractors in furnishing bid bonds and performance guarantees. In addition, the newly established private sector funding arm, Private Sector Infrastructure Development Fund Company (PSIDFC) will provide subordinate loans to strengthen the financial position of developers in the participation of private sector infrastructure development in Sri Lanka. Local contractors can utilize such funds in becoming developers in large-scale projects so that the risk of foreign exchange involvement can be minimized. Also in the present globalize environment, government policies are changing from that of an investor to that of a facilitator and private-sector-led construction demand is predicted to increase in the future. Construction firms will be under pressure to change their

business strategies in order to meet the future demand. This necessity for the change will originate primarily from technological changes, the changing nature of the project delivery and new project procurement process (Chithra and Kapila, 2001).

1.5 Problem Statement of the research

Is there any relationship between Organization performances and financial structure of the organizations in the construction industry?

1.6 Aims and Objectives

The aim of the dissertation is to identify the relationship between organizations' performances and financial structure in the construction industry in an economic uncertainty and fluctuation. The objectives are summarized as below,

- To identify how organizations are motivated with the different financial arrangements
- To assess level of organizations' performance and financial decision making under different economic conditions.
- To measure the relationship between organizations' performance and financial structures.

In this dissertation organizations performance in terms of business expansion, business growth, business development and business sponsoring will be measured with respect to a financial arrangement (ex. financial techniques, tools, techniques, and functions), financial decision making and financial structure in companies, firms, organizations in construction industry.

1.7 Research Method

As a part of the research method financial theories has been discussed and examined to develop measures and observe role, function and performance of organizations in terms of financial indicators, benchmarks and indices. As research method questionnaire survey and secondary data were used to analyze the objectives.

The corporate finance principals and fundamentals were the research methods formed to analyze research questions and thereby to achieve the research objectives.

Research questionnaire have been developed about, functions of organizations under recession, uncertainty, and economic crisis and global economic changes. Research questions will be related to corporate governors and corporate governing practices in environmental of economy down terns and political uncertainty. Secondary data from annual reports was used to find the relationship between organizations performance level and financial tools

1.8 Scope and Limitation

Performance management can be discussed through investment decision, and basic operation/financing decision. Mainly this research has focused only for basic functions, and tasks in corporate organizations in the construction industry. The performances are discussed in relation to business expansion, business growth, and business development and merging in corporate, organizations in the construction industry. This study has covered only seven listed construction companies over the period of 2007 to 2013 in Sri Lanka.

1.9 Chapter breakdown

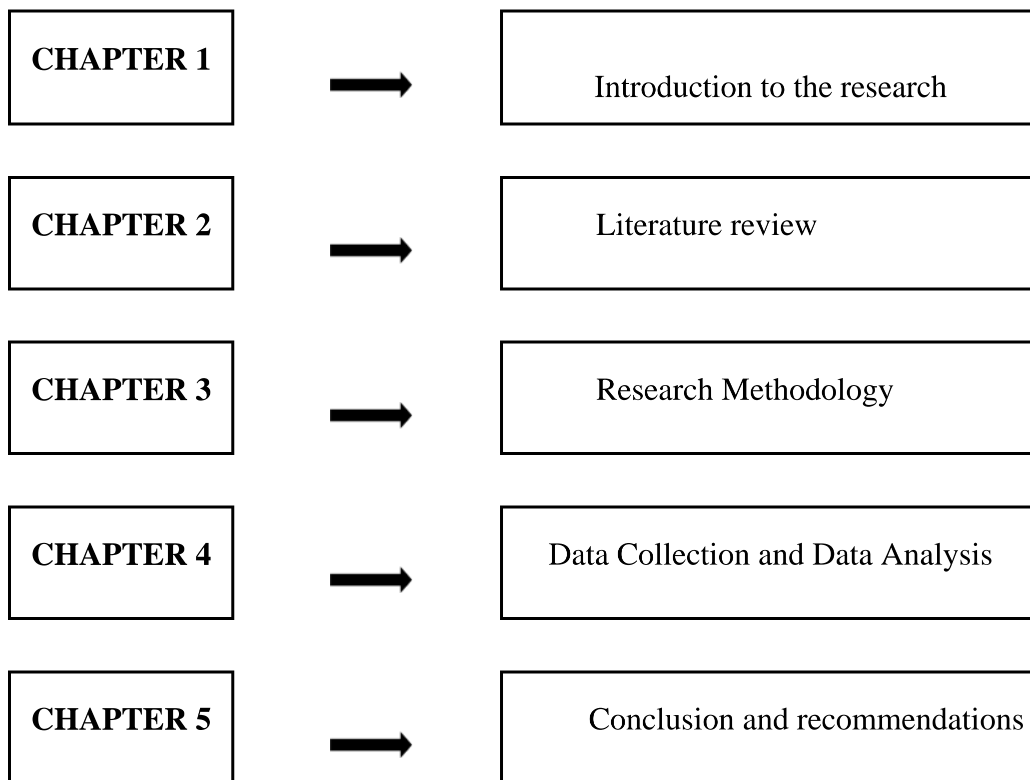

Figure 1.2 Chapter Break down

1.10 Summery

The chapter permits an introduction to the research whilst giving the rational to the topic researched, objectives, brief methodology, expected limitation and chapter breakdown of the dissertation. This gives an approach to the theory and literature brings by the second chapter.

CHAPTER 2

LITRATURE REVIEW

2.1 Introduction

This Chapter is included with what research has been previously conducted and significant factors related to the research objectives. This literature review helps to determine the factors and information around the research objectives. It clearly explains the theories and strategies related to the corporate finance and the finding of previous researchers' regarding corporate finance and managers' performance. This chapter mainly discusses with three categories which are corporate financial structure, organizations' behavior and corporate governance indicators.

2.2 Corporate Financial Structure

The composition of a company's capital is considered as equity (common and preferred stock), debt (including bonds and loans) and hybrid securities (such as convertible debt and preferred shares).Equity financing is provided by the shareholders. Debt financing is provided by banks or bondholders who, respectively, receive loan contracts and publicly traded bonds in return for their money. The capital structure shows the composition of a group's liability as it shows who has a claim on the group's assets and whether it is a debt or equity claim. The leverage ratio is the proportion of the group's liabilities that is financed by debt claims (Ross et al., 1995).

The capital structure of corporations can be quite complex as there are many different types of debt and equity claims. For example, debt claims vary according to their maturity (short term or long term), seniority (senior or junior), the type of covenants associated with the debt, whether the debt is secured or unsecured, and

whether the debt is privately held or publicly traded. The optimal debt-equity mix is explained by a number of capital structure theories. According to these theories, there are costs and benefits associated with debt as well as equity. The company should choose the combination of debt and equity that maximizes its value.

Starting a corporation is more complicated than starting other forms of business organization. Forming a corporation involves preparing articles of incorporation and a set of bylaws. The bylaws or rules are describing how the corporation regulates its own existence (Ross et al., 1995). Normally Corporation is form as separate groups which are managers and stockholders

2.2.1 Function of corporate finance

Corporate finance is concerned primarily three types of financial decisions that the finance team needs to make in a business which are investments, financing and dividend decisions. Among these three decisions, investment decisions and financial decision are called as operating decision. . The capital budgeting decision is concerned with what real assets the firm should acquire while the financial decision is concerned with how these assets should be financed (Husam, Michae and Rekha, 2010). With the limited resources management must be aware of how to allocate money figure out where the money can best utilized.

Another public job function of corporate finance is determining whether or not the company pays a dividend, and if so, how much the company has a responsibility to maximize shareholder value. Also ensure that there is a good balance between long- and short-term goals. The company must have enough assets to cover short-term costs, referred to as working capital management, and enough invested to ensure the company has long-term growth.

2.2.1.1 Investment decision

An investment decision revolves around spending capital on assets that will yield the highest return for the company over a desired time period. This decision determines the amount of cash flows in future periods and mainly it should be maximized the value of the firm and shareholder values. This decision mainly refers two areas which are short term and long term reallocation of corporate funds. Short term investment decision refers the level of current assets which are cash, accounts receivable and inventories used for day to day operations. Long term investment decision includes the fixed asset purchasing, acquisitions, mergers and corporate reorganizations (Richard et al., 2007).

During the short term analysis various analytical tools are interrelated and used to manage current assets. Some of the tools are cash budget, ratio analysis, balance sheet, funds flow and cash flow.

Capital investment is the major aspect of the long term investment decision. The capital investment proposal includes both investment in new assets and the relocation of capital and assets with the company and it should be evaluated expected return and the risk. There are different techniques involved in the evaluation of capital investment named as risk analysis techniques which refers the investment risk, cost of capital analysis, which determines the discounted rate, cash flow analysis, which determines the expected net cash flow from new investment, financial forecasting analysis, which refer the cash income and expenses and ratio analysis which are net present value, internal rate of return, cost benefit ratio and payback period. Also the mergers, acquisitions and failures are analyzed using financial ratios such as price earnings ratios, exchange ratios and possible negotiation range for mergers and acquisitions (David,Rober and John, 2009).

2.2.1.2 Financing decision

All functions of a company need to be paid for one way or another. The financing decision depends on the size of the firm, the financing option available to the firm, the needs of the firm and the location of the firm.

Every investment can be financed through company money or from external funders. It is the financing decision process that determines the optimal way to finance the investment. There are two ways to raise money from external funders which are taking on debt or selling equity. Taking on debt is the same as taking on a loan. The loan has to be paid back with interest, which is the cost of borrowing. Selling equity is essentially selling part of your company and the company is selling itself to the public in return for money (Williomson,1988).

When making financial decisions it should be determined the best financing mix or capital structure for the company. The important elements to consider in making a financial decision include the nature and riskiness of the business operation, the capital structure (debt to equity ratio) desired, the length of time the assets will be needed and the cost of alternative financing (Anonymous,2000). There are a number of analytical tools are used for analyzing optimum capital structure for the company which are financial leverage analysis, trend and historical analysis and ratio analysis. Businesses need short-medium and long term financing at various times to remain liquid and profitable. To analysis short term financing it as applied techniques such as present value analysis, compounding analysis, and interest factor analysis. For the long term financing it is analyzed debt stocks, common stocks values sales, loan and leasing, financing (David, Rober and John, 2009).

2.2.1.3 Dividend Policy

The other decision is how the profit is distributed by the company, whether the firms distribute all or a proportion of earned profits in form of dividends' to the shareholders or whether it is put back to the business. Bishop, Steven, Harvey,

Robert, and Garry, (2000) says that managers must not only consider the question of how much of the company's earnings are needed for investment, but also take into consideration the possible effect of their decisions on share prices (as cited in Husam,2010). The term 'dividend policy' refers to "the practice that management follows in making dividend payout decisions or, in other words, the size and pattern of cash distributions over time to shareholders" (Lease et al., 2000 as cited in Husam,2010).

Companies can hand back cash to their shareholders either by paying a dividend or by buying back some of the outstanding shares. As Richard etal.(2007) says when mangers decided on the dividend, their primary concern seems to be giving a shareholder a "fair" payment on their investment and as alternative to dividend payments the company can repurchase its own stock. As per the John Lintner (1950) interview with corporate managers, he found that following facts (Richard,Stewart,Franklin and Pitabad ,2007).

1. Firms have to long run target dividend payback ratios. Mature companies stable with high payout ratio and growth companies have a low payout ratio.
2. Mangers focus more on dividend changes than absolute levels
3. Dividend changes follow shifts in long run sustainable earnings
4. Managers are reluctant to make dividend changes that may have to be reversed. They are particularly worried about having rescinded a dividend increase.
5. Firms repurchase stock when they have accumulated a large amount of unwanted cash or wish to change their capital structure by replacing equity with debt.

Dividend policies are the regulations and guidelines that companies develop and implement as the means of arranging to make dividend payments to shareholders. Establishing a specific dividend policy is to the advantage of both the company and

the shareholder. In order to make sure the policy is workable, a company should develop a viable policy and then run this policy through a number of test scenarios in order to determine what impact the dividend policy would have on the operation of the business.

As Ahmed , Ghulam, Syed, and Kashif (2011) founds that dividend policy is the major concern in most of the organizations, since no proper tools are followed, and in the absence of that majority of companies cannot achieve the target in Pakistan corporate sector. Further. It is recommended that financial managers should also focus on dividend policy and investment appraisal techniques along with other practices because constructive dividend policy contributes towards shareholder wealth and get attention of investors that ultimately affect the organizational performance.

2.2.2 Capital Structure and Corporate Strategy

2.2.2.1 Capital structure

The capital structure is referred to as the way in which the firm finances itself through debts, equity and securities. It is the composition of debt and equity that is required for a firm to finance its assets. The capital structure of a firm is very important since it is related to the ability of the firm to meet the needs of its stakeholders. The Board of Directors or the financial manager of a company should always endeavor to develop a capital structure that would lie beneficial to the equity shareholders in particular and to the other groups such as employees, customers, creditors and society in general (Pandey, 2009).

Capital structure refers to the way a corporation finances its assets through some combination of equity, debt, or hybrid securities. A firm's capital structure is the composition or 'structure' of its liabilities. Gearing ratio is the proportion of the capital employed by the firm which comes from outside of the business, such as by taking a

short term loan. Modigliani and Miller created ((1958, 1963 & 1977)) a theory of capital structure in a perfect market. His theory said that the value of a company is independent of its capital structure and the cost of equity for a leveraged firm is equal to the cost of equity for an unleveraged firm, plus an added premium for financial risk. As per his findings if capital structure is irrelevant in a perfect market, then imperfections which exist in the real world must be the cause of its relevance (as cited in Velnampy and Niresh 2012)

Capital structure theory

The trade-off theory allows bankruptcy cost to exist. It states that there is an advantage to financing with debt (the tax benefits of debt) and that there is a cost of financing with debt (the bankruptcy costs and the financial distress costs of debt). The marginal benefit of further increases in debt declines as debt increases, while the marginal cost increases, so that a firm that is optimizing its overall value will focus on this trade-off when choosing how much debt and equity to use for financing. Empirically, this theory may explain differences in debt equity ratios between industries, but it doesn't explain differences within the same industry. As per the trade off theory profitable firms prefer to have higher gearing due to tax shield and lower probability of bankruptcy (Yat-Hung, Eddie and Patrick. 2010).

The Pecking Order Theory is popularized by Myers (1984). When he argues that equity is a less preferred means to raise capital because when managers (who are assumed to know better about true condition of the firm than investors) issue new equity, investors believe that managers think that the firm is overvalued and managers are taking advantage of this over-valuation. As a result, investors will place a lower value to the new equity issuance.

2.2.2.2 Corporate strategy

Corporate strategies complement traditional finance paradigms and extend our insight into a firm’s decision regarding capital structure. Equity and debt must be considered as financial instruments as well as strategic instruments of corporate

governance (Williamson, 1988). Under corporate strategies managers mainly concern about where is the organization today, where want it to be and how we want to go there. For the mangers involve developing strategies, though marketing, training, resource handling, financing, diversion, acquisition, product developing and in-house or subcontract production. According to the past literature, it can be identified three types of corporate strategies.

a. **Growth** - A growth strategy is when an organization expands the number of markets served or products offered, either through its current business (es) or through new business (es). Because of its growth strategy, an organization may increase revenues, number of employees, or market share. Organizations grow by using concentration, vertical integration, horizontal integration, or diversification.

b. **Stability** - A stability strategy is a corporate strategy in which an organization continues to do what it is currently doing. Examples of this strategy include continuing to serve the same clients by offering the same product or service, maintaining market share, and sustaining the organization's current business operations. The organization does not grow, but does not fall behind, either.

c. **Renewal** - When an organization is in trouble, something needs to be done. Managers need to develop strategies, called renewal strategies that address declining performance. The two main types of renewal strategies are retrenchment and turnaround strategies.

Source: Management, 11e (Robbins/Coulter)

d. **Other** - David et al.(2009) explained that to leverage firm capabilities, managers implement four types of strategies which are portfolio strategy (divestment, acquisition, alliance, new product development), growth strategy (for example, consolidation, withdrawal, launching new products, entering new markets), business strategy (for example, cost focus, differentiation or hybrid) and financing strategy (for example, debt rescheduling, raising equity). Strategies are implemented through a range of revenue generation and efficiency enhancing actions. Also, some past

researches have said that the corporate strategy consists of two parts which are capturing inter-divisional synergies which is the extent of current thinking; and how the organization identifies and manages strategic uncertainty

e. **Diversification** - Past researchers it was highlighted that diversification is a main strategy of corporate governance. In particular, studies on the interaction between diversification and capital structure became of interest due to their associated strategic implications regarding corporate governance. The effect of diversification on capital-structure choices has been explained mostly through the coinsurance effect. The coinsurance affects deals with the reduction of operating risk due to the imperfect correlation between the different cash flows of a firm running diverse businesses (Lewellen, 1971 as cited in La Rocca and Gerca, 2008).

e. Capital structure decision - The capital structure decision is another critical corporate strategy because the profitability of a company is directly affected by such decision. The successful selection and use of capital is one of the key elements of the firms' financial strategy. As Brander and Lewis (as cited in Velnampy and Niresh, 2012) findings the oligopoly firms, in contrast to the firms in the competitive markets, would employ higher levels of debt to produce more when opportunities to earn high profits arise and the implied prediction of the output maximization hypothesis is that capital structure and market structure has positive relationship. Lalith, P.S (as cited in Velnampy et al., 2012) investigated the capital structure of SriLankan companies and found that the use of long-term debt is relatively low in SriLankan companies. The mean leverage in Sri Lanka is estimated at 13.5%, long term debt to equity ratio is 24%, while the total debt to equity ratio is 104.1%. This evidence suggested that the use of debt financing in Sri Lanka is significantly low in comparison .Chiang Yat Hung, Chan Ping Chuen Albert and Hui Chi Man Eddie (as cited in Velnampy et al., 2012) shows the inter-relationship between profitability, cost of capital and capital structure in property developers and contractors in Hong Kong. As Velnampy and Niresh (2012) findings, there is a negative association between capital structure and profitability except the association between debt to equity and return on equity. Further the results suggest that 89% of total assets in the

banking sector of Sri Lanka are represented by debt, confirming the fact that banks are highly geared institutions. To examine factors that affect the capital structure choice, proxy measures need to be defined for both independent and dependent variables. As the leverage proxy measures of capital structure, it has identified overall leverage, long term leverage, short term debt, long term debt, total liabilities divided by total assets, total debt divided by capital and as the profitability proxy measures it has identified return on assets, return on equities (Yat-Hung, Eddie and Patrick. 2010).

f. Business model - The business model is new managerial strategy. It is widely used managerial practice for designing, comparing and analyzing an organization's value. Past researchers explain that the business model as an essential part of successful business and its main purpose is to separate company from others and to give it an advantage over its competitors. A good business model defines the way a company operates, how it creates value for its customers and how it captures from its operations to make a profit. Generally, this business model system is not popular among all managers and all industries. Therefore the problem with the innovating business model is that only a few managers understand their company's current business models well enough to develop them further or to change them at the right time. This is where a proper business model analysis using a set of defined business model elements is useful. The defined elements give managers a common language to discuss, design and compare business elements, and most importantly, to analyze the interdependencies between the elements. As per A. Pekuri and Pakuri and Harri (2013) findings managers in construction have been understudied business models very differently than those in other sectors. The main difference is that they relate these models to their companies' fields of operation, business segments, modus operandi, certain project delivery and contract types, financial objectives and securing more work. There seem to be as many definitions and purposes of business models as there are managers in construction.(Pekuri et al ,2013)

2.2.2.3 Summery of general corporate strategies (for questionnaire)

I. Growth strategies
   - Consolidation
   - Launching new type of projects
   - Launching new market

II. Stability Strategies for existing business
   - Jointing with existing clients with existing type projects
   - Maintaining market share
   - Sustaining the current business operations

III. Renewal strategies (During declining stage)
   - Retrenchment strategies (involve cutting operating costs and divestment of non-core assets)
   - Investment Strategies (innovation and market diversification)

IV. Financing strategies
   - Debt rescheduling
   - Raising equities

V. Acquisition

VI. Merge the company

VII. Capital structure decision changing

VIII. Following a specific Business Model

2.2.3 Agency Problem

Investment or capital budgeting decisions are among the most important decisions made by corporate managers. The right decisions lead to value creation, but the wrong ones cause poor performance and a decrease in shareholder value. Managers are agents of shareholders and are susceptible to the temptations, which give rise to agency problems. These agency problems can be mitigated only by well designed monitoring as well as compensation plans, which tie the interests of the managers' interests to those of the shareholders.

