

THE DETERMINANTS OF CAPITAL STRUCTURE

FROM A

MANAGERIAL PERSPECTIVE

BY

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CONFIDENTIAL CLAUSE

DATE

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STATEMENT096160

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I would like to dedicate this dissertation to my family in Khanthararom, Si Sa Ket, Thailand.

Kingston, September 9, 2003

T. Nunta

ABSTRACT

This study ascertains financing behavior and Capital Structure determinants of a leading Jamaican corporation, Grace Kennedy Limited (GKL) in order to establish the extent to which the company follows the Static Trade-off theory (STOT), in which an optimal capital structure of the firm exists and can be derived by balancing the benefits of debt against costs associated with debt i.e. Bankruptcy costs and Agency costs and costs of underinvestment. STOT is compared with The Pecking Order theory (POT) which firm has no specific target debt ratio and capital structure is driven by the need of funds. The existence of Information Asymmetry, Signaling and relative costs associated with alternative methods and sources of funding lead the firm to have a preferred hierarchy for financing decision with the Internal Retained Earnings being preferred, followed by Debt and then Equity. GKL's financing behavior arguably follows the STOT, but more clear evidence supports the POT. The Firm has given preference toward the following funding sources and Corporate Principles, Financial Flexibility, Transactions Costs, Bankruptcy Costs, Credit Rating, Market Considerations and Timing are all seen as important fundamental factors (Determinants) in deciding about Capital Structure. Some concern is also given to Information about Asymmetry problems at international level.

However, Agency Costs, i.e. Asset Substitutions, Wealth Transfers, and Over-investment are not found to be issues of major concern, as the Firm has good governance. Tax Shield benefits have no effect on the financial manager's decisions. Also an Industry Norm is not found to be important for GKL's Capital Structure decisions. The amount of debt in the Firm's capital structure is maintained at a low level according to a conservative policy. It is also driven by corporate strategic planning, and by the availability of profitable investments taking advantage of each funding source.

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CHAPTER1: INTRODUCTION

1.1. INTRODUCTION

Capital structure issues have been a key problem of modern financial theory during the last decades. The contradiction between traditional view and modern views on the existence of an optimal capital structure has given rise to researchers looking for an ultimate answer that can be used as guideline for choosing their optimal capital structures which will maximize shareholders' value. This study seeks to examine and understand the concept of capital structure from a managerial perspective based on the two well recognized theories, the Static Trade-Off and the Pecking Order Hypothesis. This study also attempts to examine the financing behaviour of companies, how managers make capital structure decisions, and what factors and processes influence companies to make their decisions in this respect. Which theories would best describe how firms determine their financial policy in practice?

1.2. PROBLEM STATEMENT

According to academic literature reviews, an optimal capital structure does exist. To create an optimal capital structure is essential for any business entity. Decisions in this regard are important not only because of the need to maximize returns for various shareholders, but also because of the impact such decisions have on a company ability to deal with its competitive environment. MM (1958) stated on the basis of a restrictive set of assumptions (capital market is perfect) that capital structure is irrelevant to the firm value. Hence, value of the firm is unaffected by its financial mix. The authors suggested that it does not matter how the firm finances its operations. This statement has been challenged and debated among researchers because MM's propositions were based on an unrealistic set of assumptions:

1. There are no brokerage costs
2. There are no taxes
3. There are no bankruptcy costs
4. Investors can borrow at the same rate as corporations.

5. All investors have the same information as management about the firm's future investment opportunities.

6. EBIT is not affected by the use of debt.

On the basis of the above assumptions, Modigliani and Miller (1958) argued that Capital Structure is irrelevant for the value of a firm in the absence of market imperfections that occur in the real world. Examples of these are taxes, information asymmetry, transaction costs (Myers and Majluf, 1984); agency costs, (Jensen and Meckling, 1976); and cost of bankruptcy and financial distress (Myers, 1986), financial flexibility (Donaldson, 1961);

Modigliani and Miller (1963) extended their study. They suggested that firm value is independent of its capital structure except for value added by tax shield on interest payments. This implies that an "optimal" capital structure is one where capital is 100 percent financed by debt. In practice, the debt levels of corporations in the UK used only a modest amount of leverage with debt making up 25 percent of total capital. In contrast, the U.S. corporations had increased the use of debt in their capital structures from 47 percent in 1972 up to 60 percent in 1991. The two largest retailers, Federal Department Store and R.H. Macy, were forced to declare bankruptcy as the result of their excess use of debt (See Eugene, 1999). Remolona (1990) conducted a study of leverage trends in various countries. He found that firms are not financed by 100 percent of debt. German, French and Japanese firms appear to have the sharpest declines in leverage. British firms have kept their leverage from falling. As for the U.S. firms the rise in leverage was caused by different types of behaviour (i.e. some cash rich firms borrowed heavily to repurchase their stock, instead of using this debt for investing)

This evidence is at variance with MM propositions. If debt is beneficial for firms as gaining value from tax advantage, why are most companies not leveraging themselves at 100 percent debt? What would be the right proportion of debt that a company should include in its capital structure? What factors are considered by financial managers to establish the optimal capital structure of debt for the firm?

Should firms be financed by debt or equity? And how much of each would create the right mix of capital?

According to theorists, the financing behavior and approaches have been built around two theories. Firstly, a Static Trade-Off Theory (STOT) (see, e.g. Myers, 1984) explains financing activity in terms of movement towards a target capital structure, where the target is derived by balancing the tax benefits of debt financing and the costs of financial distress and bankruptcy. Secondly, the Pecking Order Hypothesis, where there is no optimal capital structure, but firms finance their investments according to relative costs of alternative methods with the internal retained earning being preferred, followed by debt and then equity. The Pecking Order Theory (POT) supported by Stewart Myers (1984), is based on the comprehensive survey by Gordon Donaldson (1964) of how corporations actually structure their financing and Myers and Majluf (1984).

The variability of results of empirical studies and the lack of agreement between researchers on the determinants of capital structure, have led to this case study which intends to ascertain more understanding on a Jamaican firm's behavior and approaches in making decisions as regards to its optimal financial capital structure, and the extent to which the firm follows the Static Trade-off theory or the Pecking Order Theory.

1.3. RESEARCH OBJECTIVES

The study intends to explore and investigate the factors and the determinants of capital structure under the following objectives:

To gain an understanding of how a major Jamaican firm behaves in making its financing decisions.

To ascertain the factors that influences the choice between debt and equity financing. (i.e., Taxes, Information asymmetry, Agency cost, Signalling and Control issue) and the kind of approach used by the company to come to a decision.

To explore and investigate the extent to which the company practices have met theory in optimal capital structure decisions.

1.4. RESEARCH DESIGN

This section gives a description of the research design. The sample, data collection method, limitations of the research and the structure of the study will be discussed.

1.4.1. Sample

Grace Kennedy and Company (GKL) is one of Jamaican largest publicly held conglomerates, with six divisions and approximately 62 subsidiaries and associated companies. GKL has a diversified range of business units spanning the sectors of finance, maritime, food trading, remittances and retail and trading. The company operates in Jamaica, the wider Caribbean, Latin America, Canada, New York and Miami. The company has been selected because access has been granted, and it possesses most of the important variables (as proposed by various researchers in their empirical studies) that can facilitate the objectives of this study.

1.4.2. Data Collection Method

Methods of collecting data involved the following: In analyzing this study a case study method is used. Exploratory research for gathering information related to capital structure decisions will be carried out. According to Holme and Solvang (1991), the secondary data is divided into two categories, i.e., internal sources and external sources. Internal sources refer to information inside the company under study. External sources refer to information outside the company.

Internal data will be taken mainly from the annual reports of Grace Kennedy Limited, from 1998 to 2002. The information from the financial annual report, company records, balance sheets, income statements and cash flow statements are analyzed within the period of 5 years' performance from 1998 to 2002, in order to obtain the picture of the company's position relating to firm's size, asset structure, profitability, growth, volatility and tangibility.

External data was collected from The University of Natal Library, and the University of The West Indies Library. Inter-library and Internet were also used to

access books, journals and articles of previous studies both theoretical and empirical for the literature review. The exploratory study will provide sufficient understanding of the determinants of financial policy decisions, to permit the use of a semi-structured questionnaire.

A semi-structured interview is used as this method allows the interviewer to gain more in-depth information as regards the rationale behind the chosen financing policy. This technique is suitable for the topics under investigation as recommended by Burton (burton@dundee.cs.uk.)

1.4.3. Procedure

- The procedure can be summarized as follows:
- Select the company listed on the JSE (Jamaica Stock Exchange).
- Computation of information given from balance sheet, income statement and cash flow statement to get the picture and trend of the company. The analysis of this information will be used to provide more insight as a basis to understand why the company selects a particular capital structure policy. (Growth opportunities, Assets structure, Profitability, Retention ratio, Return on Assets, Taxes, etc.).
- The financial ratios are compared with previous year performance and to Neal and Massy Ltd, a company in the same conglomerate industry.
- Design the questionnaire, based on the literature survey
- Write a letter via email to request for cooperation and then telephone to make an arrangement for interview.
- Conduct interview, analyse the data and interpret.

1.4.4. Limitation

- Information about some particular issues may be difficult to obtain from the respondent, as the company may be reluctant to disclose too much information, e.g., about tax planning. This would be too sensitive an issue.