Agency Problem is one key term of the corporate governance. An agency problem is present to the extent that unresolved material conflict exists between the self – seeking goals of managers and the value maximization of shareholders. (Mark, 2011).The stockholders are the principals and the managers are their agents entrusted with the responsibility of running the firm on behalf of the stockholders. Corporate managers may not necessarily share the stockholders' enthusiasm for maximizing NPV or taking up risky, but worthwhile projects. This is called the agency problems, which cause sub-optimal behavior on the part of the managers. Some examples of this behavior, including with reduced effort (or shirking), perks, empire building, entrenching investment and avoiding risk (Richard,Stewart,Franklin and Pitabad ,2007)

Agency theory (Jensen and Meckling, 1976) states that agency costs arise from the conflict of interest between a principal and an agent. This conflict results, for example, when managers, who are responsible for important decisions of the firm, are not the primary claimants of the firm's net assets, and thus do not bear a major share of the wealth effects of their decisions. Agency theory divides the costs of such arrangements into structuring costs, monitoring costs, and costs of bonding a set of contracts. Costly control procedures, such as the use of contracts, are necessary to align the actions of the managers (the agent) with those of the residual claimants, the shareholders (the principals). Agency theory stresses that such means of contracting reduce agency costs by coordinating the goals of the principal and the agent.

The interaction among mangers, stakeholders and debt holders and its related conflicts of interests, influence capital structure, corporate governance activities and strategy plans are arise of inefficient managerial decision. Especially in regards to capital structure planning, the conflicting relationship between managers, shareholders and debt holders could bring managers to act: 1) in their own interests, by choosing suboptimal projects that do not provide an adequate yield level, but that are low risk, thus ignoring shareholder preference for riskier projects 2) in the interest of shareholders, by making investment decisions that maximize equity value

and not firm value and, when operating in inefficient markets, could cause them to make suboptimal choices that damage debt holders. Managerial overinvestment, Underinvestment problem are so major problem between managers and shareholders (T.La Rocca and Rocca and Gerace, 2008).Agency Problems are mitigated by a combination of monitoring and incentives.

2.3 Organizations' Behavior

In 2011 Ahmed et al. have found five major applications of financial functions (key determinants of financial management practice) of a company in Pakistani corporate sector which are capital structure decision, dividend policy, investment appraisal techniques, financial ratios and working capital policy. Dividend policy and Capital structure decision are the major assessment of an organization and appraisal techniques are not being followed extensively as the majority of the companies' financial executives responded that they were not performing investment appraisal techniques due to constraints on capital investment and resource availability. Working capital policy and financial performance assessment ratios are practiced in Pakistani corporate sector at large. Further, he has found that the availability of finance and attitude of senior management is the major constraints for capital investment. Corporate managers are well aware of the investment appraisal techniques for project risk assessment and consider these techniques important for the long-term profitability and survival of a company.

2.3.1 Organizations' performance and corporate strategies under economic down turn, company bankruptcy

Different types of environmental shock can occur for businesses and shocks change the level of environmental munificence, the level of resources available in a particular environment. A recession, an environment of falling GDP, is one type of shock. Recession generates contradictory tendencies, some constraining firms from

achieving their objectives, while others are enabling. Falling GDP exerts downward pressure on consumer expenditure and confidence, with implications for business performance, while at the same time influencing asset prices downwards, which is enabling for resource acquisition. Declining aggregate demand is also likely to lead to business exits, particularly among new firms (Geroski and Walters, 1995 as cited in David et al., 2009).

Glynn, Malcolm and Michael (2010) has explained the reasons for recession in UK as the credit crunch (banks have had serious liquidity problems and became very risk averse about lending to business and individuals as well as to other banks.), Globalization of the world economies and Impact of UK public finances (the problems of the UK's public finance deficit create major concerns for businesses).

There are so many causes are affected of the failure of a company. Other than the economic decline Olivier, Pandian and Howard (2007) explained the several reasons for failure of a company through his literature reviewed. According to his literature, problem of organizational decision making and result on adaptation process are some reasons for the firm decline in turnaround situations. Also he has said that firm decline is the result of managers' failure to maintain the alignment of a firm's strategy, structure, and objectives with an evolving and changing environment. Internal and external both factors affect to decline of a company.

Filatotchev and Toms (as cited in Oliver et al., 2007) argue that the internal mechanisms of failing firms imply that their responses to environmental change are either too active or too passive. Oliver has found five of corporate strategy impacts on shareholder value in decline and turnaround situations. Manufacturing costs, marketing costs, accounts receivable, and accounts payable are operations related variables (short-term oriented), and capital expenditures is a strategic variable (long-term oriented).As a example capital expenditure, capital expenditure negatively associated with beta excess returns during the first year of decline and during the latter years of decline, capital expenditures were positively associated with beta

excess returns. This means that investors may value retrenchment strategies (which presumably have immediate effect) highly in comparison to long-term strategies.

Business restructuring in the form of replacement of managerial elites, functional reorganizations, and other changes to internal arrangements are often a precursor to, or a consequence of, strategic adaptation to recession (Whittington 1991; Geroski and Gregg 1994 as cited in David et al., 2009).Past researchers have found some strategies for facing for the economic crisis named as Enhance product innovation or new product development , reducing fixed costs, substantial capital investment, relocate production overseas ,collaborate or merge with other businesses and permanent downsize of productive capacity.

Generally there are three board strategies in business for adapting during difficult economic conditions.

2.3.1.1 Retrenchment strategies

Mainly this is a common adopting approach to deal with recession condition and it involves with involve cutting operating costs and divestment of non-core assets, especially in the short-term. The divestment of the business, reductions in employment; cuts on a wide range of expenditure, marketing and training are the main strategies of this approach. Managers are focusing on immediate survival rather than on long-term aims. Geroski and Walters (as cited in David et al.2009) found that that innovation activity tends to vary over the business cycle, with fewer major innovations and patents awarded during periods of downturn. As per the research on textile industry at UK most companies have taken action for reducing overhead cost such as temporarily mothballing of some productive capacity, reduced use of consultants and outsourced services, reduced training budgets and reduced travel expenses and greater use of teleconferencing.

2.3.1.2 Investment strategies

This involves expenditure on innovation and market diversification. Recession is regarded as an opportunity to implement strategic change that would otherwise not have occurred. Such strategies are risky and many firms are likely to be too preoccupied with short-term survival to think about innovation and growth, or lack the resources to implement such strategies effectively (Glynn et al., 2010). As David (2009) findings on his literature Such strategies are risky and many businesses are likely to be too preoccupied with short-term survival to think about innovation and growth and investment strategies require resources which are financed, managerial skills, technical expertise and firms with limited resources are less able to implement them. . However, the potential for these investment approaches is conditioned by concerns about getting access to capital finance.

2.3.1.3 Ambidextrous' strategies

This approach is a combination of retrenchment and investment. It is likely that most firms adapt under recession conditions through judicious cost/asset-cutting behaviour and through investment in product innovation and market development. It seems to offer firms both a short-term route to survival, as well as a longer-term opportunity to secure competitive advantage. Neither retrenchment nor investment strategies alone can be regarded as universal panaceas for recession conditions. The judicious combination of exploitation improving efficiency) with exploration (seeking new sources of competitive advantage) appears to be an important strategy in recession (David et al., 2009).

Darrel (2001) has found that two conventional approaches for facing to the economic downturn, which are "many executives take few if any precautions and they acting simply until the downturn recover and others are running for new investors .As he said there are two actions for facing to the downturn. One is preparing for the worst. Under this he further says that the most executives are likely to be overly optimistic

in the face of approaching downturn and managers try to maintain a contingency plan and implement. As he said the most of managers open their mind to new ideas when they are under stress. Other major action for surviving a downturn is growth through diversification. Further, he says that when an industry's situation is bad managers try to apply quick fixes. Mangers slash budget and staff, reduce capital expenditure, drop services that competitors don't offer, and push suppliers to cut prices for trying to short term survival. Squeezing suppliers is another short term survival. Also, some companies have used downturns to build loyalty with other stakeholders. Darrel (2001) says that acquisitions are too risky to undertake during a downturn.

Previous researchers (Gilson, 1989 and Datta S. and Datta, 1995 as cited in Susan et al., 2010) found that corporate governance attributes are associated with financial distress. Susan et al. (2002) have investigated three areas of corporate governance association with a distressed firm which are inside turnover, creditors' involvement and ownership structure. Susan, Gary and Howard (2002) have investigated the association of various corporate governance attributes and financial characteristics with the survival likelihood of distressed firms. The results suggest that firms that replaced their CEO with an outsider were more than twice as likely to experience bankruptcy. Furthermore, larger levels of block holder and insider ownership over the sample period are positively associated with the likelihood of firm survival. Ownership structures also have a significant influence on the likelihood of firm survival. Larger levels of block holder and insider ownership over the sample period signal a higher likelihood of firm survival (Susan et al., 2002).

Martin (2010) has explained that the role of organization under economic uncertainty. Many managers believe discretion is best during an economic crisis, due to the fact that announcing cuts could cause demoralization and disorder, it often times makes already difficult situations worse. One of the worst techniques, management can apply is bearing down on their sales force with threats to produce. Tough times, instead, are the instances when supervisors should strive to trust lower-level employees. Further he says that communication is a good motivation factor.

The aim of successful crisis communications is to show that the organization is going about its normal work, controlling the crisis and retaining the support of the people who matter most.

2.3.1.1 Summery of corporate strategies under economic down (for questionnaire)

I. Reduce cost
   a. Reducing Fixed cost
   b. Reducing nr of employees
   c. Selling extra machineries, equipments
   d. Reduction of availability of credit
   e. Reducing litigation cost through proper contract arrangement
   f. Reduced use of consultants and outsourced services
   g. Reduced training budgets
   h. Reduced travel expenses and greater use of teleconferencing

II. Choosing right business model

III. Disinvestment in areas of weakness

IV. Liquidation of investments in an early phase of a downturn

V. Increase in the cost of mortgage loan

VI. Acqusion of resources

VII. Acqusion of stocks

VIII. Merger or consolidation

IX. Collaborative partnership

X. Product or service diversification

XI. Using Retaining earnings for as funding source

XII. Stable with low payout ratios

XIII. Use low debt ratio

2.3.2 Organizations' performance and corporate strategies under Economic growth and Corporate Strategies

Developing economies grow faster as the importance of the industrial and services sectors. Corporate enterprise is a natural outcome of capitalism in the course of economic development. During economic growth, the firms' behavior of capital structure is changed to increase the firm value, shareholders', wealth and profit of the company. Some major strategies are increase sales and products in existing markets, **i**ntroduce a new product, develop a new market segment or move into new geography**,** merger or acquisition combines the best of two companies, realistic goal setting, financial planning and economic forecasting, identifying a core customer demographic, business level strategy to gain an advantage over competitors, marketing, advertising or developing a market growth strategy and diversifying services, products and resources.

Muhammad (2003) has tried to include as many variables as permitted by the data in order to have a comprehensive study on the relationship between economic growth and capital structure. He has identified four major factors affect on capital structure which are country factor (total liability to total asset ratio), industry factor (One of the reasons cited is that some industries would require heavy investments in fixed assets, which has been found to be a significant variable determining capital structure and this is because fixed assets are closely related to firms' collateral value and non-debt tax-shield. Other reason cited is that some industries may have a higher cost of bankruptcy and financial distress than other industries), size factor (Firm size as measured by total asset is expected to have a positive influence on leverage. This is because the larger the asset base of a company the more capable it is to obtain a bank loan or to issue debt securities) and firm-specific factors (If firms make capital structure decisions as if there exist an optimal mix between debt and equity, it would be both interesting and useful to know what are the factors that determine such decisions which are growth, size, fixed asset ratio, profitability, operating leverage and dividend policy) expected to have a positive relationship between capital structure and factors are differ country to country during economic growth. This

study revealed that per capita GNP growth in Japan and Malaysia is significantly related to capital structure of the firm and higher economic growth tends to cause to use more long term debt influence on leverage (Muhammad 2003).

These results for Pakistan are different from those other two countries. This also shows that inefficiencies coupled with high leverage may entangle Pakistani firms in debt trap. The indicator of prime lending rate is the most decisive factor affecting demand for credit for Japan and Malaysia. It is evident from the analysis that financial liberalization provides major support in the development of capital structure and overall corporate sector in all the three countries. In addition it was revealed from the analysis that creditor's rights provide significant impact on capital structure of companies and overall corporate sector in all the three countries. The indicator law enforcement appeared negatively significant with debt to equity and long-term debt to total capital ratio. (Mummad, 2003)

Hsien, Eduardoand Wen have found that how economic development affect the adjustment behavior of capital structure decisions in Thaiwan. The impact of economic development arises from the short-term future economic growth and the long-term shift in the level of economic development. The impact of economic development varies upon whether firms are subject to the financial constraint of over-leverage or under-leverage relative to the target debt ratios. The results have shown that the long-term shift in the level of economic development does not affect the debt ratio adjustment and the actual debt ratio for firms with the financial constraint of over-leverage in the case of a negative adjustment gap. Also, he found that the evidence of a positive effect of the long-term shift in the level of economic development on the debt ratio adjustment and the actual debt ratio for firms with the financial constraint of under-leverage. In addition, the short-term future economic growth in the course of economic development does not affect the adjustment behavior of debt ratios for firms with the financial constraint of over-leverage in the case of a negative adjustment gap.

Chen (2004) has found mixed results in the relationship between corporate financial structure and economic development among different countries. She found a negative effect of economic development on aggregate debt-to-equity ratios during the period from 1965 to 2001 in Taiwan but a positive effect during the period from 1946 to 2002 in the USA. Further, she said that economic growth and debt equity ratio move in the same direction in higher income countries and in opposite directions in lower income countries.

2.3.2.1 Summery of corporate strategies under economic growth (for questionnaire)

I. Raising more equities (increasing issuing rights)
II. Stable with high payout ratios
III. Changing business model / procumnet method
IV. Investment of areas of strength
V. Acqusion of resources
VI. Acqusion of stocks
VII. Merger or consolidation
VIII. Collaborative partnership
IX. Product or service diversification
X. Introducing new product to market
XI. Leasing or hire purchase of new machineries and equipments
XII. Launching new market

2.4 Corporate Governance Indicators

2.4.1 Sources of finance

Organizations have access to several options in financing their business activities. The key to good financial management is to understand each of the main sources of finance and to be able to match these sources with the needs of your business. Sources of finance mean the ways for mobilizing various terms of finance to the industrial concern. Sources of finance state that, how the companies are mobilizing finance for their requirements. The source of finance can be categorized in different ways, such as based on period, ownership, mode and source of generation. But the above sources of finance can be divided into three major classifications which are security finance, internal finance and loan finance. (Figure 2.1 sources of finance)

Ownership shares are the major funding agent of a capital structure. New shares issues (offer for sale) and right issues are the main options of finding funds. An offer for sale is a means of selling the shares of a company to the public and rights issues provide a way of raising new share capital by means of an offer to existing shareholders, inviting them to subscribe cash for new shares in proportion to their existing holdings. To gain extra finance, a business can take out a loan from a bank or other or other financial institution. A loan is a sum of money lent for a given period of time. Repayment is made with interest. Debenture is one of the long-term sources of finance to the company.

Generally the maturity period is longer than the other sources of finance. Retained earnings are most useful to expansion and diversification of the business activities. And it is one of the least costly sources of finance since it does not involve any floatation cost as in the case of rising of funds by issuing different types of securities. When the company uses the retained earnings as the sources of finance for their financial requirements, the cost of capital is very cheaper than the other sources of finance; hence the value of the share will increase. Loan finance is another popular source of finance. The government policies also effect to selection of source of

finance. With the different economic cycles government change the taxation policy, interest rates and other financial policy.

Further way of raising funds that has become popular is through venture capital. Merchant banks and investment specialists may be willing to provide finance for a promising and fast-growing smaller business. Venture capital is money put into an enterprise which may all be lost if the enterprise fails.

Government is sometimes made available to businesses that meet certain conditions. For example, grants and loans may be available to firms setting up in rural areas or where there is high unemployment. Once a business is up and running there are various ways of financing its expenditures. Expensive items of equipment can be leased. Rather than buying the equipment the business hires it from a leasing company. This saves having to lay out sums of money and the business does not have to worry about having to carry out major repairs itself. Motor vehicles, machines and office equipment are often leased. Hire purchase is an alternative way of purchasing items of equipment.

In the construction industry, there are design firms, consulting firms, client firms and contracting firms. The design firm is based on client money. Short term borrowing is their main source of finance. Once get the money from client they try to repay the loan with minimum interest. Also, it may be possible to arrange additional cash inflow from the owners of the firm. That is to say, owners might use personal funds to increase their equity stakes in the company. The large contracting and client company use debt and equity base financing methods. Wang and Ting (1999) have focused their research on relationship between procumbent methods and financial strategy. The long term financing is used for design and build and Build- Operate transfer procument methods and short term financing is used for lump sum project. Based on five indicators which are current assets, current debts, current ratio, total asset turnover and return on assets Stephen (1999) said about financial outline at Taiwan as fallows,

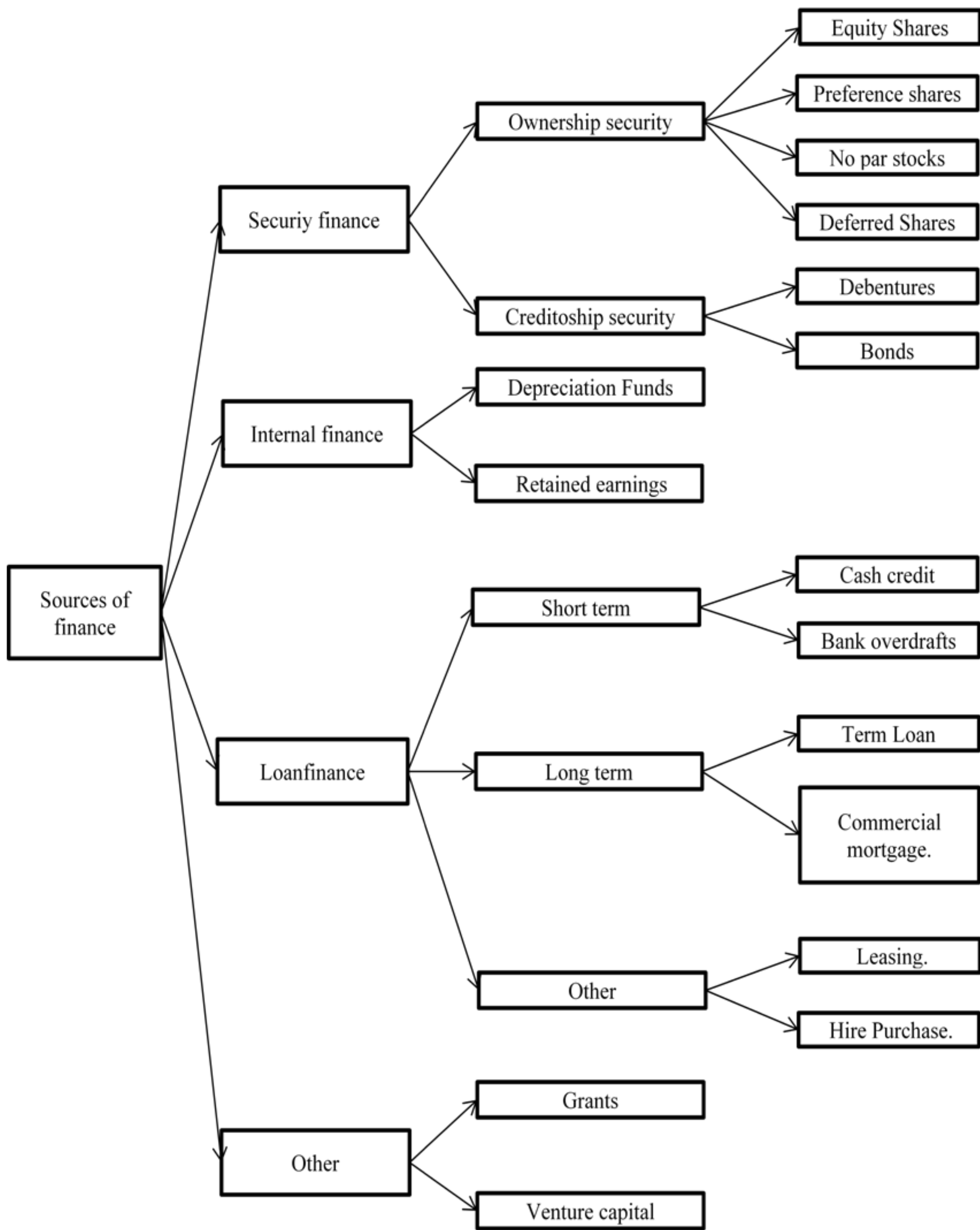

Figure 2.1 Sources of finance

- General contractors are concerned with the short term finance much more than barrowing in longer terms.
- Since contractors do not borrow money for the purpose of investment, they will only favor the least expensive source of finance available to them.
- General contractors' financial strategy serves the purpose of achieving the least expensive cost of capital.

Among these sources of fund managers should have a proper knowledge for facing to the different economic cycle. They should be managing the business strategy to control the funds of the company with several economic situations. As an example, managers can use the retained profit as the source of funds for a project. These financial strategies should be controlled with the year finance planning. Therefore proper use and allocation of funds leads to improve the operational efficiency of the business concern. When the finance manager uses the funds properly, they can reduce the cost of capital and increase the value of the firm. Financial decision will affect the entire business operation of the concern.

The key measures of performance are driven by three critical issues which are profitability, size of the business, and growth of the business over time. Companies use various performance measurement models, which recently focus not only on lagging indicators (mainly financial ratios) but also on leading indicators. Ratio is used as an index for evaluating the financial performance of the business concern.

2.4.2 Corporate performance measurement

The traditional tool used in the past is the accounting measure, return on investment (ROI). ROI is just the ratio of after-tax operating income to the net (depreciated) book value of assets. The ROI and accounting earnings (net income) have two major advantages: (1) it measures performance on an absolute basis, and (2) it can used to measure performance of the managers of departments and divisions. Also traditionally, as organizations' performance measures in terms of financial view, profitability, liquidity , working capital, gearing and investor ratios are used. The

firm growth can be identified in a number of ways both financial and non-financial. Profitability, revenue, return on investment (ROI) and cash flow are financial indicators and market share, number of employees and number of products are non financial indicators (Richard,Stewart,Franklin and Pitabad ,2007). Return on equity, return on assets, liquidity, profit, sales, borrowing, assets, number of employees, volume of contract, Tax Payment, and Number of joint ventures are commonly used for the managers performance measures. Liquidity measures how company's ability to meet obligations as they come due. Profits measure of whether the trends in profit are favorable for the company. Turn over measure of how incomes are growing and whether the incomes are satisfactory for the company. Borrowing measure of how responsibly the company is borrowing and how effectively it is managing debt. Assets measure of how effectively the company is utilizing its gross fixed assets.

The rate of Return on Assets (ROA) provides a measure for assessing the overall efficiency with which assets are used to produce net income from operations. It also is indicative of management's effectiveness in deploying capital, because it is certainly possible to be efficient and yet poorly positioned in terms of how capital is being utilized. The rate of return on equity (ROE) provides useful information about the performance of debt in the capital structure. ROE is calculated by dividing net income minus the estimated value of any unpaid operator labor and management by average total equity (net worth).Debt is an important component of the capital structure of businesses. It provides needed resources to take advantage of profit opportunities. When used productively, debt can leverage equity capital in a way that is very beneficial financially. But financial leverage is impartial and unforgiving. Debt works just as well to the detriment of a business when it is used unproductively, as it works to benefit that is managed wisely.

An alternative measure, which overcomes most of the drawbacks of the accounting, earning, is the residual income or the economic value added (EVA). EVA is a financial performance metric that is most directly linked to the creation of shareholder value, over time. It is designed to give managers better information and

motivation to make decisions that will create the greatest shareholder wealth (Richard,Stewart,Franklin and Pitabad ,2007).

EVA = residual income = income earned – income required
= income earned – cost of capital × investment

Incentives are typically not based solely on increasing shareholder wealth. Incentives can also be expressed in terms of improved firm performance. According to Holmstrom (1979), an appropriate measure of the principal's objective in an agency relationship is the measure of shareholder wealth. It is not a perfect measure of the CEO's performance. However, Healy, 1985 has argued that basing compensation on accounting measures is counterproductive as this may motivate managers to make decisions that will increase their own wealth but may not necessarily increase shareholder wealth. Empirical researchers have looked at management's ability to affect its pay by making specific decisions that directly impact accounting measures used in the evaluation.

Also, Corporate Performance management focuses on development of a performance measurement system with multiple perspectives like financial, customer and organization. The special performance measures like the corporate scorecard (or balanced scorecard) measure the achievement of the business strategy and communicate strategic direction of the organization. Accordingly, the corporate scorecard indicates key performance measures and performance target at the organizational level.

Many studies on performance measurement have been carried out at the project level. However, recently, the demand for performance evaluation and management at the company level has increased. Hani, Ibrahim and Khalid (2013) have found key performance indicators which can be implemented by construction executives to measure the performance at the company level in Saudi Arabia.

Table 2.1 Key performance indicators

Perspective	KPIs	Measurement methods
Financial	Profitability	Return on Equity
		Economic Value Added
		Return on Capital
		Net Income (NI)
		Profitability
	Growth	Volume of works growth rate
		Revenue growth
	Financial stability	Debt Ratio
	Cash Flow	

Source: Hani, Ibrahim and Khalid ,2013

Mummad (2003) has identified there are several commonly used debt ratios in studies on capital structure to study the behavior of long-term debt because it traditionally forms an important component of capital. They are

(1) Total liability (non-equity) to total asset ratio (TLA). The liability includes short-term liabilities and long-term loans. This measure reflects the amount of claims in book value terms in case of liquidation of the firm. It also reflects the residual value to shareholders.

(2) Total debt to equity (TDE). Total debt includes short-term loan and overdrafts, and long-term liabilities. This is truly a measure of leverage in the sense that fixed interest, commitment acts as a lever to enlarge return to shareholders. This ratio is a linear transformation of another commonly used leverage measure, total debt to capital.

(3) Long-term debt to capital. Capital in this measure is defined as long-term-debt plus book value of equity. This truly measures the long-term financing mix of the company.

Igor (2010) has mentioned that although the traditionally Return on Capital Employed (ROCE) and similar measures used for the performance measures it has developed another measures that are more in line with shareholder value creation such as Economic Value Added (EVA), Cash Flow Return on Investment (CFROI) which has been developed using the internal rate of return (IRR) technique and cash value added (CVA) model. The EVA and CFROI measure has been used to help managers in making better investment decisions and CVA model is employed as a tool for evaluating the influence of separate investment projects on the process of shareholder value creation. The balanced scored is a major representation of a fundamental change from traditional performance measurement systems by putting strategy.

2.4.2.1 Summery of performance measures of Organization (for questionnaire)

I. Return on investment
II. Return on equity
III. Return on assets
IV. Return on Debt
V. Return on Capital
VI. Assets / Equity
VII. Turnover / Assets
VIII. Debt ratio0 (Debt/Assets)
IX. Debt/Equity
X. Liabilities/Asset
XI. Share holders funds / Total Assets
XII. Current ratio
XIII. Earnings per Share
XIV. Earnings Before Interest After Taxes (EBIAT)
XV. Economic Value Added
XVI. Volume of works growth rate
XVII. Profitability (Profit before tax and interest /Total revenue)
XVIII. Profitability (Profit /Total revenue)

2.4.3 Corporate governance

"Corporate governance involves a set of relationships between a company's management, its board, its shareholders and other stakeholders. Corporate governance also provides the structure, through which the objectives of the company are set, and the means of attaining those objectives and monitoring performance are determined and the purpose of corporate governance is to facilitate effective, entrepreneurial and prudent management that can deliver the long-term success of the company" (OECD Principles of Corporate Governance, 2nd, as cited in code of practice in corporate governance, 2013).Corporate governance is the system of controls that helps a corporation effectively manage administer and direct economic resources . The most important and closely monitored corporate governance mechanism is the company board of directors (Mark, 2011).Corporate control mechanism between managers and shareholders, the control flow of resources for better balancing supply and demand conditions of the market, and incentive compensation are some main corporate governance mechanism inside a firm. Lei (2005) has found five corporate governance mechanisms which have significant impacted on firm value. His model has covered five governance mechanisms which are board structure, executive compensation, ownership structure, executives' conflict of interest, and transparency standards. His finding indicates that Hong Kong investors pay a premium for better governed companies and it implies that firms can increase their valuations by restructuring their corporate governance standards.

As past researches and corporate theories, there are two clarifications of corporate governance mechanisms which are internal mechanisms and external mechanism. Internal mechanisms developed focusing role and function of ownership structure, board of director, CEO duality and directors and executives' compensation. These controls monitor the progress and activities of the organization and take corrective actions when the business goes off track. External corporate governance mechanism concerns the labour market, control outside financial institution and government

regulation. External mechanisms are often imposed on organizations by external stakeholders in the forms of union contracts or regulatory guidelines. Dennis and Chung (2002) have examined the empirically the effectiveness of the ownership structure, board structure, and compensation of a sample of Chinese firms. He has found that ownership concentration and percentage of employees' shareholding have positive impacts on firm performance and the ratio of insider directors is not related to firm performance either. CEO duality has an impact on chairmen's salaries. However, managerial compensation is, in general, not related to firm performance. Furthermore, Bhagat and Bolton (2008) investigate relationship between corporate governance and firm performance. Their study reveals relationships among corporate governance, corporate performance, corporate structure and corporate ownership structure.

2.6 Summery

Capital structure, corporate strategy and corporate governance are the key term of the corporate finance. There are major corporate financial decisions which are investment decision, financing decision and dividend policy. The capital structure is the core component of a corporate organization. Organization should handle the capital structure carefully because it is the determination of the profit and shareholders' value. Mainly capital structure is including with equity and debt. There are three major sources of financing which are security, finance, internal finance and loan finance. Organizations are using different financial strategies in different economic cycle and in different procument methods in construction industry. Corporate strategies mainly focus on growth, stability and renewal. Also it has identified the diversification and capital structure decisions are major strategies under economic recession. Organizations are applying Retrenchment strategies; Investment strategies and Ambidextrous' strategies for survival under the economic uncertainty. Corporate governance also provides the structure, through which the objectives of the company are set, and the means of attaining those objectives and monitoring performance are determined.

CHAPTER 3

RESEARCH METHODOLOGY

3.1 Introduction

This chapter presents the research strategy and methodology adopted to achieve the research objectives stated in the first chapter. This chapter is the most important as the result of research is mainly dependent on it, because research methodology is the heart of the research for a successful outcome. Therefore, selecting a most relevant research methodology to address the research problem is very important as it includes the systematic approach to solve the research problem and thereby the validity and the reliability of the result are very high. Research design demonstrates the capacity of a researcher who shall clearly understand the background for research problem. It begins with the explaining research design to this research. This chapter illustrates the research methodology research design and arguments for selecting the methodology.

3.2. Research process and design

Research process indicates the total process that is involved in initiating, conducting, and completion of the research in an organized and logical order. Research process consists of series of actions or steps necessary to effectively carry out research and the desired sequencing of these steps.

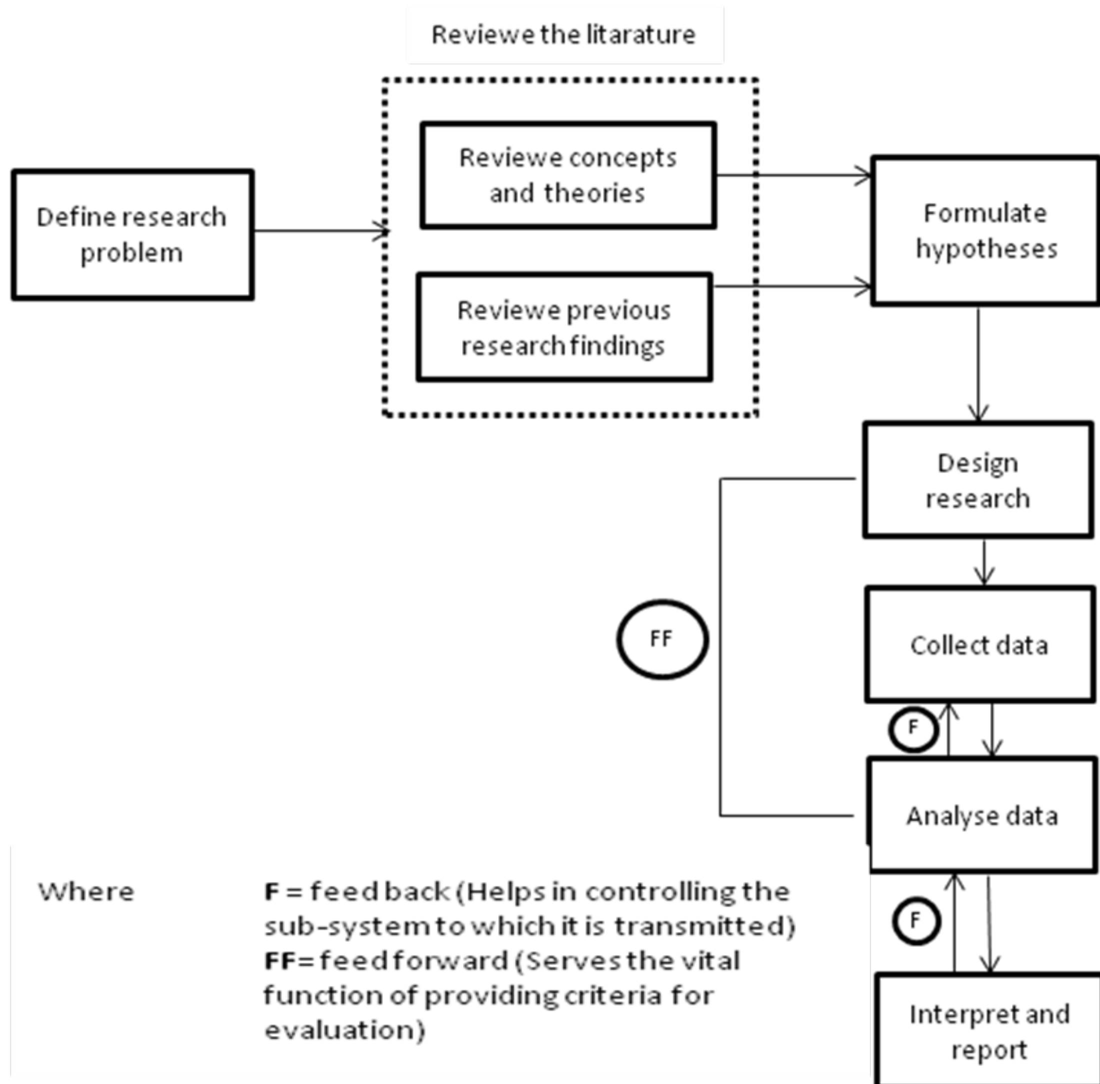

Figure.3.1: Research Process

Source: Carlos L. Lastrucci, The Scientific Approach: Basic Principles of the Scientific Method, p. 7. Cited in Kothari, 2004

Research design may be defined as the plan for getting from the research question to the conclusion. In determining the research design, critical consideration should be paid to the main research being investigated. Therefore the research design must take account of the research questions, such as what data are required and how the data

analyzed (Tan 2002).Research design consists of research approaches and research techniques.

The "Nested" research model (Kagioglou Et at, 2000 cited in Senarathna, 2005) illustrates this mechanisms in fig 3.2 to selected research techniques.

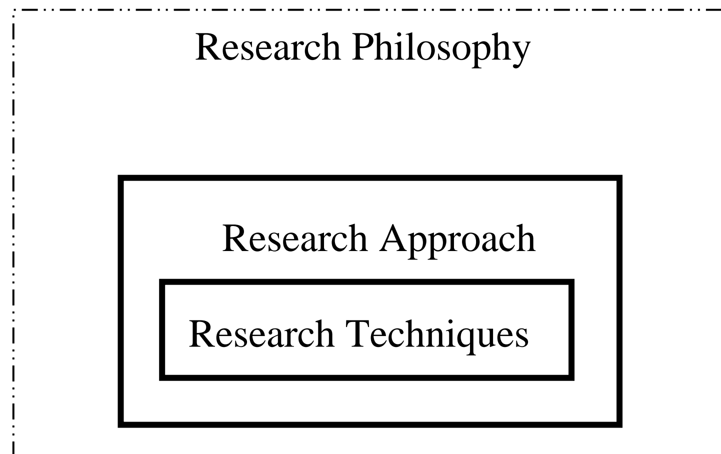

Figure.3.2: Nested Research Methodology, (Kagioglou et at, 2000 cited in Se)

3.3 Research Philosophy

Research philosophy contains important assumption about the way in which we view the world (Saunders et al.2007). It is the basic belief system that guides the investigation, which shaped by the assumption of reality and how the assumptions are acquired what values go into research (Neil, 2006).

When designing research at the inception the research philosophy should be considered. Easterby- Smith, et al. (2002) has highlighted the importance of research philosophy by three facts.

1. It helps the researcher clarify the research design

2. It helps the researcher to identify which research designs will work and which research design will not work under different circumstances.

3. It helps the researcher to identify and create research designs which may be outside his past experience.

The research philosophy is applied as two extremes which are positivism and Social constructionism. "Positivism holds a deterministic philosophy in which causes probably determine the effects or outcomes. Thus, the problems studied by post positivists reflect the need to identify and assess the causes that influence outcomes. The knowledge that develops through a post positivist lens is based on careful observation and measurement of the objective reality that exists "out there" in the world" (John,2009). Further, he says that through positivism philosophy researchers seek to develop relevant, true statements, ones that can serve to explain the situation of concern or that describe the causal relationships of interest. By considering research problem Positivism research philosophy is decided as the suitable philosophy.

3.4 Research Approach

Research approaches are classified into two as qualitative and quantitative.

3.4.1 Qualitative approach

Qualitative approach to research is concerned with subjective assessment of attitudes, opinions and behavior. It is a type of scientific research. It consists of an investigation that systematically uses a predefined set of procedures to answer the question. Generally, the techniques of focus group interviews, projective techniques and depth interviews are used. Qualitative approach is used in following research methods which are case study research and ethnography and action research are taken under qualitative approach.

The case study method is a very popular form of qualitative analysis and involves a careful and complete observation of a social unit, be that unit a person, a family, an institution, a cultural group or even the entire community. It is a method of study in depth rather than breadth. The case study places more emphasis on the full analysis of a limited number of events or conditions and their interrelations. (Kothari, 2004)

3.4.2 Quantitative approach

Quantitative approach tend to relate positivism and seek to gather factual data and to study relationships between facts and how such facts and relationships accord with theories and findings of any research executed previously (Fellows and Lui, 2003).This approach provides a quantitative or numerical description of trends, attitudes or opinions of a population by studying a sample of that population. It includes cross – sectional and longitudinal studies using questionnaires or structured interview for data collection.(Babbie as cited in John,2009).Experiment and survey approaches are taken under quantitative approach.

The design of a quantitative approach includes the variables in the study and their relationship, the participants and the research site. It also includes language

associated with quantitative research and the deductive testing of the relationship or theories. Further in quantitative studies, researchers advance the relationship among variables and pose this in terms of questions or hypotheses (John, 2009).