- The information gathered from previous records may not be valid, as they are historical data. The information from balance sheet and income statement of the company may not indicate the real facts about items, which are considered for computation as they may be manipulated for accounting purposes.
- The results from this study will apply only for this particular company and at this particular point in time. Therefore, the findings do not necessarily apply for other companies within the same industry, because they may have different characteristics, i.e. size, profitability, earning volatility, debt capability, assets structure and so on.

1.4.5. Ethical requirement

- The procedure and purpose of the interview will be explained to the respondent
- The information will be confidential.
- The results and findings will be shared with the company

1.4.6. The Structure of the Study

The study consists of five main chapters. The first discusses the conception of the study and its background. The second chapter discusses the general theory behind capital structure decisions. This chapter presents the theory of Capital Structure, the determinants of The Static-Trade-Off and the Pecking Order Hypothesis as well as findings on how firms establish their optimal Capital Structure. The third chapter deals with Capital Structure inside an organization. In this chapter we will see how Grace Kennedy Ltd. plans and executes financing policy. The fourth chapter evaluates the gap between the theory and the company's practices in relation to the Capital Structure theories. Finally, conclusions and recommendations will follow.

1.4.7. Impact and Benefit of This Study

This study will shed light on how a major firm goes about synthesizing structure. Much work has already been carried out by comparing debt to equity ratios through cross sectional analysis or other comparisons from previous researches. There is some objection that theoretical models cannot explain how a firm should act when determining financial policy. This study will complement existing studies since we investigate important factors that determine capital structure of Grace Kennedy Limited. Further contribution will be the suggestion for Grace Kennedy Limited how the company could further improve its current capital structure by incorporating theoretical models and empirical findings.

1.5. CONCLUSION

This chapter is mainly to give an overview of the study. The main purpose of this case study is to gain insight into how firms behave in making their financing decisions related to the determinant factors and manager's approaches in deciding which type of funds to be used to finance firms' investment. Research objectives, design and limitations were also stated. The next chapter will take us through the two main theories which have been used to describe a firm's financing behaviour. The determinants of an optimal Capital Structure will be discussed including the past research findings related to these factors.

CHAPTER 2: LITERATURE REVIEW

The purpose of this chapter is to present theories concerning Capital Structure and to present empirical findings. This knowledge is necessary to understand the case study analysis. The theory will be incorporated and discussed along the lines of two theories, Static Trade Off theory and the Pecking Order Theory.

2.1. INTRODUCTION

Businesses need capital to keep their operation alive. Capital is required to finance investment in working capital, plants and machinery and so on. Financial managers must decide how their firm should raise capital. There are various source of capital available such as internal retained earnings, short-term bank debt, long-term public issues debt, common shares and preferred shares. Most firms rely on debt and equity capital and the proportion of each component of capital used by the firm characterizes the firm's capital structure. An important decision a financial manager must make is what would be the optimal proportion of debt and equity of the firm that lead the company to achieve its goal of wealth maximization. Does an optimal capital structure exist? The discussion in the literature relates to how firms determine their capital structures and centers around two models: The Trade-Off Theory (target adjusted model) and the Pecking Order Theory.

The Static Trade-Off Theory (STOT) considers the impact of taxes, and financial distress and agency cost upon capital structure decisions, in order to explain management motivations and market perceptions. Includes considering the impact on these decisions which concerns managers regarding the report requirement to access capital markets. The target adjusted model believes that there is an optimal capital structure and firms are financed in such a way as to move toward the target. Firms seek level of debts by balancing the tax benefits against costs of financial distress and bankruptcy. (see Harris and Raviv,1991).

The Pecking Order Theory (POT) believes that the optimal capital structure does not exist. Firms have preference toward internal over external source of financing

and debt rather than equity financing when internal cash flows is not sufficient to fund capital expenditure, which can be explained by three possible causes: 1) management's attempt to avoid market monitoring (Donaldson, 1961); 2) the differences in transaction costs (Myers, 1984); and 3) the existence of information asymmetry (Myers, 1984) and (Myers and Majluf(1984). The firm's leverage is determined by the strength of the firms' cash flow (Jensen, 1986).The traditional Trade-off model is useful for explaining corporate's debt levels, the Pecking Order Theory is superior for explaining capital structure changes. Combining the two theories as broad base of theory and practice will enable us to understand the determinants of the firm in making financing decision and how firms approach such decisions. (Liesz, 2000)

2.2. CAPITAL STRUCTURE THEORY AND BACKGROUND

2.2.1. MM Proposition I with No Taxes

Modigliani and Merton Miller (1958) stated that the value of the firm cannot be changed by changing the proportion or types of its capital structure. There is no capital structure that is better or worse than other capital structure. The assumptions which based this argument are explicitly or implicitly that:

- 1) There are no taxes (personal or corporate)
- 2) All corporations are in the same class of risk
- 3) Corporations use only two kinds of securities (risky equity and risk-free debt)
- 4) There is no friction in capital markets. Securities can be bought or sold immediately and without costs
- 5) Individuals can lend or borrow at a risk-free rate
- 6) Bankruptcy bears no costs
- 7) There is no growth. Cash flow streams go on forever
- 8) Information is the same for all, corporate insiders and the public
- 9) There are no agency costs. Shareholder's wealth is always maximized by the managers.

When all the above assumptions are fulfilled:

$$V_l = V_u \quad (\text{equation 2.1})$$

Where

V_l = Value of levered firm

V_u = Value of un-levered firm

This is known as M&M Proposition I, where the value of levered and un-levered firms is the same. Thus, the total value of a given firm does not depend on its Capital Structure (M&M 1958). The question arises whether or not the above assumptions are realistic enough. In this scenario investors are able to do everything that is done by the firm (called "home-made leverage"). This principle is generally accepted as the starting point of modern managerial finance. It is also thought of as one of the most important findings for corporate finance (Ross et al., 1993). Proposition I is proved by the strength of "home-made leverage". (Appendix I)

2.2.2. MM Proposition II with No Taxes

On the basis of Proposition I it follows that the return of a given portfolio containing all the debts and equities of a firm is constant (see equation 2.2.).

$$r_A = \frac{D}{D+E} * r_D + \frac{E}{D+E} * r_E \quad (\text{equation 2.2})$$

D = a firm's debts

E = a firm's equities

r_A = Return on asset is constant (whatever the Capital Structure).

Some call the above principle “Weighted Average Costs of Capital” (WACC), Copeland and Weston, 1992). From equation 2.2, MM proposition II is obtained, which can be seen in equation 2.3.

$$r_E = r_A + D/E * r_A - r_D \quad (\text{equation 2.3})$$

On the basis of the M&M Proposition II it can be concluded that Return on Equity relates positively to leverage, while risk rises simultaneously. Assuming that r_A does not change in any given Capital Structure, and that return on debt (r_D) is constant, the Return on Equity (r_E) can be calculated for the various kinds of Capital Structure. As the company's WACC (r_A) is constant (see M&M Proposition I), the value of its total capital cannot be changed. Also, on the basis of Proposition II, the rate of Return on Equity rises together with the increase of leverage. This is due to the increase of risk with leverage. If the company changes from an un-levered structure to a levered structure, the operating income is divided on a reduced amount of outstanding shares which is followed by a larger r_E . r_E increases together with risk (M&M 1958). (Figure 2.1)

Figure 2.1. MM Proposition II with No Taxes

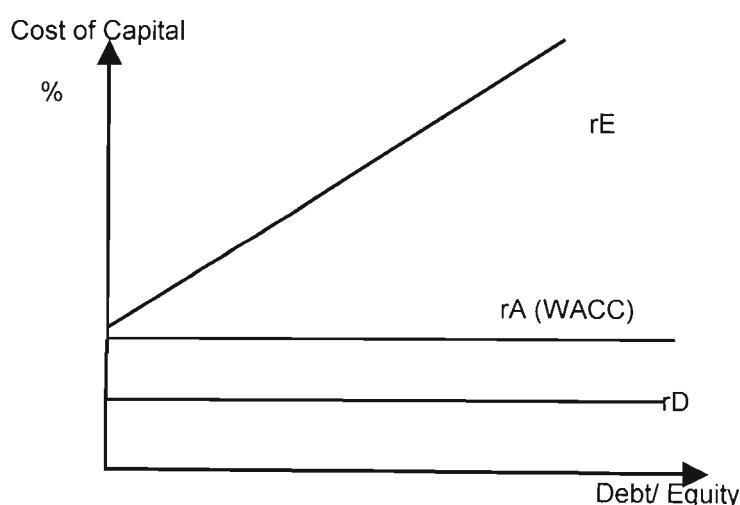


Fig. 2.1 illustrates that r_E does not influence in any way an optimal Capital Structure. There is no problem to increase r_E via borrowing, however, the

increase in r_E is offset by the increased risk. WACC is always constant even when a firm changes its Capital Structure, which shows that leverage is of no advantage for such a firm.

On the basis of the above considerations it can be said that the cost of Capital cannot be decreased by changing from equity to debt, although it appears less expensive. When companies increase debt, equity is rendered more risky. Also, costs of equity capital rise in parallel. Increasing equity capital costs are countered by the higher portion of the firm financed by low-cost debts. The general value and the overall capital costs of a firm are invariant (not changed) by leverage as can be seen by the constant WACC.

2.2.3. MM Proposition I with Taxes

Propositions I and II without taxes are not realistic because governments allow for debt financing to be tax-deductible. It follows that a levered firm pays less tax compared with companies that are equity based. Therefore, the overall debt plus equity is greater for a levered firm as the value of a levered firm is equal to the value of an un-levered firm plus the present value of the tax shield provided by debt. (See equation 2.4.).

$$V = V_u + T_c \quad (\text{equation 2.4})$$

V = firm's value

V_u = value of un-levered firm

T_c = Present Value of tax shield

The market value of a firm increases when it takes on more risk-free debt when the assumption of no tax is relaxed. It follows that a firm should take on 100 percent debt to maximize the value of the company.