This research is covered a study of relationship between organizations performance and financial structure under various economic condition. In order to achieve these objectives it has identified different financial arrangements and techniques for different industries through the literature review. That means the research objectives has been addressed by understanding what factors or variables influence an outcome though literature review. Therefore, it has identified the survey approach as the best approach to identify the relationship between organizations and financial structure for the construction industry.

3.5 Research Techniques

The research methodology is the area for successful outcomes of a research. When selecting the research the most appropriate science and technique should be used to carry out the research. After selecting research approach the next step is to select data collection and data analysis techniques. The method of data analysis technique is the way of interpreting the collected data and come to a conclusion.

3.5.1 Data collection

3.5.1.1 Sampling

Sampling can be defined as the method of selecting a representative sample from the population. But selecting most appropriate sample for the study is quite difficult (Tan,2002). The target population of this current study is Corporate Managers who work in corporate organization in the construction industry in Sri Lanka. Therefore, as the sample it has been selected construction organization where corporate finance is practiced which are listed construction companies, ICTAD registered C1, C2and C3 contracting organizations and advance procument and engineering companies.

The Colombo Stock Exchange has seven companies representing the construction and advanced procurement, engineering companies as at March 2014. Those seven listed companies were selected to carry out the research. That mean it has considered total population for the research.

3.5.1.2 Questionnaire Survey

This method of data collection is quite popular, particularly in case of big enquiries. It is being adopted by private individuals, research workers, private and public organizations and even by governments. A questionnaire consists of a number of questions printed or typed in a definite order on a form or set of forms. The questionnaire is mailed to respondents who are expected to read and understand the questions and write down the reply in the space meant for the purpose in the questionnaire itself. The respondents have to answer the questions on their own. (Kothari, 2004)

The data were collected independently through a structured questionnaire. The data is categorized into two groups which are financial structured, related data and organization performance related data. Financial arrangements, instruments and methods that are related to decision on organization capital structure and corporate strategies are key area of the questionnaire. The questionnaire is distributed among the corporate managers who are working at Corporate Organization. The medium selected for distribution of the questionnaire is via electronic mail and hard copies. Mainly questionnaire survey is used to identify the find the available financial techniques in companies. It has identified several financial arrangements, source of finance and corporate strategies through literature review. Through the questionnaire survey, it is confirmed that how these financial arrangements and strategies used in different economic conditions in the construction industry.

3.5.1.3 Secondary Data

Secondary data means data that are already available which have already been collected and analyzed by someone else. Secondary data may either be published data or unpublished data. In this research secondary data from company annual reports are used for finding a relationship and the level of between organization performance and financial techniques.

3.5.2 Data analysis techniques

A rating scale is very useful in evaluating the collected data from every research. The collected data from the open end structured questionnaire were analyzed using descriptive analysis tools. The secondary data was analyzed using correlation data analysis. The advanced statistical software ‘SPSS 20” was used for analyzing the data. Accordingly descriptive and correlation analysis are discussed below.

3.5.2.1 Descriptive analysis

Descriptive statistics concern the development of certain indices from the raw data. The important statistical measures that are used to summaries the survey data are (1) measures of central tendency or statistical averages; (2) measures of dispersion; (3) measures of symmetry (skewness); (4) measures of relationship; and (5) other measures. Amongst the measures of central tendency, the arithmetic average or mean, median and mode are the most important tools for the analysis. From among the measures of dispersion, variance, and its square root—the standard deviation are the most often used measures. In respect of the measures of skewness and kurtosis, first measure of skewness is used based on mean and mode or on mean and median. Amongst the measures of relationship, Karl Pearson’s coefficient of correlation is the frequently used measure in case of statistics of variables. (Kothari, 2004). In this research mean, median and mode measures have been used to analyze the first two objectives.

3.5.2.2 Correlation analysis

Correlation analysis enables to assess the strength of the strength of the relationship among variables. It simply measures the strength of the linear relationship between two quantitative variables. When measure the strength of a relationship between two variables the Pearson correlation coefficient “r”,-1 < r< +1 is used.

$$r = \frac{n \sum xy - (\sum x) - (\sum y)}{\sqrt{\{n\sum x^2 - (\sum x)^2\}\{n \sum y^2 - (\sum y)^2\}}}$$

Where,

n = Number of data sets
x = Independent variable
y = Dependent variable

A correlation of -1 corresponds to a perfect negative relationship, 0 corresponds to no relationship and +1 corresponds to a positive relationship (Marilyn and Theresa 2003, p.537).

3.5.3 Hypothesis testing

Hypothesis testing is used to infer a result of a hypothesis performed on sample data from a larger population. Black, (2002) defined hypothesis testing as the act of testing whether there are statistical grounds for disbelieving any statement. Hypothesis testing involves avoiding two types of errors; accepting statements when there is good reason to doubt, and rejecting them when there is in fact no good reason to do so (as cited in Patrick Ogebe and Joseph,2013).The methodology employed by the analyst depends on the nature of the data used, and the goals of the analysis. The goal is to either accept or reject the null hypothesis.

In the current research hypothetical relationship among corporate performance measures are constructed and then they are tested with company data from a sample of seven corporate construction companies. Through hypothesis testing, it has been analyzed the level of relationship between organizations performance and capital structure.

3.6 Summery

This chapter has been discussed the research design and methodology to achieve the research objectives. It comprises with three phases. Phase one aimed to identify factors relevant to capital structure and organizations' performance in construction industry. It has been done through literature review. The second phase is data collection through questionnaire survey and annual reports. Third phase is analyzing the data through SPSS 20.

CHAPTER 4

DATA ANALYSIS AND FINDINGS

4.1 Introduction

This chapter discusses the analysis for the relationship between capital structure and managers' performance. The data was collected from the 7 corporate construction organizations listed in the Colombo Stock Exchange and period of 7 years from 2007 to 2013. The analysis was carried out from SPSS statistical soft ware.

4.2 Company Profile and share performances

4.2.1 Company One: Contractor Company

This company established on 2001 and it was registered in Colombo stock market in 2008. They stand today in the forefront of the civil engineering industry in Sri Lanka. They have engaged to carry out most impactful, complex and prestigious projects in the country. They are currently stands over 3,000 employees including over 150 engineering professionals, offering cutting-edge engineering solutions, complemented by a modern fleet of specialized machinery and equipment. Their in-house integrated services include Geotechnical Laboratory Services, Design, Construction, Piling, Dredging, HDD Micro Tunneling, etc. and supply chain island-wide includes Quarry, Crusher Plants, Asphalt Plants and Concrete Batching Plants. They are primarily involved in the business of construction activities. It has been at the forefront of many of the road rehabilitation and improvement projects, bridges and flyovers, water and wastewater, buildings, telecommunication infrastructure and harbors and marine work.

During 2007 to 2013 period it shows the fallowing pattern of share market performances. It has compared with the construction sector share performances of Sri

Lanka. As below Chart Company one shows continues increment of share performance.

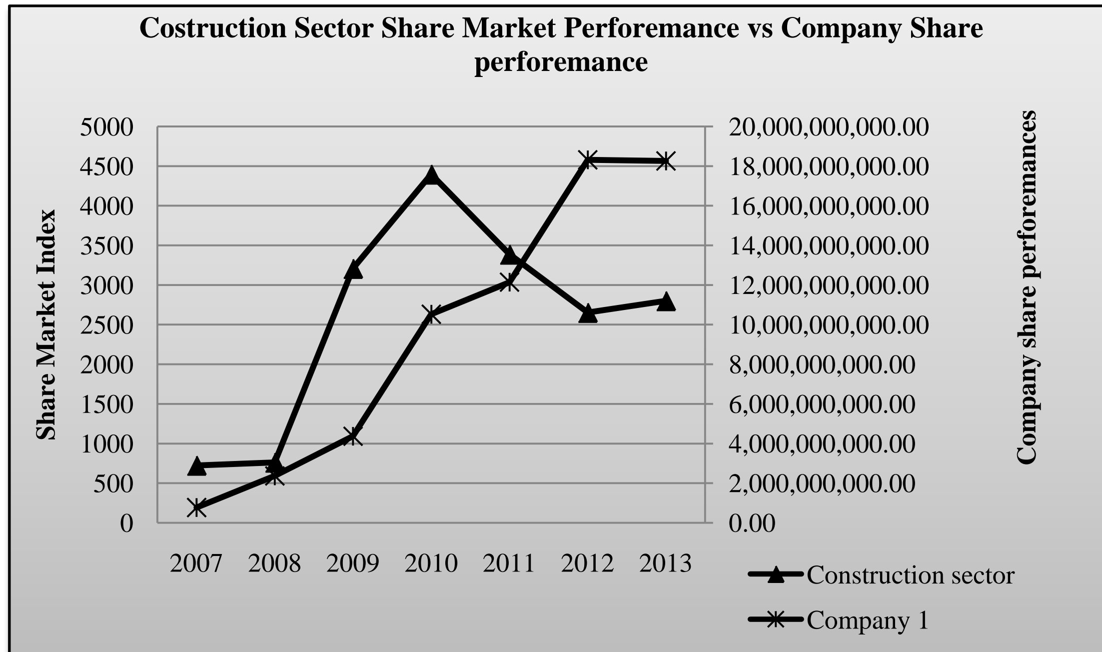

Figure 4.2.1: Construction Sector Share Market Performance vs Company 1 Share performance

The questionnaire was distributed among professionals as follow,

1. Deputy General Manager - 13 years experience
2. Commercial manager – 25 years experience
3. Contract administrator – 15 years experience

4.2.2 Company Two: Piling Company

Company Two established as a public Company in 1981 and subsequently listed on the Main Board of Colombo Stock Exchange in 1983. Group of Companies has a long history of being in operation in Sri Lanka for over 150 years with its origin in 1854. It has five subsidiaries. These subsidiaries provide services in the areas of civil

engineering, construction and property development, supply of construction materials and logistics management. The Company two division having carried out large scale projects both in the public and private sector are well geared to undertaken any mechanical; engineering projects of high complexity .They are specialized for the piling construction in Sri Lanka.

During 2007 to 2013 period it shows the fallowing pattern of share market performances. As below Chart Company two shows continues increment of share performance. Also it shows the sudden growth in year 2011.

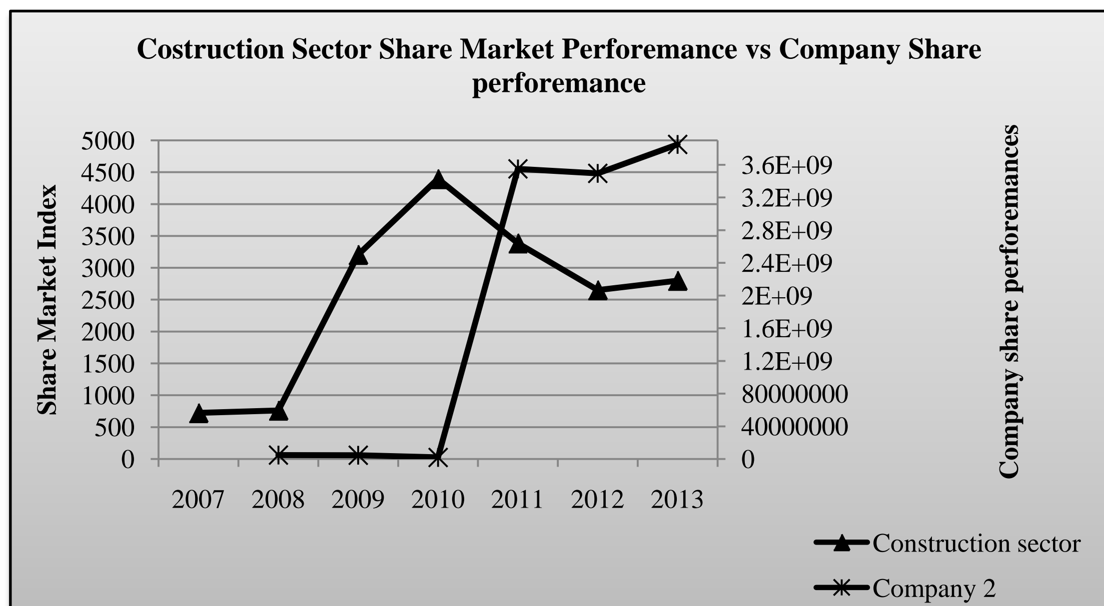

Figure 4.2.2: Construction Sector Share Market Performance vs Company 2 Share performance

The questionnaire was distributed among professionals as follow,

1. Chief executive officer - 27 years experience
2. Contract Manager – 13 years experience
3. Corporate Finance manager – 18 years experience

4.2.3 Company Three: Construction and mechanical company

Company three was incorporated to venture into the fields of Civil and Telecommunication Engineering, sectors that were hitherto solely dominated by foreign companies or by companies with foreign collaborations. Their subsidiaries are spreading as construction, road, cable, property and water. Among these company cable section is a listed company of a Colombo stock market.

Cable section was established in April 1978 and has now grown into one of the foremost companies and has launched its supremely productive and functional cables and enameled winding Wire of matchless quality, at very competitive prices. They are one of the prominent pioneers in cable manufacturing industry in Sri Lanka.

During 2007 to 2013 period it shows the fallowing pattern of share market performances. As below Chart Company three shows continues increment of share performance.

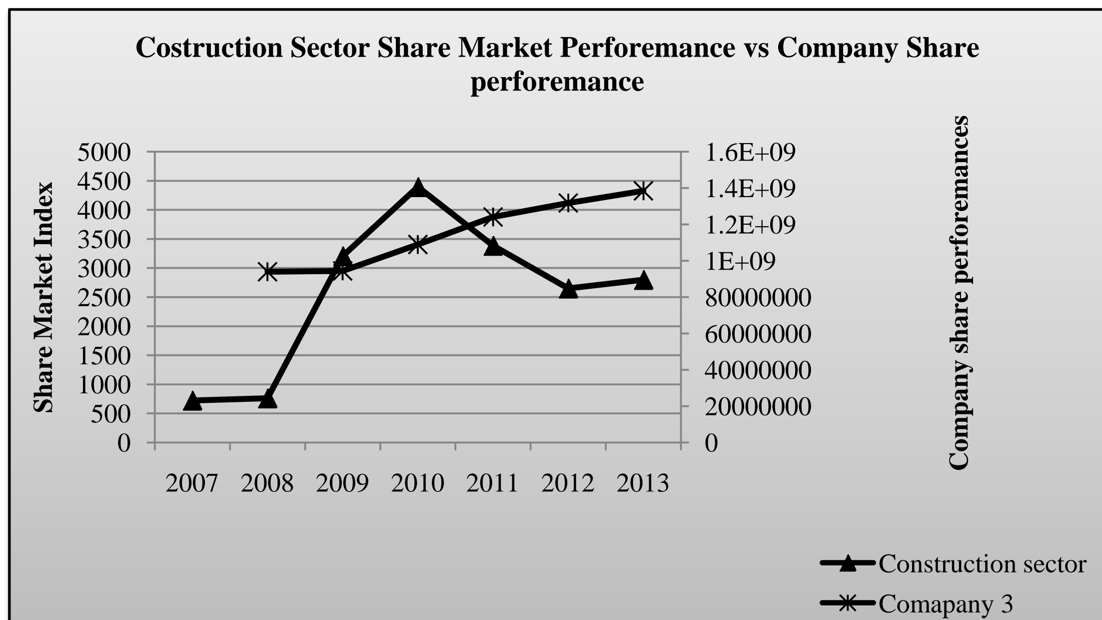

Figure 4.2.3: Construction Sector Share Market Performance vs. Company 3 Share performance

The questionnaire was distributed among professionals as follow,

1. Director - 33 years experience
2. General Manager – 38 years experience
3. Finance manager – 22 years experience

4.2.4 Company Four: Industrial Chemical Company

Company three was initially set up as an agro chemical business. As Sri Lanka started encouraging local ownership, the company acquired local investors and was listed on the Colombo Stock Exchange. The company has been prevalent in most industry segments in the country but primarily focused on chemicals and manufacturing and construction.

The Group has been working in a wide range of industry sectors in Sri Lanka for over forty years. From agri-inputs to leisure Constructions, chemicals, bitumen, plantations, consumer and paints have been steadily grown past forty years. Agriculture, Consumer, food and feed ingredients, hotels, industrial chemicals, industrial floorings, paints, pest control, plantations, and road surfacing are main sectors of this company. Among subsidiaries construction division core operations are in Road Construction, Water Proofing and Industrial Flooring. Also the company has made investments resort hotels on the west coast and cultural triangle areas.

During 2007 to 2013 period it shows the fallowing pattern of share market performances. As below Chart Company four shows continues increment of share performance. In 2011 it has little rapid increment of share performance.

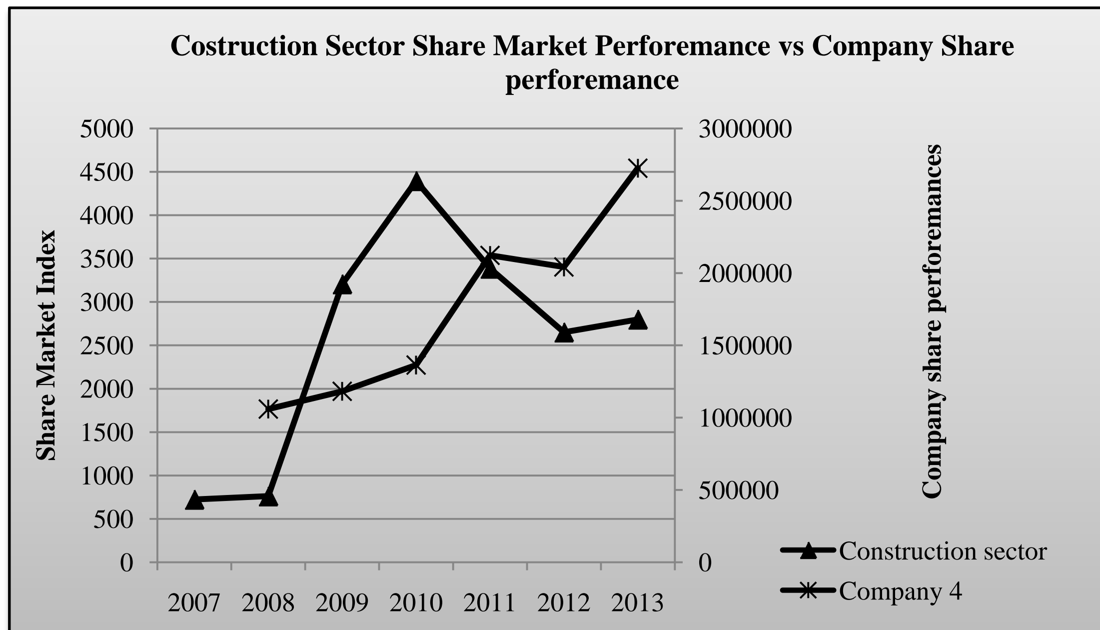

Figure 4.2.4: Construction Sector Share Market Performance vs. Company 4 Share performance

The questionnaire was distributed among professionals as follow,

1. Chief executive officer - 26 years experience
2. Assistant Finance manager – 12 years experience

4.2.5 Company Five: Mini Hydropower Company

Company five is operating with six mini hydro power projects delivering electricity to the national grid. The company has successfully diversified and embarked itself as a total turnkey solutions provider in the renewable energy industry. The company was listed in 2005 in the Colombo Stock Exchange and has been rated AA- by RAM Rating since 2011. Company five current mini-hydro power operations consist of seven plants. Their contribution of electricity to the National Grid exceeds 22 GWh. A fully owned subsidiary of Company five specializes in designing and construction of mini-hydro power projects. Also design and project management, turnkey studies, feasibility studies and consultation are other main procument methods of this country.

During 2007 to 2013 period it shows the fallowing pattern of share market performances. When compare with the construction sector performance, in 2009 company five shows reduction.

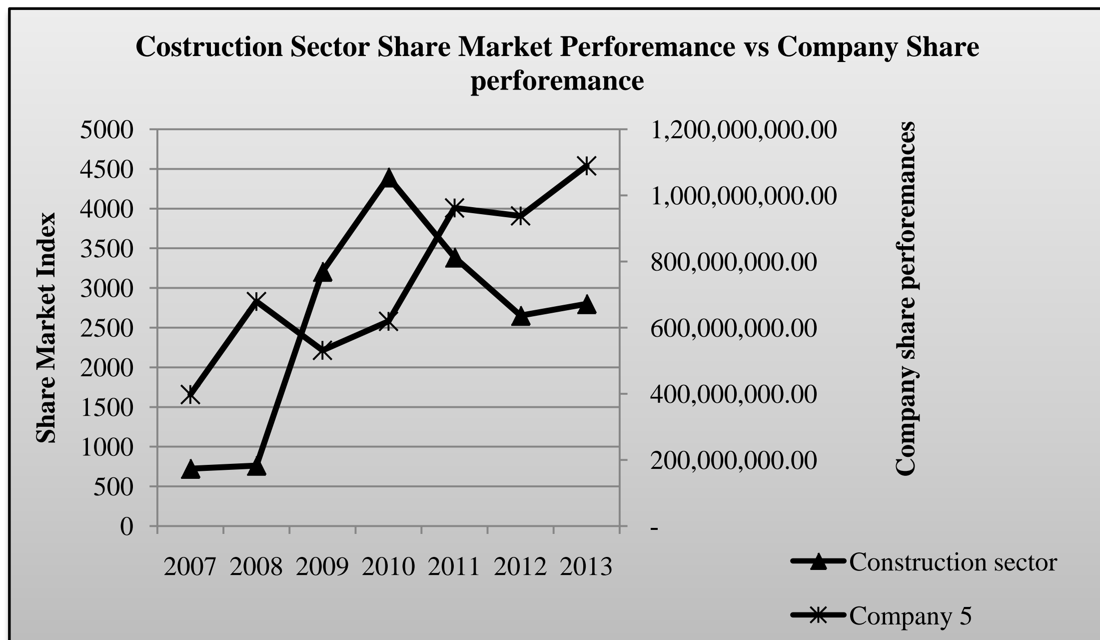

Figure 4.2.5: Construction Sector Share Market Performance vs. Company 5 Share performeance

The questionnaire was distributed among professionals as follow,

1. Managing Director - 14 years experience
2. Finance manager – 13 years experience
3. Non Executive director – 20 years experience

4.2.6 Company Six: Thermal and Mini Hydropower Company

Company six is a subsidiary which is engaging in power generation business in Sri Lanka. It is active in the power sector in Sri Lanka in operating thermal and mini hydro plants, thereby contributing supply of power to the national grid. It was incorporated in June 2003 to jointly developing of thermal power plant. Presently it also operates a 2.4 megawatt hydro power project in Deraniyagala; and a 2.6

megawatt hydro power plant in the Nuwara Eliya District. The company was founded in 2003 and is based in Colombo, Sri Lanka. Company six is a listed company in the CSE, and their involvement in the sector is expanding via strategic investment, partnerships and development.

During 2007 to 2013 period it shows the fallowing pattern of share market performances. When compare with the construction sector performance, in 2011 company six shows increment.

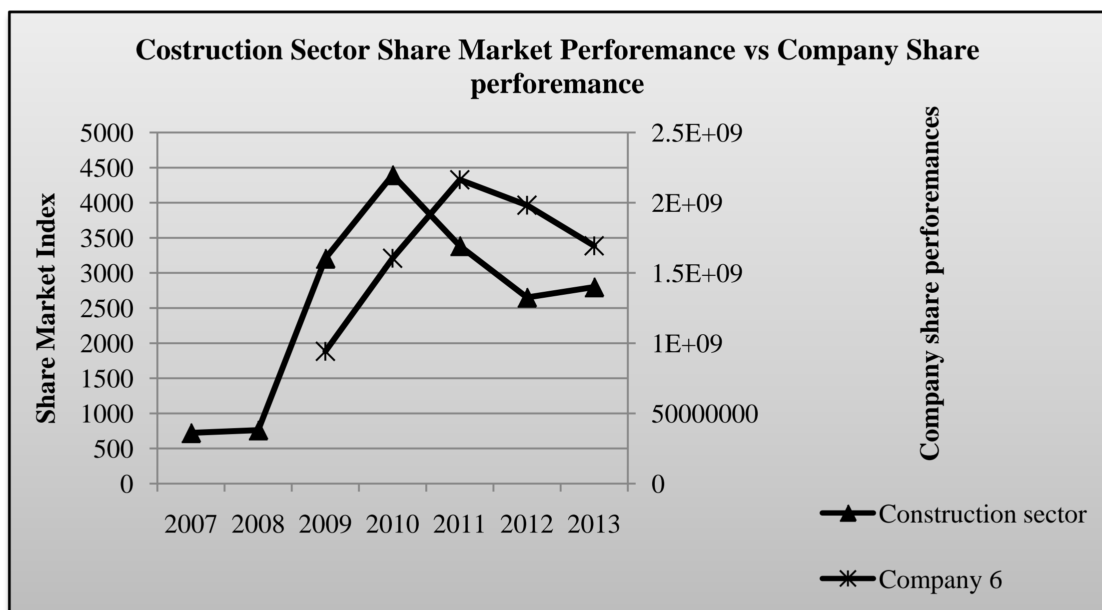

Figure 4.2.6: Construction Sector Share Market Performance vs. Company 6 Share performance

The questionnaire was distributed among professionals as follow,

1. Operation Director - 17 years experience
2. Finance manager – 33 years experience

4.2.7 Company Seven: Mini Hydropower Company

Company seven is a largest, privately owned, Hydro Power Company in Sri Lanka. It engages in the generation and sale of hydro electric energy to the Ceylon Electricity Board in Sri Lanka. It has an installed capacity of 21.85 megawatts. Company seven was incorporated in 2001 and is headquartered in Colombo, Sri Lanka. Their Mini Hydropower project is a run-of-the-river hydropower project located in Ratnapura. Another Mini Hydro Power Project, also a run-of-river mini hydro power project has an installed capacity of 7.2 megawatts (MW) and 4.65 megawatts (MW)

During 2007 to 2013 period it shows the fallowing pattern of share market performances. When compare with the construction sector performance Company seven shows similar pattern. In 2010 it shows, highest share performance.

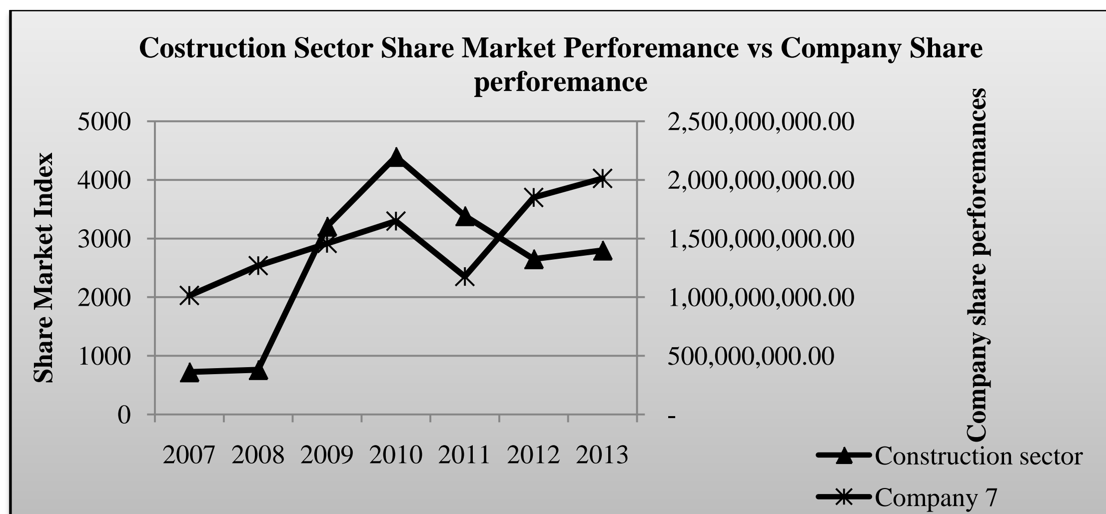

Figure 4.2.7: Construction Sector Share Market Performance vs. Company 7 Share performance

The questionnaire was distributed among professionals as follow,

1. Executive Director - 29 years experience
2. Head of Finance – 38 years experience

4.3 Data Analysis

The data was gathered through the questionnaire survey and secondary data. The questions aimed at achieving different objectives are grouped to gather under the respective objectives. After gathering necessary data, they were entered into SPSS software and then descriptive analysis and correlation analysis were used for detailed analysis.

4.3.1 Description of the survey

The survey was conducted with corporate managers in corporate construction companies. A sample of seven corporate construction companies was selected for the survey. In each company approached with questionnaires to three to two managers in electronic mail and hard copies. In company 1, Company 2, Company 3 and Company 4 about three corporate mangers responded to the survey. In company 5, company 6 and company 7 about two corporate members responded to the survey. Altogether 18 corporate managers from seven corporate construction companies participated in the survey in this research. Furthermore annual reports of sample of seven corporate construction companies were analyzed to develop measures on corporate performance.

4.4 Objective One:

The Objective one, which is how managers are motivated with the different financial arrangements (Methods, Tools, and Techniques), was achieved using Question 6 -9 in questioner.

4.4.1 Common sources of finance

Table 4.4.1: Common Sources of Finance

Item Nr	Item	Minimum	Maximum	Mean	Std. Deviation	Mode	Median
1	No par stocks	1.00	1.00	1.0000	.00000	1	1
2	Bonds	1.00	1.00	1.0000	.00000	1	1
3	Debentures	1.00	2.00	1.1111	.42448	1	1
4	Differed shares	1.00	2.00	1.1111	.42448	1	1
5	Preference shares	1.00	2.00	1.2222	.42779	1	1
6	Grants	1.00	4.00	1.2222	.54842	1	1
7	Venture capital	1.00	4.00	1.4889	.69780	1	1
8	Commercial mortgage	1.00	4.00	1.6111	.77754	1	1
9	Depreciation funds	1.00	4.00	1.7778	.80845	1	2
10	Hire Purchase	1.00	4.00	2.5000	.92455	1	4
11	overdraft	2.00	5.00	4.2222	.80845	4	4
12	Leasing	2.00	5.00	4.2778	.77754	4	4
13	Short term loan	2.00	5.00	4.4444	.70479	4	4
14	Retaining earnings	1.00	5.00	4.4444	1.0741	4.50	4
15	Equity Shares	4.00	5.00	4.6111	.54842	4	4
16	Long term loan	4.00	5.00	4.7778	.68599	5	4

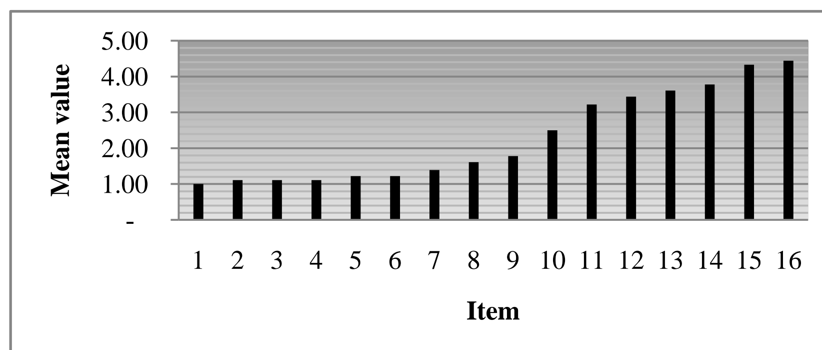

Figure 4.1: Common Sources of Finance

Figure 4.1 shows the how is the usage of common sources of finance in the construction organizations. Survey results indicate that the equity shares and long term loan are more used to the capital structure arrangement. According to the literature, short term loan are popular source of finance that long term loan. Also large contracting firms and client firms are willing to use debt and equities. The analysis results shows that Sri Lankan contractor and client corporate organizations are more concern with long term loan & equity shares. They are arranging funds with long term loan than short term loan.

4.4.2 Sources of finance for the new project

Figure shows that how is the organization behavior for financial arrangement on a new construction project. The results indicate that the equity shares and long term loan are most common sources of finance. Also retained money and joint venturing are popular among the organizations. (Table 4.4.2 and Figure 4.4.2).Here also, organization are arranging their funds with long term loan than short term loan. According to the literature it says that retained money is used for expansion and diversification. As per the analysis it says that retained money is highly used for new projects.

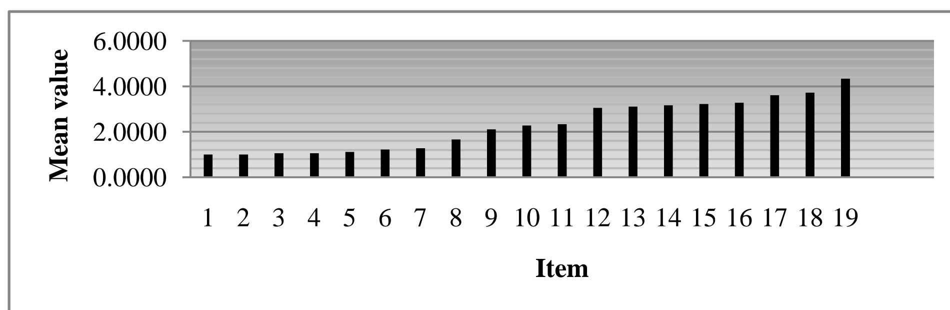

Figure 4.4.2: Sources of Finance for a new project

Table 4.4.2: Sources of Finance for a new project

Item Nr	Item	Minimum	Maximum	Mean	Std. Deviation	Median	Mode
1	No par stocks	1.00	1.00	1.0000	0.0000	1.00	1.00
2	Differed shares	1.00	1.00	1.0000	0.0000	1.00	1.00
3	Bonds	1.00	2.00	1.0556	0.2457	1.00	1.00
4	Grants	1.00	2.00	1.0556	0.2457	1.00	1.00
5	Debentures	1.00	4.00	1.1111	0.4714	1.00	1.00
6	Venture capital	1.00	2.00	1.2222	0.4278	1.00	1.00
7	Preference shares	1.00	4.00	1.2778	0.5745	1.00	1.00
8	Commercial mortgage	1.00	4.00	1.6667	0.6860	2.00	1.00
9	New Shares issues (as equity or preference)	1.00	5.00	2.1111	1.4245	1.50	1.00
10	Right issues (as equity or preference)	1.00	5.00	2.2778	1.2744	2.00	1.00
11	Depreciation funds	1.00	4.00	2.4444	0.8402	2.00	4.00
12	Hire Purchase	1.00	4.00	4.0556	1.1100	4.00	4.00
13	Leasing	1.00	4.00	4.1111	0.6764	4.00	4.00
14	Overdraft	1.00	4.00	4.1667	0.9245	4.00	4.00
15	Short term loan	1.00	5.00	4.2222	1.0044	4.00	4.00
16	Joint ventures. Partnering	1.00	5.00	4.2778	1.0741	4.50	4.00
17	Retaining earnings	2.00	5.00	4.4444	0.8498	4.50	4.00
18	Equity Shares	4.00	5.00	4.6111	0.8264	4.50	4.00
19	Long term loan	4.00	5.00	4.7222	0.8402	5.00	5.00

4.4.3 Significant factors affecting on selection of financial arrangement on a new project

Table 4.4.3: Factors affecting on financial arrangements

Item Nr	Item	Minimum	Maximum	Mean	Std. Deviation	Median	Mode
1	Floatation costs (those expenses which are incurred while issuing securities.).	1.00	4.00	2.0000	.97014	2.00	1.00
2	Payout ratio	1.00	4.00	2.7222	.75190	4.00	4.00
4	Project Complexity	1.00	4.00	2.7222	.95828	4.00	4.00
4	Flexibility of the capital structure (if need be, the amount of capital in the business could be increased or decreased easily)	1.00	4.00	2.7778	.80845	4.00	4.00
5	Capital Structure of Other Companies (similar)	1.0	5.0	2.778	.9428	4.00	4.00
6	Cost of different financing	1.00	4.00	4.0556	.72546	4.00	4.00
7	Controlling power on shareholders	1.00	5.00	4.1667	1.09814	4.00	4.00
8	The capital composition of the business (Gering Condition)	1.00	5.00	4.2222	1.06027	4.00	4.00
9	Government rules and regulations	2.00	5.00	4.2222	.87820	4.00	4.00
10	Required technology for the project	1.00	5.00	4.2222	.94281	4.00	4.00
11	Availability of going for joint venture or partnering	1.00	5.00	4.4889	.97854	4.00	4.00
12	How quickly the money is needed	4.00	5.00	4.4889	.60768	4.00	4.00
13	The stage of development of the business	4.00	5.00	4.5556	.75840	4.00	4.00

14	The state of the economy	2.00	5.00	4.5556	.70479	4.00	4.00
15	The length of time of the requirement for finance	2.00	5.00	4.6667	.76696	4.00	4.00
16	Required material, machineries and equipments	1.00	5.00	4.6667	1.0846 5	4.00	4.00
17	The amount of risk involved in the reason for the cash and the project	2.00	5.00	4.747	.94760	4.00	5.00
18	The cheapest option available	4.00	5.00	4.747	.69780	4.50	5.00
19	Project Cost	4.00	5.00	4.889	.51450	4.50	4.00

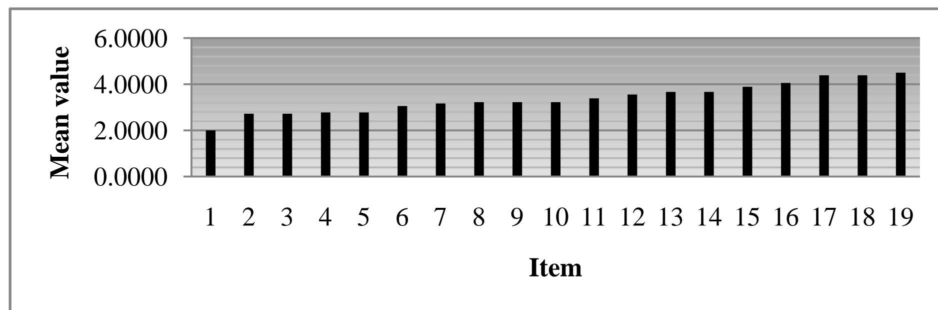

Figure 4.4.3: Factors affecting on financial arrangements

These charts show that the project cost and cost related factors and the risk factors are the significant factors for the selection of the financial arrangement for a new project. Cost and risk are the key words of a construction organization. The results show that organizations are more concern with risk and cost factors before starting a new project.