2.2.4. MM Proposition II with Taxes.

Proposition II with no taxes shows that there is a positive relationship between expected return on equity and leverage. Equation 2.5 shows that the same holds when we add corporate taxes (T_c).

$$r_E = r_A + \frac{D}{E} (1 - T_c) (r_A - r_D) \quad (\text{equation 2.5})$$

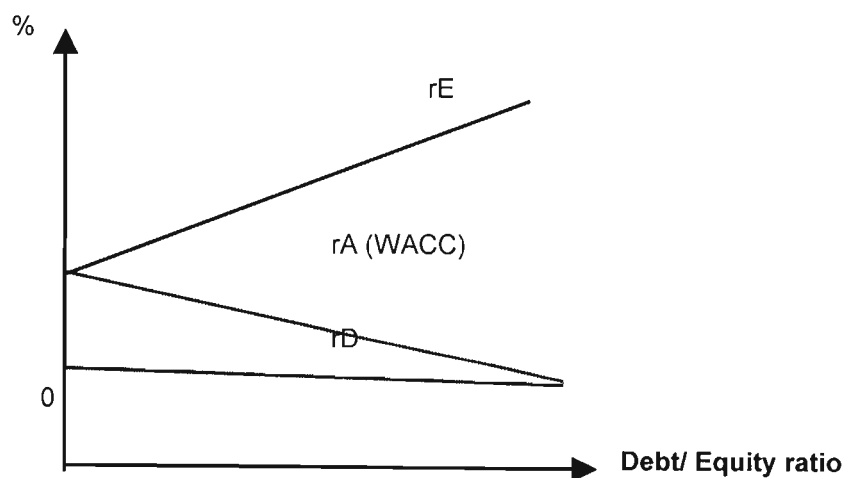
WACC (with taxes) can be calculated with equation 2.6:

$$\text{WACC} = \frac{D}{D+E} * r_D * (1 - T_c) + \frac{E}{D+E} * r_E \quad (\text{equation 2.6})$$

High leverage lowers WACC in a corporate tax scenario (Figure 2.2). Compare this with WACC remaining constant although leverage has increased (Fig. 2.1). Thus, the value of a firm is assumed to rise together with higher leverage because WACC will decrease (under the assumption that corporate taxes exist). It follows that an increasing amount of debt is accompanied by a higher value of the firm. Thus, a 100 percent debt financing ought to be implemented (Copeland & Weston, 1992).

Figure 2.2 MM Proposition II with Taxes

Cost of Capital



It should be noted that the M&M propositions are based on very restrictive, unrealistic assumptions. For example, M&M Propositions do not consider costs of bankruptcy, which do exist in reality.

2.3. THEORETICAL MODELS

Realistic or not, the M& M propositions have been a starting point for the understanding of Capital Structure, spawning two basic models: i.e. 1) the Trade-off Model, and 2) the Pecking Order Theory. The Trade-off Model is the only one that has created a formula for calculating an optimal Capital Structure. Model 2 is based on observations and the explanation of special patterns; it cannot calculate optimal Capital Structure levels (adapted from Copeland & Weston 1992).

2.3.1. The Static Trade- Off Model Approach

The Static Trade- off theory (POT) approach was derived from Modigliani and Miller (1958), the capital structure irrelevance hypothesis, combined with the effect of taxes, financial distress, and Agency costs. The Trade-Off Theory recognizes that target ratio does exist and may vary from firm to firm. It is the optimum mix of debt and equity, where firm value can be maximized by balancing the marginal benefit of lower taxes with the marginal cost of financial distress. To balancing the Agency costs of debt and equity against its benefits.

2.3.1.1. Taxes and Benefits of Debt

MM (1963) suggested that the optimal capital structure of a firm should be the one which is 100 percent debt financed as the firm value is increased by the present value of tax shield. Tax reduction gives a firm an incentive to issue debt over equity. Graham (1996) in consistent with Mason (1990) argued that firms with high expected marginal tax rate tend to have higher debt level in their capital structure than firms that are not have such benefits. Thus, firms which are not benefits from tax shield on interest payments are less likely to use debt finances. For example, firm with high level of Non-Debt-Tax- Shield in form of Depreciation and Investment Tax Credits (DeAngelo and Masulis, 1980) and Firms with Tax-Loss-Carry-Forwards are much less likely to use debt in their capital structure due to firm tax saving capacity has already been exhausted by Non-Debt-Tax-Shield expenditures. Debt has the potential to increase the firm's value and lower

the Cost of Capital. There is danger when an excessive use of debt occurs. That is the potential costs of financial distress and bankruptcy.

2.3.1.2. Cost of Debt and Bankruptcy

In spite of MM proposition, Myers (1984) argued that, in practice, most companies do not finance purely by debt due to the concerns of costs of financial distress and costs of bankruptcy which occur because of excessive use of debt. Financial distress is a situation where a firm's operating cash flows are not sufficient to satisfy current obligations such as trade credits or interest expenses causing the firm to take corrective action (Wruck, 1990). Costs associated with such a situation are high causing damage to the firm and its stakeholders by reducing the value gained from tax of increasing debt levels, consequently driving down the firm's market value.

Warner (1977) classified the Bankruptcy costs into two categories. Firstly, Direct Costs, involving legal and accounting fees, reorganization costs, and other administrative expenses, include the costs of physical deterioration. Secondly, Indirect Costs, which are less tangible such as costs relating to the perception of creditors, customers and suppliers, this also includes the inability of management to focus on their business as they have to divert their efforts and resources from maximizing firm value to halt a deteriorating situation. For example, "Chrysler Corporation's near bankruptcy caused management to devote a great deal of time and expenses to rebuilding the public's confidence in its ability to continue operations. Other examples of indirect difficult to measure costs are lost sales, lost profits, higher cost of credit, and the inability to invest in profitable opportunities because external funding sources are not available" (Cited by Rao, 1987: pg 444).

Jerold Warner (1997b) collects data for 11 railroad bankruptcies that occurred between 1933 and 1955 in an attempt to measure the magnitude of bankruptcy costs. He found that direct costs such as lawyers and accountants' fees, and value of managerial time spent in administering the bankruptcy cost were small, ranging from 1 to 5 percent of the firm market value to seven years

prior to and just before bankruptcy. There were economies of scale in going bankrupt, as a percentage of firm value. Larger firms have lower bankruptcy costs compared with smaller firms. Thus, Warner suggested that the direct costs of bankruptcy are less important for capital structure decisions of large firm than of smaller firms. But Warner's results are inconclusive as indirect costs relating to other stakeholders are not measured; nevertheless, the evidence suggests that direct costs may not be large enough to be an important determinant of optimal capital structure.

Haugen and Senbet (1978) argued that bankruptcy costs are not relevant to determining a firm's value, reasoning that these costs are of no concern for anyone other than firms' shareholders and bondholders. Bankruptcy costs have no bearing on the relationship between the firm and its suppliers or customers. Therefore it should not be considered for capital structure decisions.

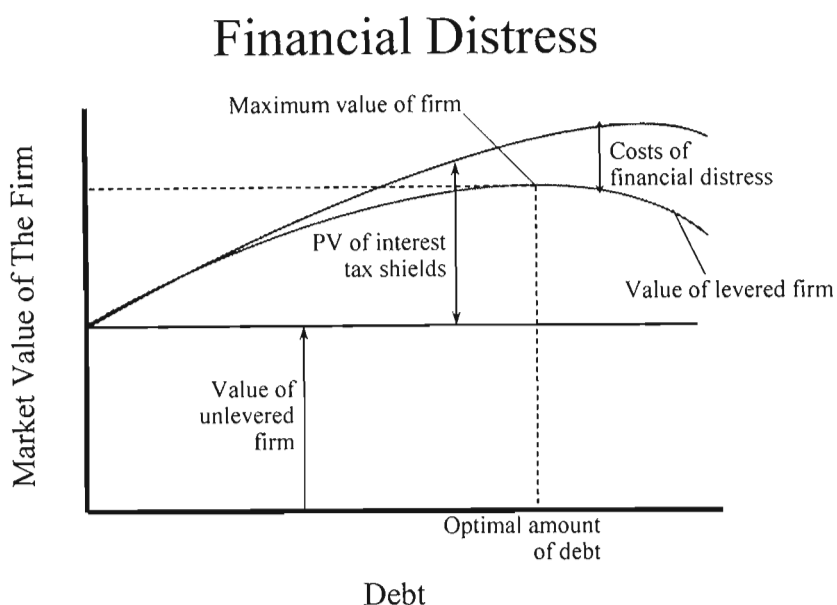
Altman (1984) provided the evidence on the indirect costs of bankruptcy as the opportunity costs which are difficult to estimate. His evidence came from the study of 19 firms (12 retailers and 7 industrials), that underwent bankrupt between 1970 and 1978. He compared expected profits, computed by regression from time series, with actual profits. The average indirect bankruptcy cost were 8.1 percent of firm value prior to bankruptcy and 10.5 percent on the year of bankruptcy. The other method used unexpected earnings from analyst forecast for a sample of 7 firms that went bankrupt in the period of 1980-1982. The average indirect costs of bankruptcy were 17.5 percent of value prior to bankruptcy. He concluded that all things considered, the direct costs and indirect costs associated with financial distress are high and sufficiently large, therefore, bankruptcy costs should be taken into consideration in capital structure is determined.