4.4.4 Ratios, techniques using for selection of financial structure

As per the below analysis, it shows that Return on Investment, Cost of debt, and IRR Profitability ratio are the highly use as financial techniques for selection on financial structure. (Table 4.4.4 and Figure 4.4.4)

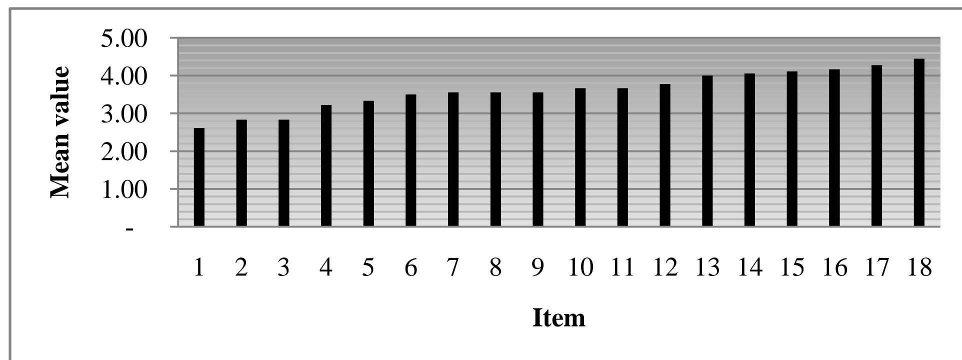

Figure 4.4.4: Ratios, techniques using for selection of financial structure

Table 4.4.4: Ratios, techniques using for selection of financial structure

Item nr	Item	Minimum	Maximum	Mean	Std. Deviation	Median	Mode
1	Payout ratio	1.00	4.00	2.61	0.78	4	4
2	Activity ratios	1.00	5.00	2.84	1.15	4	4
3	Short term debt (Short term debt / Total Assets)	2.00	4.00	2.84	0.79	4	2
4	Total Debt / Capital	4.00	5.00	4.00	0.69	4	4
5	Return on equity	4.00	5.00	4.06	0.74	4	4
6	Debt Service Coverage Ratio	2.00	5.00	4.11	0.77	4	4
7	Debt Ratios (Debt/Assets)	2.00	4.00	4.22	0.55	4	4
8	Tax Rate	2.00	5.00	4.44	0.84	4	4
9	Total Liabilities / Total Assets	2.00	5.00	4.50	0.92	4	4
10	Long term debt (Long term debt / Total Debt)	2.00	5.00	4.56	0.92	4	4
11	Cost of Equity Capital	2.00	5.00	4.56	0.78	4.5	4
12	Long term leverage (Long term debt / Total	2.00	5.00	4.56	0.78	4	4

	Assets)						
13	Overall Leverage (Total debt / Total assets)	2.00	5.00	4.56	0.84	4	4
14	Profitability ratios (Profit before tax and interest / Total revenue)	4.00	5.00	4.56	0.62	4	4
15	Cost of Debt	4.00	5.00	4.67	0.67	4	4
16	Return on Investment	4.00	5.00	4.67	0.70	5	5
17	Present value analysis	2.00	5.00	4.78	0.81	4	4
18	Internal Rate of Return	4.00	5.00	4.78	0.76	4	4

4.5 Objective Two:

The Objective two which is how asses the level of managers performance and financial decision making under different economic conditions was achieved using Question 10 -13 in questioner.

4.5.1 Common corporate strategies

Table 4.5.1: Common corporate strategies

Item nr	Item	Minimum	Maximum	Mean	Std. Deviation	Median	Mode
1	Following a specific Business Model	1.00	4.00	2.06	0.73	2.00	2.00
2	Merge the company	1.00	4.00	2.39	0.98	2.00	2.00
3	Consolidation	1.00	4.00	2.44	1.04	2.50	3.00
4	Acquisition	1.00	4.00	2.56	1.04	3.00	3.00
5	Capital structure decision changing	1.00	4.00	3.00	0.97	3.00	3.00
6	Debt rescheduling	3.00	4.00	3.22	0.43	3.00	3.00
7	Retrenchment strategies	1.00	5.00	3.39	1.04	3.00	3.00
8	Investment Strategies	2.00	5.00	3.44	0.78	3.50	4.00
9	Rising equities	2.00	5.00	3.56	0.78	4.00	4.00
10	Maintaining market share	2.00	5.00	3.56	0.78	3.50	3.00
11	Launching New market	3.00	5.00	3.78	0.81	4.00	3.00

12	Jointing with existing clients with existing type projects	2.00	5.00	3.78	0.65	4.00	4.00
13	Launching New type of projects	3.00	5.00	4.28	0.67	4.00	4.00
14	Sustaining the current business operations	3.00	5.00	4.33	0.59	4.00	4.00

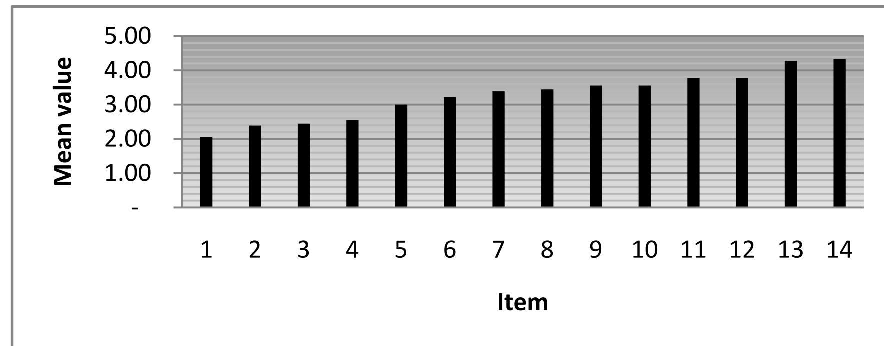

Figure 4.5.1: Common corporate strategies

According to the above analysis, it shows that the common corporate strategies which were used in the Sri Lankan construction industry. Sustaining the current business, launching new types of projects and launching new markets are highly used strategies within organizations. According to the literature it has found that three major corporate strategies which are growth, stability and renewal strategies. As per findings, it shows that Sri Lankan corporate organization also followed above three strategies. These are only general strategies which are used by organizations.

4.5.2 Corporate strategies used during and post crisis period

Table 4.5.2: Corporate strategies used during and post crisis period

Item nr	Item	Minimum	Maximum	Mean	Std. Deviation	Median	Mode
1	**Reducing cost**						
1.1	Reducing Fixed cost	2.00	5.00	4.1111	.83235	4	4
1.2	Reducing nr of employees	1.00	4.00	2.8333	.92355	3	3
1.3	Selling extra machineries, equipment's	1.00	5.00	2.9444	.99836	3	3
1.4	Reduction of availability of credit	1.00	4.00	2.7222	.82644	3	3
1.5	Reducing litigation cost through proper contract arrangement	1.00	4.00	2.8333	1.09813	3	3
1.6	Cuts on a wide range of expenditure, including R and D	1.00	4.00	3.0000	.68599	3	3
1.7	Reduced use of consultants and outsourced services	1.00	4.00	2.1667	.92355	2	3
1.8	Reduced training budgets	1.00	4.00	2.3889	1.09216	2.5	3
1.9	Reduced travel expenses and greater use of teleconferencing	1.00	5.00	3.0556	1.10997	3	4
2	Merger or consolidation	1.00	4.00	2.0556	1.10997	2	1
3	Choosing the right business model	1.00	4.00	2.0800	.90749	2	2
4	Acqusion of stocks	1.00	4.00	2.3333	.97014	2	3
5	Acqusion of resources	1.00	3.00	2.3889	.69780	2.5	3
6	Collaborative partnership	1.00	4.00	2.4444	1.09664	2	2
7	Raising more equities (increasing, issuing rights)	1.00	4.00	2.5000	.85749	2.5	3
8	Product or service diversification	1.00	4.00	2.7778	.87820	3	3
9	Increase in the cost of a mortgage loan	1.00	4.00	2.8333	.85749	3	3
10	"Liquidation of investments in an early	1.00	5.00	2.8889	1.18266	3	3
11	Use low debt ratio	2.00	5.00	3.1667	.61835	3	3
12	Stable with low payout ratios	1.00	5.00	3.1667	1.04319	3	3
13	Develop human resource capabilities	2.00	5.00	3.2778	.89479	3	4
14	Using Retaining earnings	2.00	5.00	3.2778	.89479	3	3

	for as a funding source						
15	Disinvestment in areas of weakness	2.00	5.00	4.0000	.76696	4	4
16	Investment of areas of strength	3.00	5.00	3.6667	.68599	4	3

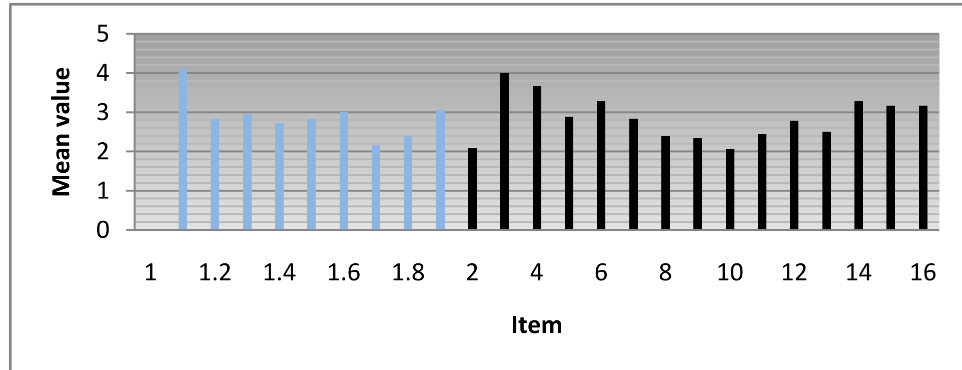

Figure 4.5.2: corporate strategies used during and post crisis period

Above analysis shows that how the construction organizations are surviving with the crisis. Reducing the cost, Investment of areas of strength, disinvestment in areas of weakness, using retaining earnings, stable with payout ratios and use low debt ratios are highly implemented strategies of the crisis period. According to the past researches, retrenchment and investment strategies have been used during a crisis period. Under retrenchment strategies it includes with cutting operation cost, divestment of the business and reduction in employees. Under investment strategies it includes with expenditure on innovation and market diversification. Although Darrel (2001) has found that product diversification is a major strategy, this research results shows that it is used in average level by Sri Lankan corporate construction organizations. Also result is confirming that Sri Lankan construction organizations are stable with low payout ratio in a crisis period.

4.5.3 Corporate strategies used during growth period

Table 4.5.3: Corporate strategies used during growth period

Item nr	Item	Minimum	Maximum	Mean	Std. Deviation	Median	Mode
1	Merger or consolidation	1.00	5.00	2.17	1.38	1.5	1
2	Leasing or hire purchase of new machineries and equipment's	1.00	4.00	2.72	0.89	3	3
3	Changing business model / procumnet method	1.00	4.00	2.72	0.96	3	3
4	Acqusion of stocks	2.00	4.00	2.94	0.64	3	3
5	Collaborative partnership	1.00	5.00	2.94	1.21	3	3
6	Acquision of resources	2.00	5.00	3.22	0.86	3.5	4
7	Product or service diversification	1.00	5.00	3.28	1.32	3	3
8	Introducing new products to market	1.00	5.00	3.39	1.04	3.5	4
9	Stable with high payout ratios	2.00	4.00	3.50	0.55	3	3
10	Launching new market	3.00	5.00	3.67	0.77	3.5	3
11	Develop human resource capabilities	2.00	5.00	3.72	0.83	4	4
12	Raising more equities	1.00	5.00	3.78	0.88	4	4
13	Investment in areas of strength	2.00	5.00	4.06	0.87	4	4

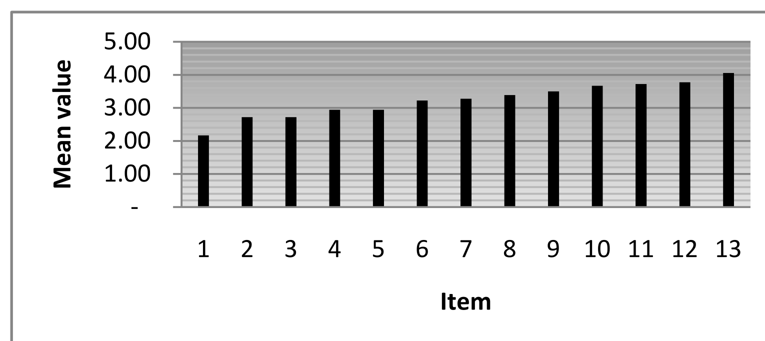

Figure 4.5.3: Corporate strategies used during growth period

Above analysis shows that how the construction organizations are acting during the economic growth period. As per the analysis, it shows that the organization attempt to increase their strength and power of the company during this period. They are trying to increase the strength of the company by investment in the new strength area, raising more equities, develop human resource capabilities, launching new markets and stable with high payout ratios. Research findings are confirming that Sri Lankan corporate construction organizations are stable with high payout ratio during the economy growth.

4.6 Objective Three:

The Objective three, which is to find the relationship between organization performance and financial structures, was achieved using Question 13 -15. It was identified the indicators for measuring organizations' performance and these indicators are used to find the relationship between financial structure and organizations' performance.

4.6.1 How is the important of capital structure as a measure of corporate governance?

Table 4.6.1: Importance of capital structure

	Minimum	Maximum	Mean	Std. Deviation	Median	Mode
Impotency	3.00	5.00	4.17	0.71	4.00	4.00
Valid N	21					

According to literature review it was identified that the capital structure as a measure of corporate governance. It has been confirmed through this analysis. This table shows that the capital structure is a more important measure of corporate governance.

4.6.2 How is the significant of following measures on measuring on organizations' performance?

Table 4.6.2: Significant measures on corporate organizations' performance

Item nr	Item	Minimum	Maximum	Mean	Std. Deviation	Median	Mode
1	Shareholders' funds / Total Assets	2.00	4.00	2.94	0.73	3	3
2	Turnover / Assets	2.00	4.00	3.00	0.59	3	3
3	Volume of works growth rate	1.00	4.00	3.00	0.84	3	3
4	Assets / Equity	2.00	4.00	3.06	0.73	3	3
5	Current ratio	2.00	5.00	3.11	0.76	3	3
6	Economic Value Added	1.00	5.00	3.33	1.19	4	4
7	Return on Debt	2.00	5.00	3.39	0.78	3	3
8	Debt/Equity	3.00	5.00	3.39	0.61	3	3
9	Earnings Before Interest After Taxes	2.00	4.00	3.39	0.70	3.5	4
10	Return on assets	3.00	5.00	3.61	0.70	3.5	3
11	Return on Capital	3.00	5.00	3.67	0.59	4	4
12	Liabilities/Asset	2.00	5.00	3.72	0.83	4	4
13	Debt ratio (Debt/Assets)	2.00	5.00	3.78	0.81	4	4
14	Earnings per Share	3.00	5.00	4.06	0.73	4	4
15	Return on equity	3.00	5.00	4.11	0.58	4	4
16	Profitability (Profit before tax and interest /Total revenue)	2.00	5.00	4.17	0.92	4	5
17	Profitability (Profit after tax /Total revenue)	3.00	5.00	4.28	0.67	4	4
18	Return on investment	3.00	5.00	4.39	0.61	4	4

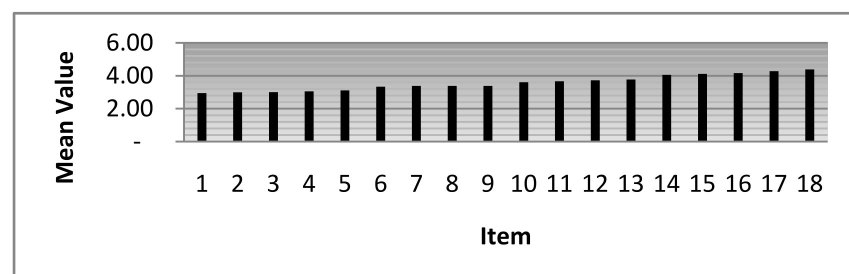

Figure 4.6.1: Significant measures on organizations' performance

This table shows that the how the financial measures use for measuring the organizations' performance. It is expressing that return on investment, profitability ratio, return on equity and earnings per share are the popular financial techniques for measuring the performance of construction organizations.

4.6.3 How is the importance of following factors which are the determination of corporate organizations' performance

Table 4.6.3: Factors which determines of Organizations' Performance

Item nr	Item	Minimum	Maximum	Mean	Std. Deviation	Median	Mode
1	Return through diversification	1.00	4.00	2.72	0.83	3	3
2	Account receivable	1.00	5.00	2.78	1.06	2.5	2
3	Shareholders' funds / Total Assets	1.00	5.00	2.78	1.00	3	2
4	Current ratio	2.00	4.00	2.89	0.58	3	3
5	Income receivable	1.00	5.00	3.00	1.08	3	3
6	Expecting loan amount	1.00	4.00	3.00	0.97	3	3
7	Outstanding of the company	1.00	5.00	3.33	1.08	3	3
8	Projects in hand	2.00	5.00	3.39	1.04	3	3
9	Earnings Before Interest After Taxes (EBIAT)	2.00	5.00	3.44	0.78	3.5	4
10	Secured workload of the company	3.00	5.00	3.83	0.62	4	4
11	Earnings per Share	2.00	5.00	3.89	0.83	4	4
12	Turnover of the company	3.00	5.00	4.22	0.73	4	4

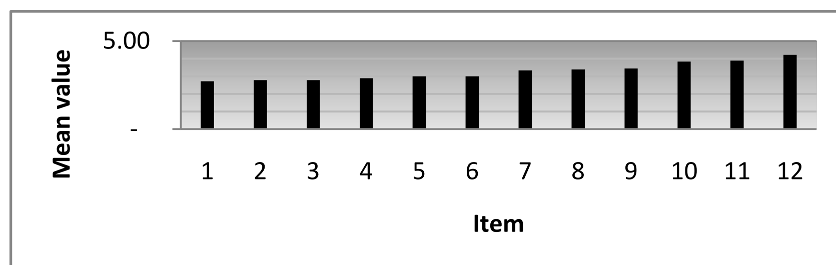

Figure 4.6.3: Factors which determines of Organizations' Performance

Also further it is confirmed that some important financial tools for determine the organizations' performance. Thereby turnover of the company, earning per share, secured work load and EBIAT are highly usage determines for measuring organizations' performance. Therefore they can be used as organizations' performance indicators as financially.

4.7 Analysis of Corporate Performance Management

Based on above objective three questions it was identified that the significant factors of measuring organizations' performance. Also the significant factors for measuring capital structure were identified through literature review. Among significant factors it has been selected only data available factors in Sri Lankan construction corporate construction organizations. In this section, hypothesis on corporate performance measures are constructed and they are tested with data collected from annual report of seven corporate construction companies in Sri Lanka.

4.7.1 Relationship among Corporate Performance Measures

Correlation analysis was carried out to identify the relationship between capital structure and organizations' performance.

Capital Structure	Total debt (TD) / Total Equity (TE)
	Total debt (TD) / Total Asset (TA)
	Long term debt (LD) / Total Asset (TA)
Organizations' Performance	Return on equity (ROE)

	Return on assets (ROA)
	Net Profit margin (NP)
	Earnings per share (EPS)

Figure 4.7.1: Capital Structure and organizations' Performance indicators

4.7.2 Hypotheses

The following hypothesis is formulated for the study.

Hypothesis

In this section the following hypothesis are constructed to theoretically examine corporate performance measures and confirm the relationship among the measures. Accordingly hypothetical relationship between organizations' performance and capital structure are derived.

Hypothesis testing

H1 - There is a significant negative relationship between Debt/Equity and ROE

H2 - There is a significant negative relationship between Debt/Equity and ROA

H3 - There is a significant negative relationship between Debt/Equity and NP

H4 - There is a significant negative relationship between Debt/Equity and EPS

H5 - There is a significant negative relationship between Debt/ Assets and ROE

H6 - There is a significant negative relationship between Debt/ Assets and ROA

H7 - There is a significant negative relationship between Debt/ Assets and NP

H8 - There is a significant negative relationship between Debt/Assets and EPS

H9 - There is a significant negative relationship between LD/Assets and ROE

H10 - There is a significant negative relationship between LD/Assets and ROA

H11 - There is a significant negative relationship between Debt/Asset and NP

H12 - There is a significant negative relationship between Debt/Asset and EPS

4.7.3 Descriptive analysis

Table 4.7.1: Descriptive analysis

	Minimum	**Maximum**	**Mean**	**Std. Deviation**
TD/TE	.03	7.29	1.0024	1.20341
TD/TA	.01	.77	.3209	.20258
LD/TA	.00	.45	.1100	.09494
ROE	.00	.43	.1389	.10331
ROA	.00	.29	.0907	.07779
NP	.00	1.14	.2843	.30692
EPS	.00	30.42	3.4902	6.43269
Valid N 46				

The descriptive statistics show that over the period under study, the managers' performance measured by return on equity, return on assets, net profit and earnings per share averaged 13.89%, 9.07%, 28.43% and 349.02% respectively. The debt/equity ratio stood at 1.0024% and total debt to total assets averaged 32.09% and long term debt to assets averaged 11%. The maximum and minimum values for debt/equity ratio indicate that the debt/equity composition varies substantially among the corporate construction companies in Sri Lanka. Also it is highlighted that the Sri Lankan construction organizations are highly geared institutions due to debt percentage is greater than equity shares percentage.

4.7.4 Correlation analysis

Table 4.7.1: Correlation analysis

		TD/TE	TD/TA	LD/TA	ROE	ROA	NP	EPS
TD/TE	Pearson Correlation	1	.688**	.622**	-.014	-.432*	-.674**	.286
	Sig. (2-tailed)		.000	.000	.925	.014	.005	.054
TD/TA	Pearson Correlation	.688**	1	.554**	-.030	-.441**	-.691**	.502**
	Sig. (2-tailed)	.000		.000	.842	.002	.000	.000
LD/TA	Pearson Correlation	.622**	.554**	1	-.001	-.260	-.280	.171
	Sig. (2-tailed)	.000	.000		.993	.081	.059	.256
ROE	Pearson Correlation	-.014	.-030	-.001	1	.835**	.363*	.622**
	Sig. (2-tailed)	.925	.842	.993		.000	.013	.000
ROA	Pearson Correlation	-.432*	-.441**	-.260	.835**	1	.697**	.220
	Sig. (2-tailed)	.014	.002	.081	.000		.000	.141
NP	Pearson Correlation	-.674**	-.691**	-.280	.363*	.697**	1	-.211
	Sig. (2-tailed)	.005	.000	.059	.013	.000		.158
EPS	Pearson Correlation	.286	.502**	.171	.622**	.220	-.211	1
	Sig. (2-tailed)	.054	.000	.256	.000	.141	.158	

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

The above table indicates the relationship between variables used in the study. It shows that all variables show the negative relationship except association with earning per share.

- It shows the negative relationship between debt to equity and Return on assets. The correlation is -.432 at 95% significant level. The co efficient of variable (r^2) is .1866 and it says that 18.66% of variance in the capital structure (TD/TE) is accounted by Return on assets.
- It shows the negative relationship between debt to equity and Net Profit. The correlation is -.674 at 99% significant level. The co efficient of variable (r^2) is .454 and it says that 45.43% of variance in the capital structure (TD/TE) is accounted by Net Profit.
- It shows the negative relationship between debt to assets and ROA. The correlation is -.441 at 99% significant level. The co efficient of variable (r^2) is .1945 and it says that 19.45% of variance in the capital structure (TD/TA) is accounted by Net ROA.
- It shows the negative relationship between debt to assets and Net Profit. The correlation is -.691 at 99% significant level. The co efficient of variable (r^2) is .4774 and it says that 47.74% of variance in the capital structure (TD/TA) is accounted by Net Profit.
- It has a weak negative relationship between capital structure and ROE and it has strong positive relationship between TD/TA and EPS and it has weak positive relationship between TD/TE and EPS and LD/TA and EPS. The correlation is .502 at 95% significant level between TD/TA and EPS.

4.7.5 Hypothesis testing

Table 4.7.3: Hypothesis testing

NO	Hypothesis	Results	Tools
H1	There is a significant negative relationship between Debt/Equity and ROE	**Rejected**	Correlation
H2	There is a significant negative relationship between Debt/Equity and ROA	**Accepted**	Correlation
H3	There is a significant negative relationship between Debt/Equity and NP	**Accepted**	Correlation
H4	There is a significant negative relationship between Debt/Assets and EPS	**Rejected**	Correlation
H5	There is a significant negative relationship between Debt/ Assets and ROE	**Rejected**	Correlation
H6	There is a significant negative relationship between Debt/ Assets and ROA	**Accepted**	Correlation
H7	There is a significant negative relationship between Debt/ Assets and NP	**Accepted**	Correlation
H8	There is a significant negative relationship between Debt/Assets and EPS	**Rejected**	Correlation
H9	There is a significant negative relationship between LD/Assets and ROE	**Rejected**	Correlation
H10	There is a significant negative relationship between LD/Assets and ROA	**Rejected**	Correlation
H11	There is a significant negative relationship between Debt/Asset and NP	**Rejected**	Correlation
H12	There is a significant negative relationship between Debt/Asset and EPS	**Rejected**	Correlation

As per the correlation analysis, it has analyzed the hypothesis testing to find the relationship between corporate performance management and the capital structure. As per the correlation analysis it shows that there are negative relationships between Debt/Equity and ROA, Debt/Equity and NP, Debt/ Assets and ROA and Debt/ Assets and NP at the 90% and 95% significant level. Also it shows that there are very weak positive relationship between TD/TA and EPS, TD/TE and considerable positive

relationship between EPS and LD/TA and EPS. But hypothesis was created for negative relationship.

4.8 Summery

The analysis was carried out for finding the relationship between organizations' performance and capital structure. It was analyzed by three objectives. As first objectives it was found that the organizations' behavior with different financial arrangements. According to analysis, equity shares and long-term loans are the most common financial arrangements. When selecting the capital structure organizations' are more concern about project cost, cost related factors and risk factors of the project. Also it was found that ROI, Cost of debt, Profitability ratio and IRR are popular financial techniques during the selection of financial structure. Construction organizations financial strength is vary with the economic situation of country and global. It was found that how organizations' change their strategies with the different economic situations. During the crisis they change their strategies as reducing cost, deinvestment in areas of weakness, stable with low payout ratio and use low debt ratio. Also it was found that commonly used financial strategies which are investment in areas of strength, raising more equities, stable with high payout ratios during an economic growth. As third objective it was found that the relationship between organizations' performance and capital structure. Organizations'' performance indicators were found by questionnaire survey and measurements for capital structure were identified through literature review. It has negative relationship between organizations' performance indicators and capital structure except relationship between earning per share. Accordingly measures on corporate performance management were hypothetical examined and tested in data analysis to confirm the relationship between organizations' and capital structure.

CHAPTER 5

CONCLUSION

5.1 CONCLUSION AND RECOMONDATION

The construction industry in the 21st century is developing with significant changes with construction work force, globalization, and growth of the organization, different management system and better client solution. It has increased the corporate organization structure in construction industry due to risk and the cost. It is mainly advantage to minimize the risk and cost because of limited liability, enhanced creditability, unlimited growth, unlimited shareholders and tax advantages. Mainly there are three corporate functions which are investments, financing and dividend decisions. Among these decisions this research has focused on the financial decisions of construction organizations in Sri Lanka. Within last years it has shown different patterns in Sri Lankan economy. The organizations' financial decisions have changed with these economical cycles.

Strong management system is highly affected for the organizations performances. The company performance is changing with the corporate strategies which use according to the situations. This research has been focused to identify the relationship between performance and capital structure of the construction corporate organizations. It has been identified with three major objectives which are how managers motivate with the different financial arrangements, financial diction making under different economic conditions and to find the relationship between organizations' performance and financial structures. Literature review, Questionnaire survey and secondary data have been carried out to achieve above three objectives.

Through the literature review it was found that sources of finance, strategies during economic down and economic growth. Although literature findings show that short term loan are popular in the construction industry as per the analysis it says that organizations are highly prefer to select long term loan and equity shares for the

arrangement of the capital structure in Sri Lankan Construction corporate organizations. Further it shows that their financial decision on capital structure is depending on cost and risk related factors. Also it shows that the generally, the organizations use various financial techniques for their financial arrangement as according to the situation. Among these factors it shows that return on Investment, Cost of debt, IRR and Profitability ratios are commonly use for their selection.

The second objective is how the financial decisions change with the different the economical situations. They are mainly using strategies which are reducing cost, deinvestment areas of week, Investment on strength area, using retaining earnings for as a funding source and stable with low payout ratios. Also during the economic growth managers are acting to increase their market value. They are using corporate strategies which are investment in the new strength area, raising more equities, develop human resource capabilities, launching new markets and stable with high payout ratios. According to the results organization are not willing to issues shares and use high debt at the economic down. Therefore it can be concluded that capital structure is arranged with retained earnings, less equities and less debt in economic down. The issuing equity is in average level in that period. Also the capital structure is arranged with equity shares and long term loan in an economic growth and also they are surviving with high payout ratio in this period.

The third objective is to find out the relationship between performances and financial structure in corporate construction companies in Sri Lanka. It was found through correlation analysis between organizations' performance indicators and capital structures indicators. While the organizations' performances are indicating through ROE, ROA, net profit margin and earnings per share and the capital structure is indicted by equity shares, assets and debt. As per the analysis it shows that debt percentage is greater than equity shares percentage. The mean value of debt/equity ratio is 1.0024%. It shows the fact that corporate construction companies more on debt rather than equity. Therefore it is indicated that Sri Lankan Corporate construction organizations are geared institutions as average level. The R values were found to be significant and negative for association between debt/equity and ROE, debt equity and net profit, debt to total assets and ROA and debt to assets and

net profit. It can be concluded that there is a significant relationship between organizations' performance and financial structure.

Construction industry plays a major role in the economic development in a country. Therefore construction organizations are crucial places in a country. Selection of capital structure is a critical decision. This selection is necessary for the profit determination of firms. Therefore organizations should make the financing decision prudently to get a competitive advantage in the industry. The current research findings can be concluded as fallows,

- Long term and Equity shares are the major sources of finance in Sri Lankan Construction Corporate organizations.
- The organizations' decision on capital structure is mainly based on Project cost and risk related factors and it is analyzing ROI, Cost of Debt, IRR and profitable ratios.
- While during an economic down, the companies are arranging their capital structure with retained earnings, less equities and less debt, it is arranged with equity shares and long term loan in an economic growth.
- Companies stable with high payout ratio in the economic growth and companies have a low payout ratio in the economic down.
- The Sri Lankan corporate construction organizations are geared institutions in average level.
- There is a significant relationship between capital structure and organizations' performance. So organizations should make good capital structure decision to earn profit and carry on their business successful

This research is useful for the selection of sources of finance and to identify the strategies in various economic situations. Also, because there is a significant relationship between organizations' performance and capital structure managers should be highly aware when the selection of capital structure.

In the current research measures from capital structure were theoretically examined and tested as part of corporate performance management in construction companies.

5.2FURTHER RESEARCH

- A study can be carried out to find the relationship between Capital structure and managers performances.
- A research can be conducted to examine the capital structure and organizations performances in the no listed construction organizations.
- Only some methods are used to test hypothesis such as correlation and descriptive statistics. Further the researcher can add much variety of techniques to generalize their findings such as ANOVA, regression and etc.

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APPENDIX A : Questionnaire

Overview and Data Collection procedure

The aim of the dissertation focuses to identify relationship between performances and financial structure in companies, firms, organizations in Construction Industry in an economic uncertainty and fluctuation. The objectives are summarized below as,

1. To measure how organizations are motivate with the different financial arrangements
2. To asses level of organizations' performance and financial decision making under different economic conditions.
3. To measure the relationship between organizations' performance and financial structures.

This questionnaire will be focused on identifying how organizations motivate with the different financial arrangements and what are the financial decisions under different economic conditions.

The questionnaire will be distributed among managers who are applying corporate financial techniques and who are working in client, consultant and contracting organization in the construction industry.

Researcher
A.V.Sashika Aluthwaththa
Msc in Project Management
Department of Building Economics
University Of Moratuwa
E -mail : vidulsashika@gmail.com

Dissertation Supervisor
Dr. Kapila Devapriya
Department of Building Economics
University Of Moratuwa
E -mail : kakdevapriya@uom.lk

Section A: Demographic Characteristics

Q1. Your Name (Optional): ....

Q2. Type of your current organization: ....

Q3. Your designation/position: ....

Q4. Your experience in the construction Industry: ………..(Number of years)

Q5. Type (s) of work you are predominantly experienced in:

☐ Design ☐ Client ☐ Contracting

Section B: Financial Structure

Q6

What are the important sources of finance in your organization capital structure?
(Please select the relevant value from each combo box)

No	Sources of finance	Scale - 5 Extremely Important 3 Moderately Important 1 Not Important at all
1	Equity Shares	
2	Preference shares	
3	No par stocks	
4	Differed shares	
5	Debentures	
6	Bonds	
7	Depreciation funds	
8	Retaining earnings	
9	Short term loan	
10	Overdraft	

11	Long term loan	
12	Commercial mortgage	
13	Leasing	
14	Hire Purchase	
15	Grants	
16	Venture capital	
	Other	

Q7 When start a new project what are the common financial methods?

(Please select the relevant value from each combo box)

No	**Sources of finance**	**Scale - 5 Highly use 3 Moderately use 1 Not use at al**
1	Equity Shares	
2	Preference shares	
3	New Shares issues (as equity or preference)	
4	Right issues (as equity or preference)	
5	No par stocks	
6	Differed shares	
7	Debentures	
8	Bonds	
9	Depreciation funds	
10	Retaining earnings	
11	Short term loan	
12	overdraft	
13	Long term loan	

14	Commercial mortgage	
15	Leasing	
16	Hire Purchase	
17	Grants	
18	Venture capital	
19	Joint venturing. Partnering	
	Other	

Q8 What are the significant factors affecting on selection of financial arrangement on a new project in your organization?

(Please select the relevant value from each combo box)

No	**Factors**	**Scale - 5 Highly affect** **3 Moderately affect** **1 Not use at all**
1	The stage of development of the business	
2	The state of the economy	
3	Project Cost	
4	How quickly the money is needed	
5	The cheapest option available	
6	The amount of risk involved in the reason for the cash /risk involvement on the project	
7	The length of time of the requirement for finance	
8	The capital composition of the business (Gering Condition)	
9	Pay out ratio	
10	Project Complexity	
11	Government rules and regulations	

12	Required technology for the project	
13	Required material, machineries and equipments	
14	Floatation costs (those expenses which are incurred while issuing securities (e.g., equity shares, preference shares, debentures, etc.). These include commission of underwriters, brokerage, stationery expenses, etc)	
15	Flexibility of the capital structure (if need be, amount of capital in the business could be increased or decreased easily)	
16	Controlling power on shareholders	
17	Capital Structure of Other Companies (similar)	
18	Availability of going for joint venture or partnering	
19	Cost of different financing	
	Other	

Q9 What are the ratios, techniques using for selection of financial structure for a new project in your organization?

(Please select the relevant value from each combo box)

No	**Techniques**	**Scale - 5 Highly use 3 Moderately use 1 Not use at all**
1	Debt Service Coverage Ratio (tells us about the cash payments to be made (e.g., preference dividend, interest and debt capital repayment) and the amount of cash available.)	
2	Return on Investment	
3	Profitability ratios (Profit before tax and interest / Total revenue)	
4	Return on equity	
5	Debt Ratios (Debt/Assets)	

6	Overall Leverage (Total debt / Total assets)	
7	Activity ratios	
8	Long term leverage (Long term debt / Total Assets)	
9	Short term debt (Short term debt / Total Assets)	
10	Long term debt (Long term debt / Total Debt)	
11	Total Liabilities / Total Assets	
12	Total Debt / Capital	
13	Internal Rate of Return	
14	Present value analysis	
15	Cost of Debt	
16	Tax Rate	
17	Cost of Equity Capital	
18	Pay out ratio	
	Other	

Section C : Organizations' Performance

Q10

What are the major corporate strategies which you have applied in recent years in your organization ?

(Please select the relevant value from each combo box)

No	Strategies	Scale - 5 Highly use 3 Moderately use 1 Not use at all
	Growth strategies	
1.1	Consolidation	
1.2	Launching New type of projects	
1.3	Launching New market	
1.4	(Any)	
2	Stability Strategies foe existing business	
2.1	Jointing with existing clients with existing type projects	
2.2	Maintaining market share	
2.3	Sustaining the current business operations	
2.4	(Any)	
3	Renewal strategies (During declining stage)	
3.1	Retrenchment strategies (involve cutting operating costs and divestment of non-core assets)	
3.2	Investment Strategies (innovation and market diversification)	
3.3.	(Any)	
4	Financing strategies	
4.1	Debt rescheduling	
4.2	Raising equities	
4.3	(Any)	
5	Acquisition	
6	Merge the company	
7	Capital structure decision changing	
8	Fallowing a specific Business Model	
	Other	

Q11 What are the financial strategies used during and post crisis period?
(Please select the relevant value from each combo box)

No	Strategies	Scale - 5 Highly use 3 Moderately use 1 Not use at all
1	Reduce cost	
	Reducing Fixed cost	
	Reducing nr of employees	
	Selling extra machineries, equipments	
	Reduction of availability of credit	
	Reducing litigation cost through proper contract arrangement	
	Cuts on a wide range of expenditure including RandD	
	reduced use of consultants and outsourced services	
	reduced training budgets	
	reduced travel expenses and greater use of teleconferencing	
2	Choosing right business model	
3	Disinvestment in areas of weakness	
4	Investment of areas of strength	
5	Liquidation of investments in an early phase of a downturn	
6	Develop human resource capabilities	
7	Increase in the cost of mortgage loan	
8	Acqusion of resources	
9	Acqusion of stocks	
10	Merger or consolidation	
11	Collaborative partnership	
12	Product or service diversification	

13	Raising more equities (increasing issuing rights)	
14	Using Retaining earnings for as funding source	
15	Stable with low payout ratios	
17	Use low debt ratio	

Q12 What are the financial strategies used growth period ?
(Please select the relevant value from each combo box)

No	**Strategies**	**Scale - 5 Highly use 3 Moderately use 1 Not use at all**
1	Raising more equities (increasing issuing rights)	
2	Stable with high payout ratios	
3	Changing business model / procumnet method	
4	Investment of areas of strength	
5	Develop human resource capabilities	
6	Acqusion of resources	
7	Acqusion of stocks	
8	Merger or consolidation	
9	Collaborative partnership	
10	Product or service diversification	
11	Introducing new product to market	
12	Leasing or hire purchase of new machineries and equipments	
13	Launching new market	

Section D : Corporate Governance Measures

Q13
How is the important of capital structure as a measure of corporate governance ?

Scale - 5 Extremely Important
3 Moderately Important
1 Not Important at all

Q14 How is the significant of fallowing measures on corporate governance ?
(Please select the relevant value from each combo box)

No	Measurements	Scale - 5 Extremely Important 3 Moderately Important 1 Not Important at all
1	Return on investment	
2	Return on equity	
3	Return on assets	
4	Return on Debt	
5	Return on Capital	
6	Assets / Equity	
7	Turn over / Assets	
8	Debt ratio0 (Debt/Assets)	
9	Debt/Equity	
10	Liabilities/Asset	
11	Share holders' funds / Total Assets	
12	Current ratio	
13	Earnings per Share	
14	Earnings Before Interest After Taxes (EBIAT)	
15	Economic Value Added	
16	Volume of works growth rate	
17	Profitability (Profit before tax and interest /Total revenue)	
18	Profitability (Profit /Total revenue)	

APPENDIX B : Data collection

Objective One and Two

B Q6 What are the important sources of finance in your organization capital structure?

Company	Manager	Variables															
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	1	4	1	1	1	1	1	3	4	3	3	5	1	4	1	3	3
1	2	5	2	1	1	1	1	1	5	5	3	5	3	5	3	1	1
1	3	4	1	1	1	1	1	2	4	4	2	4	1	3	3	1	3
2	1	3	1	1	1	1	1	3	3	4	4	4	1	4	4	1	1
2	2	5	1	1	1	1	1	1	4	4	4	4	2	4	3	2	1
2	3	4	1	1	1	1	1	3	4	4	4	5	1	4	3	1	1
3	1	5	2	1	2	1	1	1	2	3	3	4	2	3	3	1	1
3	2	5	1	1	1	1	1	3	4	3	2	5	1	4	1	2	2
3	3	5	2	1	1	1	1	2	3	4	3	4	1	4	2	1	1
4	1	5	1	1	1	1	1	1	3	3	5	5	2	4	3	1	1
4	2	4	1	1	1	1	1	1	4	4	4	5	1	3	2	1	1
4	3	5	1	1	1	1	1	1	4	3	3	5	1	4	2	1	1
5	1	4	2	1	1	2	1	1	3	3	3	5	3	4	3	1	2
5	2	5	1	1	1	1	1	1	5	3	3	4	2	4	3	1	1
6	1	4	1	1	1	1	1	2	3	3	4	4	3	3	2	1	1
6	2	5	1	1	2	2	1	2	4	2	2	3	2	3	1	1	2
7	1	4	1	1	1	1	1	2	3	4	3	4	1	4	4	1	1
7	2	4	1	1	1	1	1	2	3	3	3	3	1	4	2	1	1

B Q7 When starts a new project what are the common financial methods?