Financial distress typically occurs in firms which have a large amount of debt financing. Hence, the greater the use of debt, the larger are the fixed interest charges and the greater is the probability of facing financial difficulties which leads to decline of earnings as reported Earning per Share (EPS). This is because the market is perceived to have added more financial risk to the firm.

Thus, investors demand higher rates of return on their capital. Therefore, with the costs of bankruptcy, a levered firm's value is lower by the present value of expected bankruptcy costs. (See equation 2.7 and Figure 2.3 below)

$$\begin{array}{rclcl} \text{Market Value} & = & \text{Market Value} + & \text{Present Value} - & \text{Present value} \\ \text{of} & & \text{of} & \text{of} & \text{of} \\ \text{Levered firm} & & \text{un-levered firm} & \text{tax shields} & \text{bankruptcy costs} \end{array}$$

(equation 2.7)



Sources: www.bus.utexas.edu/faculty/Tyrone.Callahan/Restricted1/Files/Sess19.PPT

Figure: 2.3. The Optimal Capital Structure, Tax benefits and Costs of Bankruptcy

At a lower level of debt the probability of bankruptcy is low and firm value will increase with leverage due to the benefits of debt tax shields. A firm's value increases with increases the use of debt resulting in more gain on the present value of tax shield on debt interest payments. On the other hand, the probability of financial distress and bankruptcy increases with the level of debt to equity ratios causing a negative effect on the value of the firm which affects the value of tax relief for increasing debt levels. After a "reasonable amount" of debt, the

presence of bankruptcy cost begins to affect the firm value adversely even though tax shield benefits continue to increase with relatively more debt. The optimal capital structure is the point where trade off between benefits gain from adding debt into capital structure offsets the extra costs associated with potential bankruptcy and financial distress, At this point the firm's value is maximized (Myers, 1986).

2.3.1.3. Agency Costs

Agency costs are defined as problems which arise because a separation between ownership and control of corporation and the role of financial contracts in creating and controlling agency problems. Managers or "an agent" whose actions influence both his own welfare and that of others are empowered by the owners of the firm that are shareholders to make decisions. However, managers may have personal goals that compete with shareholders' wealth maximization. When firms consider whether to issue debt or equity for their capital expenditures they have to face agency costs associated with these two sources i.e., cost of too much equity is possibility of wealth transfers from shareholders to the managers, and cost of too much debt is asset substitution, and under-investment probability. Thus, the firm's optimal capital structure can be obtained by trading off these agency costs of equity or debt against its benefits. (Jensen and Meckling, 1976)

2.3.1.4. Agency Costs and Potential conflicts among Stakeholders

Agency conflicts can be classified into two categories as follows:

2.3.1.4.1. Potential conflicts between Managers and Shareholders.

Jensen and Meckling (1976) stated the financing decision is influenced by the concern of the potential agency problem which arises because managers of the firm own less than 100 percent of its residual claim. Consequently, they do not capture the entire gain from the profit enhancement activities, but they do bear the entire cost of these activities. Therefore, the manager can invest with less effort in managing firms' activities and resources, and they can even transfer those resources to themselves, for example, by consuming "perquisites" such as

a luxurious offices and vehicles, private jet, and building “empire” and so on and these agency costs of equity are borne by shareholders. Thus, potentials problem of wealth transfers from shareholders to managers through managerial perquisites are trade off against the benefit of cheap debt. Jensen (1986) argued that management does not automatically seek to maximize return on capital as the investors wish them to do. Instead they are interested in projects that aim to pursue growth rather than profitability, and for them to gain benefit through larger compensation which are associated with size of the firm. This is supported by Wildsmith (1974) who found that for a large corporation potential agency conflict is more important as managers own only small fraction of stock and shareholders’ wealth maximization may not be a first priority of manager decisions. Instead, manager’s primary goal seemed to be to maximize the size of their firms.

Shleifer and Vishny (1997) provided the advantages and likely reasons for managers to pursue growth strategy as follows; 1) managers can increase their job security and hostile takeover is less likely to occur; 2) The status, power, salaries and other forms of compensation increase; 3) The opportunities of career advancement are created for lower and middle management levels. The authors suggested a model that can be used to further reduce these potential conflict issues which incur agency costs, by means of managers facing disciplinary forces of the managerial labor market, of product market competition, of the threat of take over, and a monitoring board of directors.

Jensen (1986), Barclay and Smith (1995) and Stulz (1990) argued that benefit of debt financing is for controlling overinvestment problems. Adding debt into capital structure can add value to the firm, especially for cash cow firms which have substantial cash available. These firms are prone to overinvestment such as to invest in projects which have negative NPV, through value-destroying diversifying acquisitions attempts with misguided attempts to maintain market shares at the expense of profitability and capital providers, i.e., equity shareholders and bondholders. Thus, D/E ratios for mature firm are expected to be high. This is supported by Stewart et al. (1988) who argued that firm should borrow if it is

able to, not because it needs to in order to take full advantage of tax benefit of debt. The less the firm needs to raise capital to finance expansion the more money it should borrow. In addition, debt commits managers to generate and disgorge cash which would otherwise be used for unprofitable projects. Thus, debt in the capital structure served as a control mechanism to motivate managers to maximize value for investors, to cut back wasteful investment, and to force the sale of underutilized assets. Two ways to solve an overinvestment problem are; 1) pay out the excess cash by declaring increase in dividend, 2) through stock repurchase plan. Jensen (1986) found that firms implicitly trade off the value loss through over-investments against benefits of increased debt and bankruptcy costs in deciding an optimal capital structure. Harris and Raviv (1990a) argued that firms which have high debt level with high tangible assets have less investigation costs, which is important in situation when bankruptcy occurs. He suggests the capital structure is the trade off between improved liquidation decisions against investigation costs.

2.3.1.4.2. Potential Conflict between Bondholders and Shareholders.

This type of conflicts occurs when debt has become risky, thus causing the required rate of return on firm's debt to increase due to the firm taking on a large new project that is far riskier than it was anticipated by debt-holders. In case this risky project is successful all the benefits will go to equity shareholders while debt holders receive only a limited (fixed) gain. However, if the project is unsuccessful, the bondholders have to share the losses. To protect themselves, from assets substitution problems, the bondholders and stockholders insist on restrictive covenants in their lending agreements. These covenants impose restrictions on the firms' investment decisions and financing policies. In a situation when the firm has higher debt levels the bondholder will demand higher cost of lending funds. However, since this covenant cannot protect bondholders from every possible management decision, the company must be monitored to ensure that the covenant is obeyed and thus monitoring costs are passed on to stockholders in the form of higher interest rates. Therefore, the existing shareholders bear the

cost. Restrictive covenants also act as an incentive to shareholders to invest in suboptimal projects. The optimal capital structure is the trade off between the agency costs of too much debt i.e. costs of lost efficiency of management due to potential of financial distress and bankruptcy plus monitoring costs and the cost of loss through management investment decision on suboptimal projects with the benefits of debts. (See, Harris and Raviv (1991)).

Consistent with this argument, Diamond (1989) and Hirshleifer and Thakor (1989) argued that reputation is an important consideration when managers make their capital structure decisions. The firm can borrow capital at a relatively cheaper rate, if investors perceive that the firm has low risks, than a firm with higher risks. The reason is that investors are not always able to distinguish between a good performance firm and a relatively poor performance one. They rely on the company's performance records as a measure of comparing among competing firms. Therefore it's possible that managers have an incentive to build their reputation by investing in only a safe project, which not necessarily means the one that yields higher return to shareholders.

The Agency Costs associated with debt were summarized by Jensen and Meckling (1984) as follows; 1) the opportunity of wealth loss caused by the impact of debt on the firm's investment decisions; 2) the monitoring and bonding expenditure by both bondholders and owner-managers; 3) costs associated with bankruptcy and reorganization costs. Titman (1984) suggested that agency costs are an important consideration and should not be limited to the cost associates with debt or equity capital providers. But the agency costs should be extended to firms' customers and its employees.

2.3.1.5. Implication of the Trade-Off Theory.

According to the literature review of the Static Trade-Off Theory model above, an observable pattern of firm's financing behavior can be expected as follows:

i) Firms with more business risk ought to have less debt than lower risk firms, the greater the risk, the greater the probability of financial distress at any level of debt. Hence, the greater the expected costs of distress. Thus, firms with lower

risk can borrow more before the expected cost of financial distress offsets the tax advantages of borrowing

ii) Firms that have tangible assets available, such as real estate can use more debt than firms whose value derives primarily from intangible assets such as patents and goodwill. The costs of financial distress depend not only on the probability of incurring distress but also on what happens if distress occurs. Specialized assets and intangible assets are more likely to lose value if financial distress occurs than standardized, tangible assets.

iii) Firms that currently pay taxes at the highest rate and are likely to do so in the future should use more debt than firm with lower tax rates.

2.3.2. The Pecking Order Theory Model

The Pecking Order Theory (POT) provides a contrasting view point against a target debt to equity ratio. Donaldson (1961) and Myers, (1984) stated that firms financing behavior according to a preferred hierarchy for financing decision. The highest preference is to use internal financing i.e., retained incomes, the effects of depreciation, and capital reserves before resorting to any form of external funds. Internal funds incur no flotation costs and no additional disclosure of proprietary financial information that could lead to severe market discipline and possible loss of competitive advantage. If the external funds are required firm will prefer the following order; safe debt, convertible securities, preferred stock and common stock. The motivation for POT financing behavior are a cheap cost of internal capital, managers retain control of firm, reduced agency costs of equity i.e., the dilution of shares, and avoid an inevitable negative market reactions to the announcement on new equity issue(Hawawini and Viallet,1999; and Hutchison et al ,1998).

2.3.2.1. The Pecking Order Theory and Information Asymmetry

Myers (1984) and Myers and Majluf (1984) stated that the Pecking Order hypothesis is based on two key assumptions regarding how managers make financing decisions. Firstly, because of the existence of Asymmetric Information,

managers know more about firm's operations, current earnings, growth opportunities and future prospects than outside investors. The use of internal funds is considered the cheapest source of funding as it incurs no flotation costs and fees, and the company is not required to disclose its additional proprietary financial information that could lead to more severe market discipline and possible loss of competitive advantage. It also precludes managers from having to make public disclosure about the firm's investment opportunities and potential profits that can be realized by investing in them. Secondly, the assumption that managers will act in the best interest for existing share holders. The manager may even forego a positive NPV project if it would require issuing new equity, since this would give much of the project's value to new shareholders at the expense of the old. They gave the argument that there was no well-defined target debt-to-equity ratio, because there were two kinds of equity, one at the top of the Pecking Order that is internal finance, and the other at the bottom which is equity. Myers summarized the Pecking Order Hypothesis into four parts:

- i) Firms are likely to prefer internal finance to external finance when financing their new investment. The existence of Information Asymmetry has influenced firms in choosing not to issue new equity. Therefore, the firms have to pass up a positive NPV investment or the new issue may create disadvantages for the position of existing shareholders due to the effect of share dilution.
- ii) Managers set the target dividend payout ratios based on their future investment opportunities and expected future cash flows. The target payout ratio is set at the level that causes retained earnings plus depreciation to cover capital expenditure under normal conditions.
- iii) Dividends are "sticky" and firms are reluctant to raise dividends unless they are confident that the higher dividend can be maintained, and are reluctant to cut dividend unless they really have to. If the retained earnings are not sufficient for capital requirements, financial reserve will be depleted whether in the form of cash or marketable securities. However, if retained earnings exceed the capital outlays, they will be invested in cash and marketable securities, and then they will pay off debt obligations.

iv) The firm's debt-to-equity ratio reflects the accumulated requirement for external financing. When good investment opportunities are presented with positive NPV projects, firms that have already depleted their financial reserves will seek external financing with the following order of preferences: 1) the safest debt, 2) hybrid securities (convertible bonds) and 3) common equity issuing. As firms climb up their pecking order, their level of risk to bankruptcy and financial distress are increasing. Thus, the potential cost of bankruptcy will become an important consideration especially when the borrowing capacity is already exhausted.

2.3.2.2. Pecking Order Theory and Signalling

2.3.2.2.1. Signalling with proportion of debt

Ross (1977) argued that MM (1958)'s irrelevancy proposition was based on the assumption that the capital market is perfect. Thus, the market "knows" the (random) return stream of the firm. The firm value is the perceived value of investor from valuing this stream. Therefore, the change in capital structure may alter market perceptions. He suggested that in practical world the capital markets are less perfect. There is a different level of information between insiders and outsiders. Managers can use higher financial leverage to convey information about firm value and its future operations, including the quality types of investment projects. The use of larger levels of debt signals that the firm's earnings are of a higher quality. Low quality firms are expected to have higher bankruptcy costs at any debt level, and will not mimic higher quality firms by issuing more debt. Thus, increasing debt financing conveys positive news concerning the firm's capacity to service a larger amount of debt (Kim and Stulz, 1988), similarly, decreasing the leverage signals negative news.

Consistent with this Myers and Majluf (1984) argued that managers know more about the true future value of the firm than anyone else and they act in the best interest of existing shareholders. Investors have less information and are less well-informed about the firm's assets value than the current firm insiders. Therefore, issuing equity is perceived as bad news and sending adverse signals

to the market, which believes that the firm's shares are over-valued leads to a corresponding mark down of the firm's security's prices. This is an explanation for the decline of security prices on the announcement of an equity issue (Musulis and Kowar, 1986; Mikkelsen and Partch, 1986). This because investors believe that assets are overvalued by firms issuing equity, which is strongly supported by evidence of market timing by Graham and Harvey (2001), Banker and Wurgler(2002), Ritter (2002), Bancel and Mitto(2002), who found that firms with lower leverage (low risk) tend to raise equity when their valuation is high. Conversely, firms with high leverage (high risk) tend to raise funds when their valuation is low. Therefore, it is a possibility that equity may be mispriced by the market when a new investment project requires that a firm has to issue new equity. The under- pricing of the asset may be so severe that new investors capture more than the NPV of the new project which results in a net loss to existing shareholders. Thus, the manager is likely to reject the project even if the project provides a positive NPV. This situation can be avoided, if the firm chooses to finance the project by using internal funds or risk-less debt, which are less severely undervalued by the market. It suggested that firms maintain financial reserves and the use of cash or debt is preferred to equity.

Fama (1985) argued that positive news of a firm can be observed through the announcement of bank debt agreements. This is because banks are privy to inside information and would not approve a loan if negative news comes to light in the lending process. In contrast, firms that announce bank debt reductions convey unfavourable inside information.

2.3.2.2.2. Signalling with Proportion of Equity Ownerships

Leland and Pyle (1977) suggested that owners of the firms have more information about the expected value of the venture projects than outside investors. This inside information can be transferred to suppliers of capital because it is in the owners' interest to invest a greater fraction of their wealth in successful projects. Thus, the willingness of owners to invest in such projects can serve as a signal of project quality. The firm's value increases with the

proportion of equity held by owners relative to what they would have held given low-quality projects. The empirical implications of this signalling argument are that: 1) if the original founders of a company going public with the decision to keep a large proportion of securities, then this firm should be expected to have greater price earning multiples than if founders would have kept only a small portion of securities which signal a low quality project. 2) If a firm's value is positively related to the proportion of the owner's wealth held as equity in the firm, then the firm will have greater debt capacity and will use greater amounts of debt. Debt is not a signal in this model, but its use will be positively correlated with the firm's value.

2.3.2.3. Market Reaction to Equity and Debt Issue and Financing Theories

According to the signalling and information asymmetry (Ross, 1977) the firm choice of capital structure is influenced by the concerns of market reaction to types of capital issued by the firm. Evidence from various studies found that found that the market reacts positively to debt issue and negatively to equity. Furthermore,

Hull (1999) studied the changes of magnitude and direction of stock returns accompanying pure leverage-change announcements. He found the announcement period stock returns of firms moving "away from" industry Debt-to-Equity norms are significantly more negative than returns moving "close to" theses norms. This is consistent with the Optimal Capital Structure Theory where the industry Debt-to-Equity norms are a reasonable benchmark of wealth maximizing leverage ratios. In contrast, Hatfield et al. (1994) carried out research to test a hypothesis of Masulis (1983), which stated that when a firm issuing debt is moving toward industry average from below, the market will react more positively than when the firm is moving away from the industry average. Their results found that the relationship between a firm debt's levels and that of its industry did not appear to be of concern to the market.

Otto (2002), studied financing policy and the underinvestment problem for new business ventures. He found that when a firm's access to internal's generated

funds is constrained, the firm must enter external capital markets and raise the required investment in order to capture the value of growth options. Investment costs and expected volatility of the venture have significant impact on the value of the firm. Equity financing is preferred when investment costs are low with expected high volatility. In contrast, when investments are high but volatility is low, debt capital is preferred. He explained that when growth option is at-the-money, which is investment cost is about equal to project value, the increase in volatility of the venture causes a relative large gain in growth value. Firms will choose equity financing whenever volatility is very high. When the real option is deep-in-the-money, where investment cost is very low relative to project value, equity financing is always preferred regardless of the level of volatility. He further found that when the investment option is near-the-money, the use of debt financing is preferred if the cost of external funding is low, but if the cost of external capital is high, equity is preferred. However, Viswanath(1993) and Mikkelsen and Partch (1986) argued that in a multi-period world, the manager of an undervalued firm may find it optimal to make an equity issue even though cash is available. This shows that the POT need not always hold. Whenever managers consider that potential losses of future projects caused by unpredictable dilution resulting from the issue of risky security to finance such projects are too great, they may decide to issue a risky security to finance a current investment even though they may have the option of using cash or issuing a less risky security i.e. debt. Consequently, not all equity announcements are interpreted by the market as an adverse signal that the firm's assets are overvalued. Similarly, Thakor (1989) argued that managers of firm with on-going investment program will recognize that they may have to turn down worthwhile projects in the future because of information asymmetry at that time. Consequently, in making financing decisions at the present time, they will have trade off current dilution against the potential loss of a future $NPV > 0$ project. Thakor's result found that the market reaction to an equity announcement is sometimes positive and sometime negative, but it is always negative if firm has sufficient retained earnings to finance the project. Mikkelsen and Partch (1986)

also found the evidence to support Viswanath (1993), who argued that the Myers and Majluf (1984)'s model is not consistent with all of the empirical observations. For instance, the model would imply that the price drop for equity issues should be greater than for convertible debt, and least for straight debt. In practice, this monotone pattern has not been found. For example, Mikkelsen and Parth (1986) found the price drop on the issue of convertible debt is a negative function of the quality of the debt, and the less risky a convertible bond issue is, the more the market will mark down the price of security. Similarly, Eckbo (1986) found no correlation between the quality of straight debt issue and the market reaction, but his results could not reject the hypothesis of the market reaction. This finding leads to the conclusion that the POT does not apply to all instances. Therefore, in order to explain corporate financing behaviour the extent to which POT holds needs to be examined.