Company	Manager	Variables																		
		1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**
1	1	4	1	4	4	1	1	1	1	3	5	1	1	5	1	3	1	1	2	4
1	2	5	3	5	5	1	1	1	1	1	5	3	3	5	3	3	4	1	1	5
1	3	5	1	3	4	1	1	1	1	2	4	2	3	5	1	3	1	1	2	4
2	1	3	1	1	2	1	1	1	1	2	3	3	3	4	2	4	4	1	1	3
2	2	3	1	1	1	1	1	1	1	1	3	4	4	3	1	3	3	1	1	3
2	3	4	1	1	3	1	1	1	1	2	3	3	4	5	2	4	4	1	1	4
3	1	5	2	2	3	1	1	1	2	3	2	3	3	3	2	3	3	1	1	3
3	2	4	1	4	3	1	1	1	1	4	5	2	3	5	1	4	1	2	2	4
3	3	5	1	3	3	1	1	1	1	3	4	4	3	5	2	3	2	1	1	3
4	1	3	1	1	1	1	1	1	1	3	3	3	3	5	3	3	3	1	1	3
4	2	4	1	1	1	1	1	1	1	2	4	4	3	5	2	3	4	1	1	4
4	3	4	1	1	1	1	1	1	1	3	3	3	4	5	1	4	3	1	1	4
5	1	3	1	3	2	1	1	1	1	2	4	3	4	4	2	3	3	1	1	4
5	2	3	1	1	1	1	1	1	1	3	3	3	3	5	2	3	3	1	2	3
6	1	3	1	1	1	1	1	1	1	3	4	3	4	4	1	3	4	1	1	4
6	2	3	2	3	3	1	1	3	1	1	4	5	1	3	1	1	4	1	1	1
7	1	3	1	1	1	1	1	1	1	2	3	4	4	4	1	3	4	1	1	1
7	2	3	2	2	2	1	1	1	1	2	3	5	4	3	2	3	4	1	1	2

B Q8 What are the significant factors affecting on selection of financial arrangement on a new project in your organization ?

Company	Manager	Variables																		
		1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**
1	1	4	1	1	3	4	5	2	4	1	3	4	3	3	1	1	1	1	4	4
1	2	5	1	2	5	5	4	5	4	4	4	3	3	1	2	4	5	3	5	4
1	3	5	1	3	4	5	3	3	1	2	1	4	1	4	3	3	3	3	3	1
2	1	4	2	1	4	4	5	5	3	3	4	4	4	4	3	4	3	4	4	4
2	2	3	2	2	5	3	3	4	2	2	3	3	3	3	2	2	4	2	3	3
2	3	5	2	3	5	4	4	4	3	3	4	4	3	3	3	3	4	3	4	3
3	1	3	3	1	4	5	5	4	5	3	4	5	4	4	4	4	5	4	4	4
3	2	3	3	2	4	5	5	3	5	2	3	3	3	3	3	3	4	5	4	3
3	3	4	3	3	4	5	4	4	4	3	3	3	3	3	2	2	3	3	4	3
4	1	5	4	1	5	3	3	3	3	3	3	3	5	5	1	3	3	3	3	3
4	2	4	4	2	4	5	4	4	3	2	2	3	4	4	1	2	4	2	4	3
4	3	4	4	3	4	4	5	4	2	3	1	2	3	5	2	3	3	3	4	3
5	1	3	5	1	4	5	3	4	4	3	2	2	4	5	1	2	2	2	2	3
5	2	3	5	2	5	4	2	4	3	3	2	3	2	2	3	3	3	3	4	3
5	3	4	6	1	5	5	4	3	2	2	3	2	2	4	1	3	1	3	3	2
6	1	3	6	2	5	5	4	3	3	4	3	4	3	4	1	3	3	2	3	3
6	2	4	7	1	4	4	5	4	3	3	2	2	4	4	1	3	3	2	1	3
6	3	4	7	2	5	4	5	3	4	3	2	4	4	5	2	2	3	2	2	3

B Q9 What are the ratios, techniques using for selection of financial structure for a new project in your organization?

Company	Manager	Variables																	
		1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**
1	1	4	4	4	5	3	3	1	4	2	4	3	4	5	3	5	3	3	1
1	2	5	5	4	5	4	5	4	4	4	4	4	4	5	5	5	4	5	4
1	3	3	5	5	5	3	4	3	5	2	4	2	5	5	5	5	4	5	3
2	1	4	3	4	4	3	3	3	3	3	3	3	3	4	4	4	4	3	3
2	2	2	3	3	3	2	2	2	2	2	2	2	4	3	3	3	2	2	2
2	3	4	4	4	4	3	3	2	4	2	4	3	3	4	4	3	3	4	2
3	1	3	5	5	4	4	5	4	4	4	4	5	4	4	3	5	4	4	2
3	2	5	5	3	5	4	4	1	4	2	5	3	4	5	2	5	3	3	2
3	3	4	4	4	4	3	4	3	4	3	3	3	3	4	3	4	3	3	3
4	1	3	5	4	5	3	3	1	3	3	3	3	5	5	5	5	4	3	3
4	2	4	5	5	4	3	4	2	4	2	4	4	4	5	4	4	3	4	2
4	3	3	4	4	3	3	4	3	4	3	5	3	3	4	4	4	3	3	2
5	1	4	5	3	4	3	4	4	4	2	4	5	5	4	4	4	2	3	4
5	2	3	4	4	4	4	5	5	3	4	4	4	4	4	4	5	3	4	2
6	1	4	5	4	3	3	3	3	4	3	4	4	5	3	4	4	2	4	3
6	2	3	5	5	3	3	4	3	3	4	3	5	4	3	3	4	5	4	3
7	1	4	4	4	4	3	3	3	2	3	2	3	4	4	4	4	4	3	3
7	2	4	5	4	4	4	3	4	3	3	2	4	4	3	4	4	4	4	3

C Q10 What are the major corporate strategies which you have applied in recent years in your organization?

Company	Manager	Variables													
		1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	1	4	5	4	4	2	5	5	3	3	4	3	3	4	2
1	2	3	5	5	5	3	5	1	5	3	5	3	1	3	2
1	3	3	4	3	4	3	5	3	3	3	4	3	3	4	2
2	1	1	4	3	4	4	4	3	3	4	3	3	4	3	3
2	2	1	5	5	4	4	4	4	2	3	2	1	1	1	1
2	3	3	4	4	4	3	4	3	4	4	4	3	3	4	2
3	1	2	4	5	4	5	5	3	4	3	3	4	3	2	2
3	2	4	5	4	3	3	4	5	4	3	4	4	4	3	2
3	3	3	4	4	4	4	4	3	4	3	4	3	2	3	2
4	1	3	5	5	2	3	3	5	4	3	3	2	1	3	3
4	2	2	4	4	4	4	5	4	3	4	4	3	2	4	2
4	3	2	5	3	4	5	4	3	4	3	4	1	2	3	4
5	1	2	4	3	4	3	5	3	4	3	4	4	2	4	2
5	2	4	5	3	4	3	4	3	3	3	4	3	2	4	1
6	1	3	4	4	3	4	5	2	4	3	3	1	2	1	2
6	2	1	3	3	3	4	4	4	3	3	4	1	2	3	1
7	1	1	4	3	4	3	4	4	2	4	2	2	4	2	2
7	2	2	3	3	4	4	4	3	3	3	3	2	2	3	2

C Q11 What are the financial strategies used during and post crisis period?

Company	Manager	Variables																							
		1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**
1	1	4	3	5	3	3	2	1	1	2	5	4	5	4	4	4	3	3	1	1	1	3	3	1	3
1	2	5	1	3	3	1	3	3	3	5	5	5	3	3	3	1	3	1	1	1	3	3	5	5	5
1	3	4	3	4	2	3	3	2	3	4	4	4	3	3	2	3	2	3	2	3	3	4	5	4	3
2	1	4	4	4	3	4	4	4	4	4	4	4	3	3	3	3	3	3	4	4	3	4	3	5	4
2	2	2	4	3	1	3	3	1	4	3	2	2	3	1	2	3	2	4	1	3	3	1	2	3	2
2	3	5	4	4	3	4	4	3	3	4	3	4	3	2	2	2	3	4	2	4	3	2	3	4	3
3	1	4	2	2	4	4	3	3	3	4	4	5	4	5	4	3	2	2	2	1	1	2	2	2	3
3	2	5	3	3	3	2	3	2	1	3	5	5	4	4	3	4	3	2	4	2	4	3	4	2	3
3	3	5	3	3	3	2	3	3	2	4	5	5	4	4	3	4	2	3	3	2	3	3	3	2	3
4	1	3	3	3	1	1	3	1	1	3	3	3	3	1	3	1	1	1	1	1	1	3	3	3	3
4	2	4	4	2	3	4	3	2	2	1	4	4	4	2	4	2	2	3	2	2	3	2	4	4	3
4	3	5	3	3	2	3	3	1	2	3	3	4	3	3	3	3	3	2	3	3	3	3	3	3	3
5	1	3	2	4	2	4	3	3	3	4	5	4	4	2	4	3	3	2	2	2	3	2	4	4	4
5	2	5	1	1	4	1	1	3	1	1	4	3	4	1	2	3	3	2	1	4	3	3	4	3	3
6	1	4	3	2	3	4	3	2	4	3	5	4	4	3	4	3	2	1	4	2	4	1	2	3	3
6	2	4	3	2	3	3	4	2	3	2	3	4	3	4	5	3	3	3	1	2	3	2	3	3	3
7	1	4	2	2	3	2	3	1	1	3	4	4	5	3	4	3	1	1	2	4	3	2	3	3	3
7	2	4	3	3	3	3	3	2	2	2	4	4	4	4	4	3	2	2	1	3	3	2	3	3	3

C Q12 What are the financial strategies used during growth period?

Company	Manager	Variables												
		1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**
1	1	5	2	3	4	4	4	3	1	5	1	2	2	4
1	2	5	3	4	5	5	5	3	3	5	5	5	3	3
1	3	4	3	3	3	4	5	3	4	3	5	2	2	5
2	1	4	4	4	4	4	4	4	5	4	4	4	4	4
2	2	1	3	2	3	3	3	4	1	3	3	3	4	3
2	3	4	4	3	5	4	4	3	4	4	4	3	3	4
3	1	3	3	3	4	3	4	3	3	3	5	5	3	5
3	2	4	3	3	5	4	3	2	1	3	3	3	1	5
3	3	4	4	3	4	4	4	2	3	3	3	3	3	4
4	1	3	3	1	5	3	3	3	1	1	1	3	3	3
4	2	3	4	4	4	3	2	3	2	3	3	4	2	3
4	3	4	3	3	5	3	3	2	1	3	4	3	3	3
5	1	4	3	2	4	4	3	3	1	4	5	4	3	4
5	2	4	3	1	4	2	2	2	4	3	4	1	2	3
6	1	4	3	4	5	5	4	3	1	1	2	4	3	3
6	2	4	3	2	2	5	3	4	1	1	3	4	1	3
7	1	4	4	2	4	3	4	3	2	2	2	4	4	4
7	2	4	3	2	3	4	3	3	1	2	2	4	3	3

D Q13 How is the important of capital structure as a measure of corporate governance?

Company	Manager	Importancy
1	1	4
1	2	5
1	3	5
2	1	4
2	2	3
2	3	4
3	1	5
3	2	3
3	3	4
4	1	3
4	2	4
4	3	4
5	1	4
5	2	4
6	1	5
6	2	4
7	1	5
7	2	5

D Q14 How is the significant of fallowing measures on corporate governance?

Company	Manager	Variables																	
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1	1	4	5	4	2	5	4	3	3	3	4	2	3	3	2	3	4	5	4
1	2	5	5	5	5	3	2	3	5	5	5	3	4	5	4	5	3	5	5
1	3	4	4	3	4	4	2	2	2	4	2	2	3	4	2	1	1	2	4
2	1	4	4	3	4	4	3	3	4	3	3	4	2	3	3	4	4	3	3
2	2	3	3	3	3	3	3	3	3	3	3	4	3	4	4	4	4	4	4
2	3	5	4	4	3	4	4	3	4	3	4	3	3	4	4	4	3	5	5
3	1	5	4	4	3	3	4	3	4	3	4	3	4	4	3	5	4	4	4
3	2	5	5	5	3	4	4	4	4	3	4	2	3	5	4	4	3	5	4
3	3	4	4	4	3	4	4	4	4	3	4	3	3	5	4	4	3	4	5
4	1	4	4	3	3	3	3	3	3	3	3	3	3	3	3	1	3	3	3
4	2	5	4	3	4	3	3	3	4	3	4	3	2	4	3	4	2	4	5
4	3	4	4	3	3	3	3	3	4	4	3	3	3	5	4	3	3	5	4
5	1	5	4	3	2	4	2	2	5	4	5	2	5	4	3	3	2	5	5
5	2	4	5	3	3	3	3	2	3	3	3	2	3	4	3	3	3	5	5
6	1	4	3	4	4	4	2	3	5	3	5	3	3	3	3	4	2	4	4
6	2	5	4	4	4	4	3	4	4	3	4	3	4	5	4	2	4	5	5
7	1	4	4	3	4	4	3	3	4	4	3	4	2	4	4	4	3	3	4
7	2	5	4	4	4	4	3	3	3	4	4	4	3	4	4	2	3	4	4

D Q15 How is the importance of fallowing factors which are the determination of corporate performance of your organization?

Company	Manager	Variables											
		1	2	3	4	5	6	7	8	9	10	11	12
1	1	3	3	4	5	4	4	3	3	2	2	2	3
1	2	5	4	5	4	5	5	3	3	2	3	5	4
1	3	5	4	4	2	2	1	1	1	3	3	5	4
2	1	3	4	2	2	2	3	2	4	2	2	4	4
2	2	3	3	4	3	3	3	3	4	4	3	3	3
2	3	4	4	2	2	3	3	2	4	3	3	4	4
3	1	5	5	4	4	4	4	4	3	4	3	3	2
3	2	4	4	2	2	3	2	2	4	5	4	3	3
3	3	5	4	3	2	3	3	3	3	4	2	4	3
4	1	4	3	3	3	3	3	3	3	3	3	4	3
4	2	4	3	4	2	3	4	2	2	3	3	3	4
4	3	4	4	3	3	2	3	3	3	2	3	4	3
5	1	4	5	5	3	3	4	4	3	2	3	4	4
5	2	4	4	3	2	2	2	2	1	3	3	4	5
6	1	5	4	5	4	5	5	3	2	1	3	4	4
6	2	5	3	3	4	4	5	4	3	3	4	5	2
7	1	4	4	2	1	1	3	2	4	2	2	5	4
7	2	5	4	3	2	2	3	3	4	2	3	4	3

Objective Three: Annual report analysis (2007 – 2013)

Company	Year	Capital structure			Manager Performance			
		TD/TE	TD/TA	LD/TA	ROE	ROA	Net profit	EPS
1	2007							
	2008	1.59	0.62	0.28	0.23	0.09	0.07	5.15
	2009	1.54	0.61	0.16	0.43	0.17	0.13	16.36
	2010	0.25	0.20	0.10	0.36	0.29	0.25	15.86
	2011	0.60	0.24	0.09	0.21	0.16	0.27	1.17
	2012	0.50	0.20	0.01	0.14	0.11	0.21	1.52
	2013	0.54	0.21	0.02	0.18	0.14	0.19	2.13
2	2007	0.73	0.37	0.16	0.07	0.04	0.20	0.79
	2008	0.61	0.33	0.21	0.11	0.07	0.24	1.17
	2009	0.59	0.26	0.15	0.14	0.10	0.30	1.72
	2010	0.45	0.24	0.12	0.21	0.16	0.38	0.32
	2011	0.39	0.19	0.16	0.18	0.14	0.46	0.41
	2012	1.04	0.26	0.19	0.08	0.02	0.09	0.05
	2013	0.60	0.31	0.20	0.10	0.07	0.31	0.23
3	2007	1.02	0.21	0.15	(0.58)	(0.12)	(0.22)	(6.43)
	2008	2.05	0.72	0.45	0.14	0.05	0.26	6.85
	2009	7.29	0.77	0.31	0.20	0.02	0.04	9.93
	2010	4.57	0.55	0.38	(0.20)	(0.02)	(0.03)	(6.46)
	2011	0.80	0.18	0.06	(0.07)	(0.04)	(0.09)	(2.14)
	2012	1.05	0.31	0.09	0.10	0.04	0.07	2.93
	2013	0.75	0.27	0.07	0.11	0.04	0.07	3.94

4	2007	0.75	0.35	0.14	0.04	0.02	0.09	0.60
	2008	0.77	0.38	0.09	0.04	0.02	0.08	0.73
	2009	0.68	0.11	0.08	0.08	0.08	0.72	1.54
	2010	0.39	0.10	0.08	0.10	0.09	0.84	1.38
	2011	0.21	0.14	0.06	0.29	0.25	0.93	2.15
	2012	0.48	0.17	0.06	0.03	0.03	0.48	1.28
	2013	0.37	0.19	0.06	0.01	0.01	0.26	1.47
5	2007	0.99	0.33	0.04	0.09	0.06	0.07	0.19
	2008	0.54	0.30	0.04	0.10	0.07	0.09	0.24
	2009	0.76	0.33	0.07	0.02	0.01	0.02	0.05
	2010	0.58	0.34	0.06	0.08	0.05	0.10	0.20
	2011	0.92	0.48	0.04	0.01	0.01	0.01	0.03
	2012	1.03	0.51	0.05	0.09	0.04	0.05	0.22
	2013	1.02	0.50	0.12	(0.01)	(0.01)	(0.01)	(0.02)
6	2007	0.06	0.01	0.00	0.11	0.11	0.68	0.21
	2008	0.04	0.01	0.00	0.24	0.23	1.14	0.47
	2009	0.03	0.01	0.01	0.24	0.24	0.84	0.41
	2010	0.56	0.10	0.07	0.27	0.24	0.90	0.53
	2011	0.18	0.12	0.08	0.25	0.22	0.84	0.60
	2012	0.34	0.12	0.08	0.14	0.12	0.61	0.33
	2013	0.50	0.09	0.05	0.16	0.15	0.42	0.39
7	2007							
	2008	1.62	0.62	0.03	0.10	0.04	0.03	5.35
	2009	1.45	0.59	0.03	0.14	0.06	0.04	8.05

	2010	1.92	0.66	0.10	0.15	0.05	0.06	9.20
	2011	1.29	0.56	0.16	0.27	0.12	0.12	23.98
	2012	1.41	0.59	0.10	0.35	0.14	0.12	30.42
	2013	1.67	0.63	0.11	(0.12)	(0.04)	(0.05)	(14.66)

CONSTRUCTION SECTOR SHARE PERFOREMANCE VS.COMPANIES SHARE PERFOREMANCES

Year	2007	2008	2009	2010	2011	2012	2013
Construction sector performance Indices	723.4	762.2	3206.6	4395.9	3386.1	2651.5	2799.3
Company 1 share performance	768,572,000.00	2,364,000,000.00	4,367,000,000.00	10,524,000,000.00	12,140,000,000.00	18,314,637,000.00	18,256,985,000.00
Company 2 share performance		48,439,338.00	46,561,927.00	19,553,285.00	3,551,626,072.00	3,496,756,624.00	3,850,354,544.00
Company 3 share performance		939,880,046.00	944,281,252.00	1,089,562,601.00	1,241,240,404.00	1,318,381,614.00	1,384,987,369.00
Company 4 share performance		1,059,167.00	1,181,999.00	1,363,470.00	2,122,420.00	2,042,085.00	2,725,482.00
Company 5 share performance	397,516,665.00	678,780,108.00	531,359,913.00	618,963,895.00	961,921,676.00	937,807,488.00	1,089,320,130.00
Company 6 share performance			942,452,735.00	1,605,041,581.00	2,163,829,366.00	1,982,626,160.00	1,693,494,311.00
Company 7 share performance	1,013,784,000.00	1,268,389,000.00	1,458,009,991.00	1,648,180,000.00	1,175,482,512.00	1,849,633,217.00	2,012,225,380.00