2.3.3. Empirical Results of Field Research Concerning the Pecking Order Theory or the Static Trade Off and the Determinants

Pinegar & Wilbricht (1989) suggested the potential for the case study and small sample research to yield insights into how corporate make capital structure decisions beyond those achieved via conventional aggregate analysis and prior theorizing. A questionnaire survey of Chief Financial Officers (CFOs) from fortune 500 firms in 1986 found that managerial responses are consistent with the broad predictions of the Pecking Order Theory. So far the sample firms express a clear preference for internal funding over external funding and for debt financing rather than share issues. In addition they found that tax and bankruptcy considerations are not seen as being important by the managers of large U.S. firms. The results concluded the following: i) managers are more likely to follow a financing hierarchy than maintain a target debt-to-equity ratio; ii) financing decisions appear to be more related to the characteristics of the firm's current investment projects rather than the firm tax and bankruptcy circumstances; iii) the importance of specific capital structure theories is not related to managerial perceptions of market efficiency, and therefore, no evidence was found in

support of signaling argument related to financing decisions; iv) financial planning principles are more important in governing financing decisions than capital structure theories; v) capital structure decisions are less binding than either the investment or the dividend decision. Pinegar and Wilbrincht's results support the Pecking Order model, but ignore the issue of "asymmetric information" as it relates to a firm's financing decisions.

Norton (1991) conducted a survey of 98 CFOs from 500 fortune firms on the topic "the factors affecting capital structure decisions". Analyzing responses he found that Tax consideration, Market concerns and management's wish for Flexibility have an important influence on capital structure decisions. Also Agency costs, Information Asymmetry and Signalling were found to have limited important in their affects on financing decision choices.

Graham and Harvey (2001) carried out a survey of 392 CFOs about Capital Structure, Cost of Capital and Capital Budgeting. The authors found that financial Flexibility and Credit Rating are the main factors concerned when issuing debt. Also EPS Dilution and recent stock appreciation are matters to be concerned about when the company decides to issue equity. They found some support for Pecking Order Hypothesis and Static Trade-off theory. The CFOs responded that the tax advantage of debt is moderately important for capital structure decisions, but the tax advantage was the most important for large, regulated and dividend paying firms. Companies that probably have high corporate tax rates and therefore large tax incentives to use debt. Most firms have target debt-equity ratio and issue equity to maintain an optimal target-debt ratio

Allen (1991) conducted a survey on "the determinants of the capital structure of listed Australian companies: The financial manager's perspective". The results are consistent with Donaldson's Pecking Order Theory with respect to sources of financing and the firm's policy of maintaining financial slack. He found that companies appeared to be trying to maximise corporate wealth as opposed to shareholders wealth. Managers had learnt to mistrust external sources of financing as they cannot accurately predict and control market conditions. Thus, to have sufficient financial reserve is important for a firm's financial planning, so

that Market Timing, Magnitude and extent of important strategic investment decisions would remain in their own hands and not be subject to vagaries of capital market conditions. He found 93 percent of respondents pursued a policy of maintaining a borrowing capacity. He found that companies tried to maintain their credit rating and to maintain a moderate level of debt to equity ratios. Firms regard debt as an automatic extension of internally generated funds. Tax factors are considered as important but do not override the long term strategic considerations. He did not find that managers were consciously trade-off the tax shield benefits against the potential costs of bankruptcy when they were setting their debt levels.

Fan and So (2000) found that the capital structure decisions of Hong Kong firms conformed more to the Pecking Order Theory than the Static Trade Off model, consistent with Pinegar and Wilbricht (1989). They found some degree of information asymmetry and firm size having an impact on capital structure decisions. The Information Asymmetry was perceived to be more serious for Hong Kong firms than for U.S. firms, but there is no evidence of capital structure being used as a signal to the market in correcting mis-pricing of outstanding securities. Managers considered size of the firm as a determinant factor, but there was no evidence that they considered the proportion of intangible asset to total assets in making their capital structure decision. In additions, they found that Signalling was not considered as important for financing decisions.

Linda and Kamal (1992) conducted a survey of over-the-counter (OTC) firms with regard to the relationship of these firms' Asymmetric Information and their financing preferences. They found that OTC firms are more likely to experience Information Asymmetry than the Fortune 500 firms and believe that their securities are often mispriced. Financial flexibility is highly valued in financing decisions consistent with the potential detrimental effects of asymmetric information, as well as financial planning principles. The result support Myers (1984) argument that information asymmetry provide motivation for pecking order model of financing.

Choi (2003) found that the Korean companies' financing behaviour supports the Target Adjusting model. He implies that every firm has target leverage and moves toward the target. Consistent with Hovakimian et al. (2003) he found that firms have target capital structures. Choi's study focuses on firms that issue both debt and equity, and then draws inferences of firm financing behaviour. He found that high market to book (proxy of investment opportunities) firms have low target debt to equity ratios. Profitability has no effect on target leverage. Unprofitable firms may issue equity to offset the excess leverage due to accumulated losses. The result lent support to Market Timing, where high stock returns increase the probability of equity issuance, but Profitability has no effect on target leverage. The preference toward internal financing and the intention to time the market by selling new equity when the share price is high interfere with the tendency to maintain the firm's debt ratio close to the market.

2.3.4. Market Timing and Financing Behaviour

Baker and Wurgler (2002), consistent with Bancel and Miito (2002) and Graham and Harvey (2001), studied the effects of equity market timing, which is the practice of a firm issuing securities at high prices and repurchasing at low prices as the intention to exploit temporary fluctuations in the cost of equity relative to the cost of other forms of capital. They argued that there is no optimal capital structure for a particular firm, but instead "the capital structure is the cumulative outcome of attempts to time the equity market". The market to book ratio was used to measure the market timing opportunities perceived by managers. The finding was that low leverage firms are those that raise funds when their market valuation is high, while high leverage firms are those that raise funds when their market valuation is low. The fluctuations in the market valuation have large effects on capital structure that for at least a decade. They concluded that "there is no optimal capital structure, so market timing financing decisions just accumulate over time into the capital structure outcome".

2.4. CONCLUSION AND COMMENTS ABOUT THE THEORY

According to the Static Trade-off theory (STOT), an optimal capital structure exists by trading off costs of firm having high debt i.e., costs of Financial Distress and bankruptcy and Agency costs which are borne by both debt and equity i.e., direct wealth transfers, assets substitution, and underinvestment against its benefits. In the firm that follows the STOT the leverage is predicted to be negatively related to the firm's inherent riskiness through the effect of risk on the expected costs of bankruptcy and financial distress (Myers, 1984). It is implicit that leverage may be positively related to collateral i.e. the proportion of firm assets that are readily saleable, and negatively related to Cash Flow volatility (Shu et al., 1993)

In Pecking Order Theory (POT), the company has no well defined debt ratio and the company makes financing decisions based on the relative costs of alternative methods with Retained Earnings being preferred, followed by Debt and then new issues of Equity. External fund raising activity is therefore not driven by the target capital structure, but instead reflects gaps between internal funds and investment opportunities. The company's financing decision, whether the use of debt or equity, is optimally based on costs related to each source, the presence of informational problems between insiders and outsiders as well as divergences between the market and the intrinsic value of corporate securities (Myers and Majluf, 1984).

CHAPTER 3: THE DETERMINANTS OF CAPITAL STRUCTURE

3.1. INTRODUCTION

This chapter presents the results gathered from empirical researches of the Optimal Capital Structure related to the firm's characteristics. In order to clearly explain how GKL makes its Capital Structure decision, the GKL's Characteristics of will be ascertained.

3.2. DETERMINANTS OF CAPITAL STRUCTURE

Characteristics of the firm are often used as the determinants of capital structure by empirical researchers, as firm's characteristics affect the firm's financing decision. This evidence can be observed through increases or decreases of the leverage ratios. For example "leverage increases with fixed assets, non-debt tax shields, investment opportunities, and firm size, decreases with volatility, advertising expenditure, the probability of bankruptcy, profitability and uniqueness of the product" (Harris and Raviv, 1991). The empirical evidence is summarized in Appendix II, and how it influences financing behaviours according to theoretical models in Appendix III.

According the STOT and POT models, how these characteristics influence the capital structure decision can be explained as follows:

3.2.1. Size

Size is often used as an inverse proxy for probability of bankruptcy and is considered to be positively correlated to firms' leverage (Rajan and Zingales, 1995). According to the STOT firm with large size is not only less likely to have lower level of risk as it is more diversified and less susceptible to bankruptcy than smaller firm (Titman and Wessels (1988), but also is likely to have less information asymmetry problems (Myers and Majluf, 1984). Therefore a large firm should have more debt in its capital structure as debt has benefits i.e., to lower the cost of capital which means increased EPS (MM, 1958), increase the firm value by present value of tax reduction (MM, 1963; Stewart et al., 1988), to signal

the quality of project to investors and borrowing at cheaper rates (Ross, 1977), and to control overinvestment problems especially for larger firm in its mature stage of business cycle (Jensen, 1986). Thus, larger firms are more disposed to maintain higher level of leverage than small companies. POT predicted that firms with big size are more likely to maintain a low level of debt and prefer to finance their operations through internal equity. The motivations are transactions costs and fees associated with each sources of funds and the management demand for flexibility and control. Therefore, a large firm will be more likely to maintain a high level of capital reserves (Myers, 1984) and have a low debt. Nevertheless, the equity has it costs as large firms tend to face a wealth transfers problem (Jensen and Meckling, 1984) and overinvestment problem (Jensen, 1986)

3.2.2. Profitability

The STOT suggests that firm with profitability have an incentive to finance by debt rather than equity due to tax benefits (Stewart et al, 1988) and as an agency control mechanism (Jensen, 1986). Conversely, the POT suggested that firms should be financed by Internal Equity and maintains Capital Reserves to take advantages of future investment opportunity without passing up a positive NPV project or issuing the equity or external debt at the wrong time due to information asymmetry problems (Jensen and Meckling, 1984). Thus profitability has negative relationship with firm debt level (Rajan and Zingales, 1995).

In MM (1963), the static Trade Off theory suggests the direction of a positive relationship between a firm's profitability and its leverage. Stewart et al (1988) suggested that companies which have surplus cash flows available and are able to service debt comfortably should borrow as much as possible in order to gain full benefits of interest tax shield. Furthermore, the more firms need money to finance their attractive investment opportunities, the less money they should borrow. This suggests that a firm with high profitability that is able to generate surplus cash flow should prefer to issue debt to equity. Thus, this implies that taxes and interest tax shield are an important consideration.

In contrast, The POT of Donaldson (1961) suggests that the relationship between leverage and profitability will be negative because the more profitable the firm, the less need it has to borrow either long-term or short-term. As a result of transaction costs and associated fees, internal funds are considered as cheaper than external sources. Therefore, if firms are profitable they don't need to go into debt. Firms will prefer the use of internal generated funds on retained earnings, then from debt and finally from issuing new equity. This suggested that transaction cost is an important consideration and this shows supports to Pecking Order theory.

Myers and Majluf (1984) drew the same conclusions of how firms make the financing decision. The Retained earning is preferred as a means of finance, because there is asymmetric information's problem between debt-holders and equity-holders. A profitable firm presumably has more internal funds at its disposal than a less profitable firm. Therefore, the relationship between profitability and leverage should be negative. Rajan and Zingales (1995) also found the same result, supporting the Myers' Pecking Order Theory. Even though profitability is negatively related to the level of gearing, the relationship between leverage and profitability can be positive. This because although profitable firms have more access to debt as lenders are also more willing to lend to profitable firms. However the demand for debt may be negatively related to profits. Thus, this lends support for POT.

However, Jensen (1986) argues that the relationship between leverage and profitability depends on the effectiveness of the market for corporate control. If the market for corporate control is effective, managers of profitable firms are forced to pay out cash by leveraging up. This concern relates to Agency problem. Because to keep free cash flow available for reinvestment is risky for reinvestment rate risk. Shareholders as managers may invest in negative NPV projects and seek growth rather than profitability. On the other hand, if the market for corporate control is ineffective, managers of profitable firms may choose to avoid the disciplining role of debt by leveraging down, so that the relationship

between leverage and profitability can be negative. This is supported by empirical evidence research of Geyer and Nemec (1994).

According to Jensen (1986), existing shareholders would prefer that the firm issues new debt rather than equity since the required interest payment on debt induces the managers to act in the interest of stockholders. With a fixed debt payment, an inappropriate use of the investors' money could precipitate a default on debt, bankruptcy proceedings and the possibility that the managers could lose their jobs. A firm with a high level of cash but having no growth opportunities available will find it more valuable to return these funds to shareholders rather than to misguidedly over-invest in core business, to maintain market share, or to diversify into completely unrelated business that destroy firm's value. Proxy for Profitability is the ratio of earnings before interest, tax and depreciation (EBITDA) to the book value of assets (TA). (Profitability = EBITDA/ TA)

3.2.3. Taxes

According to STOT, MM (1963) suggested that tax is considered to affect firm's capital structure decisions as it reduces the bill of tax payments. Tax factor is found to be very important in deciding on financing decision, especially for large, regulated and dividend paying firms. This is an incentive for using debt (Graham and Harvey, 2001; Norton, 1991). Firms which are expected to have a high marginal tax rate have an incentive to have more debt (Mason, 1990: and Graham, 1996), but firms with non-debt tax shield is expected to have less debt (DeAngelo and Masulis, 1980). The incentive of debt financing is diminished as non debt tax shield increases (Ross, 1985).

According to MM (1963), taxes are an important consideration of firms in deciding on their optimal capital structure. They suggested that firms should borrow as much as possible to take advantage from the present value of firms gained through the tax shield on interest payments. Myers (1984) argued more debt in the capital structure causes higher firm's risks associated to the possibility of bankruptcy. Therefore, an excessive uses of debt which aiming to gain the benefit tax shield maybe a less attractive consideration in formulating capital

structures. Consistent with this Allen (1991) stated that firms will structure their venture deals in the most tax-efficient manner, but tax consideration will not divert them from the broad thrust of their over all strategic policies.

Graham and Harvey (2001) surveyed 392 CFOs; they found that although debt provides tax bills reduction, firms are concerned about financial flexibility and credit ratings when issuing debt and concerns about the dilution of share earnings when issuing equity. Tax consideration is the most important consideration for large and regulated and dividend paying firms, companies that probably have high corporate tax rates, thus have incentive to use debt. They also found that most firms have target debt-to-equity ratio and issue equity to maintain that ratio. There was some support for both Pecking Order Theory and Static Trade-Off Theory. Norton (1991) found that managers are considering Taxes as an important factor for capital structure decision making. This is consistent with Titi, Sander and Ward (1995) who stated that most managers highlight Tax consideration in deciding which type of security to issue and concluded that financial managers strongly support the STOT. Their conclusions are inconsistent with Harry (1990) and Baskin (1989) who support the POT. In other views, DeAngelo and Masulis (1980) stated that firm with large non-debt tax shield in form of depreciation, tax credits and tax loss carry forwards(Mason, 1990) are supposed to have lower financial leverage. Tax shield may be unimportant to such company (Ross, 1985).

3.2.4. Tangibility

Tangibility is measured by use of fixed assets over total assets (FA/TA). (See Bevan and Danbolt,2000). According to the STOT, the firm's tangibility is expected to have a positive relationship with leverage (Rajan and Zingales, 1995). Tangibility of assets represents the effect of collateral value of assets on the firm's leverage level. For the firm in financial difficulties, tangibility is more beneficial than intangible assets. It is likely to be positively related to a firm's leverage as creditors want to assure that loan is backed up by collateral assets. Therefore, the higher a firm's asset tangibility is, the higher the leverage can be

(Shuetrim et.al. 1993). Tangibility is used as collateralization is an important feature of debt covenants. It is a tool to mitigate agency conflicts of interest between lenders and shareholders (Jensen and Meckling, 1976; Myers; 1977). In addition, tangibility reduces the cost of issuing debts i.e. secured debt, which are caused by Information Asymmetry problems, thus firms with high tangibility can borrow at lower rate than firm with less tangibility (Myers and Majluf, 1984). In the STOT by Harris and Raviv (1990a), the firm with high liquidation value or having high level of tangibility has low investigation costs, and tends to use more debt than the firm with low investigation costs. However, Grossman and Hart (1982) found a negative relationship between leverage and the level of firm's assets.

3.2.5. Growth and Growth Opportunities

Growth is likely to put a strain on retained earnings and to push the firm to borrow. Thus, it is positively related to leverage. However, investment in growth opportunities increases the potential for conflict between stakeholders of the firm, e.g. creditors, managers, debt holders, common stock holders, leading to moral hazard in the form of asset substitution (Myers, 1977). This could lead to a negative relationship between Growth and Borrowing. Rajan and Zingales (1995) and Jong and Dijk (1998) found a negative relationship between growth opportunities and Debt-to-Equity ratio. This is consistent with Jensen and Meckling (1976) based on the agency cost theory and Myers (1977) based on the information asymmetry. The evidence found that both POT and STOT suggested that firms which in growth mode with growth opportunities available should have lower level of debt. In order to be able to capture such opportunities without having to face the risks which are caused by firms not having sufficient funds i.e., if a firm has to issue more debt this can cause bankruptcy and management restriction through restrictive covenants from debt holders. If equity is raised, control is giving away to outsiders and the dilution of the value of shares. Information costs can make firm with growth opportunities to forgo positive NPV projects, costs of losing investment opportunities occurs. Sheehan (2001) argued that the market conditions in 1990s allow firms which are newer,

smaller and riskier growth options to have great access to equity market and to use this market as a means to draw large cash reserves. It becomes evident that firms are more likely to draw the initial funding from the equity market instead of the internal sources. It explains that capital structure is caused by the market timing and when growth opportunities present to the firm. Firm may issue equity or debt even if funds are not needed for investment, but because the market value of their asset is high. Sheehan's argument is consistent with Ritter (2002); Graham and Harvey (2001); Banker and Wurgler (2002). The proxy to measure growth opportunity is the ratios of market of the firm to book value of assets.

3.2.6. Business Risks

Firm risk is the combination of business risk and financial risk.

Business risk is the uncertainty of income caused by the firm's industry and due to the variability of sales caused by its products, customers, and the way it produces its products. Business risk is measured by the variability of firm's operating income over time caused by both its sales variability and operating leverage. Operating leverage is a measure of business risk. A firm has high fixed costs of production makes the operating earnings series more volatile, relative to the sales series. Firms with a high operating leverage are more risky and sensitive to changes of economic environments through their business life cycle than firms with lower fixed costs components. The greater the business risk faced by the firm, the lower the debt level should be (see, DeAngelo and Masulis, 1980). Volatility of earnings is a measure of firm business risk. The volatility gives investors little chance in accurately forecasting the future earnings from available information. Investors or shareholders perceive the riskiness of the investment increases from this volatility. Therefore they would demand a higher premium to compensate for that risk from their investments. This leads to a higher cost of debt.

Financial risk is the additional uncertainty of returns to equity holders due to a firm's use of fixed obligation debt securities. Financial risk is indicated by debt to equity ratios. Although, increasing debt will increase returns on shareholders in

good time, it also can create debt burden in time of economic downturn. The ability of firm to take on financial risk depends on its business risk. If the firm has lower business risk, investors are willing to accept higher financial risk (see, Ross et al, 1996). The "static trade-off" hypothesis, "pecking-order" hypothesis, agency costs related theories and product market interaction consideration all predict the negative relationship between leverage and earnings volatility. That is the higher the volatility of earning the lower the level of indebtedness of the company.

3.2.7. Financial Slack and Management Flexibility

Financial slack means having cash or near cash and/or spare debt capacity. It is valuable for firm to carry out its strategic plan successfully. Firms that have high debt level have low flexibility, and may not be able to respond to opportunities as they appear in the business. Firms may restrict debt level below that of the optimal level in order that the risk of missing profitable investment opportunities is reduced. Evidence from the studies of Graham and Harvey (1999); Norton (1991); Allen (1991); Bancel and Mitto (2002), and Gapenski (1997) found that managers considered financial flexibility as a very important factor in deciding the Capital Structure as well as the Credit rating and market conditions and corporate planning principles and EPS dilution.

Financial flexibility is usually referred to as the amount of cash that firms build up over time. It can be viewed as negative debt. If there is no effective market for corporate control, management would prefer to retain excess amount of cash (Opler et al. 1999). Graham and Harvey (1999) surveyed 392 CFOs in order to ascertain the relationship of theory and practice of corporate finance behaviour. They found that large firms are concerned about maintaining financial flexibility and a good credit rating when making decisions to issue debt, and earning per share dilution and recent price appreciation when issuing common equity. The results support both POT and the STOT but show only little regard for the concern about Asymmetric Information, Transaction Costs, Free Cash Flows and Personal Taxes.

Bancel and Mitto (2002) surveyed managers of 16 European countries. Evidence showed that Financial Flexibility and the Earning per Share (EPS) dilution are the most important determinants of capital structure decisions, which was similar to U.S.A. firms. The evidence shows only modest support for STOT and weak support for the POT and Agency Costs theory framework. Managers show concern about Financial Flexibility in making Capital Structure decisions as the factor provides a key for them to have access to external financing in whatever economic circumstances. Furthermore, there is concern about EPS dilution when considering Common Stock issues. Therefore, a Convertible Debt issue is considered as a major advantage. This is consistent with the POT, which suggests the relationship between leverage and flexibility should be negative. If POT was followed, companies should wish to maintain spare borrowing capacity. This prevents firms having to make equity issues when they would prefer to avoid this method of financing for particular projects. Companies would also have a clear set of preferences towards availability of funding sources, which is supported by Allen (1991). Brigham and Gapenski (1997) also found that because of an Asymmetric of Information firms should have borrowing capacity reserve in order to be able to take advantage of good investment opportunities without have to issue stock at low price, hence the leverage ratio will generally be lower than suggested by the STOT Model. The proxy for the financial flexibility is the ratio of cash and marketable securities over current assets.

3.2.8. Management Values and Corporate Strategy

Whitley (1992) stated that developing economy firms follow corporate structure that is similar to those of conglomerates. This suggests that the issue of the relationship between a firm's strategy and its capital structure has special relevance to any study examining the financing behaviour of firms in a developing economy. The formal testing of the impact of corporate strategy on the firm's capital structure was started by Barton and Gordon (1988). They stated that strategy is a proxy of management values, goals and motivation for diversification. Thus, it must therefore include managers' preference for Debt and

Equity. Jordan et al. (1998) also found that competitive strategy influences capital structure. The company characteristics (as above) related to its operating environment in both micro and macro levels are also having great impact on its current capital structure decision.

3.3. CONCLUSION

This chapter showed the theoretical model of how firms approach their Optimal Capital Structure. Two theoretical models of capital structure were outlined. The STOT is useful for explaining corporate debt levels, while the POT explains Capital Structure changes. The empirical factors influencing decisions as they were ascertained from previous researches were identified. It is evident from the literature that it is important for firms to have the appropriate Capital Structure in order to maximize their shareholders' value at the most competitive costs as possible. (Appendix II, III)

CHAPTER 4: CASE STUDY- GRACE, KENNEDY LIMITED (GKL)

The purpose of this chapter is to present Grace, Kennedy Limited and its Capital Structure. The company position in the market place and its performance will be established through information available from financial statements. This information will then be incorporated in company strategic plan and economic environments to derive the basis for evaluation of GKL's Capital Structure in the next chapter.

4.1. INTRODUCTION

Grace Kennedy Limited (GKL) is one of Jamaica's largest publicly held conglomerates, with six divisions and approximately 62 subsidiaries and associated companies, spanning the sectors of Finance, Maritime, Food trading, Remittances, Retail and Trading. GKL operates in Jamaica, the wider Caribbean, Latin America, Canada, and New York and in Miami (Appendix IV). GKL's long history started in February 14, 1922. It has an excellent reputation with a strong customers' base, and it possesses strong brand equity. GKL is perceived as a low risk firm as it owns well diversified business units coupled with a dynamic team of management with strong expertise and great vision. GKL is classified as a mature firm, and it has reached the edge of mature stage in the business life cycle. Thus, it chooses to diversify into several business industries locally and internationally. This allows the Company to create synergies and values to its shareholders and customers. Thus, GKL has enjoyed continuous growth in spite of some uncertainties arising from its operating environment from time to time. GKL has become the only conglomerate listed in all three Caribbean Stock Exchanges. As regards GKL' strategic plan, current company's strategies is part of carrying out the so called "2020 Vision", (see appendix V), developed in 1995 as the company aims to gear itself to meet the challenges of the future. It has pursued rapid growth strategy by expanding through acquisitions and diversification in both local and international markets. The vision sets out the path which the company will follow to increase training of its staff and to employ state-of-the-art technology as tools to achieve increased productivity and maintain the

high quality of its goods and services. Since the programme has begun the company's net earning has been recorded at 120 percent increase in the last five years.

4.2. GRACE, KENNEDY LIMITED AND FUNDAMENTAL ANALYSIS

4.2.1 Macro Economy

During the decade of the 1990s, the performance of the Jamaican economy was rather poor according to macroeconomic indicators, characterized by negative or very low economic growth. Real Gross Domestic Product (GDP) growth rate during 1997-2002 ranged from minus 1.50 to 1.10 percent. GDP per Capita Growth Rate was between minus 2.20 to 0.61. There were also high levels of unemployment during the same period within range of 15 percent to 16.50 percent of the labour force. The inflation rate has recently been brought under control at an average annual rate of 8.6 percent after reaching 80 percent in 1991. This results in a declining percentage of persons below the national poverty line from 44.6 percent in 1991, down to 15.9 percent in 1998, but increased to 16.7 percent in 2001. Jamaican's external debt services ratio was over 15 percent for the decade. Trade balance deficit grew over the period. The value of export goods fell during 1995 to 1999, while visitor expenditure grew at a slow rate. The government struggled to keep the fiscal deficit under 8 percent of GDP. In 2001 and 2002, the Jamaican economy was hit by a number of political and economic shocks. A high crime rate followed by the September 2001 terror attacks in the United States hurt the tourism industry. Then severe tropical storms caused flood damage to infra structure and crops in November 2001 and May 2002. The fiscal deficit expanded during 2001 to more than 6.5 percent of GDP, up from 6.0 percent in 2000. Government's external debt remains high at a rate of 103 percent. This contributes to a continuously high interest rate, the highest interest rate compared to Trinidad, Tobago and Guyana, in the same region (see appendix VI). Foreign competition has increased and businesses in general have weak financial conditions accompanied by a significant depreciation of the Jamaican dollar. Overall although Jamaica has made measurable progress

in stabilizing the economy since suffering from the financial crisis in mid-1990s, the economy has not yet returned to a path of sustained growth. The Jamaican country risk forecasts for the period 2002 to 2004 are as follows:

Short-term Risk Events-Investors aversion to the more highly indebted Latin American and Caribbean markets could lead to greater scrutiny of Jamaica's poor economic fundamentals in 2003, restricting the sovereign's access to international capital markets, and placing increasing pressure on the Jamaican dollar.

Political Risk-Following the sharp decrease in its parliamentary majority in the October 2002 general election, from 38 seats to just eight in the 60-seat parliament, the People's National Party (PNP) may find governing ability more difficult in the forecast period. In light of the necessity for an austere budget in 2003/04, the government also faces an increased likelihood of social unrest in 2003/2004.

Economic Outlook-In 2003-04 GDP growth will remain modest, given the government's lack of room for maneuver to boost domestic spending and investment, along with continued sluggish economic activity in the US, Jamaica's main trading partner.

Debt Outlook-A significant risk exists that the sovereign will be unable to tap the international capital markets in 2003, necessitating an increase in official assistance. (<http://www.boj.jm.com>)

4.2.2. Industry Analysis

4.2.2.1. Characteristics of Caribbean's Conglomerate Industry

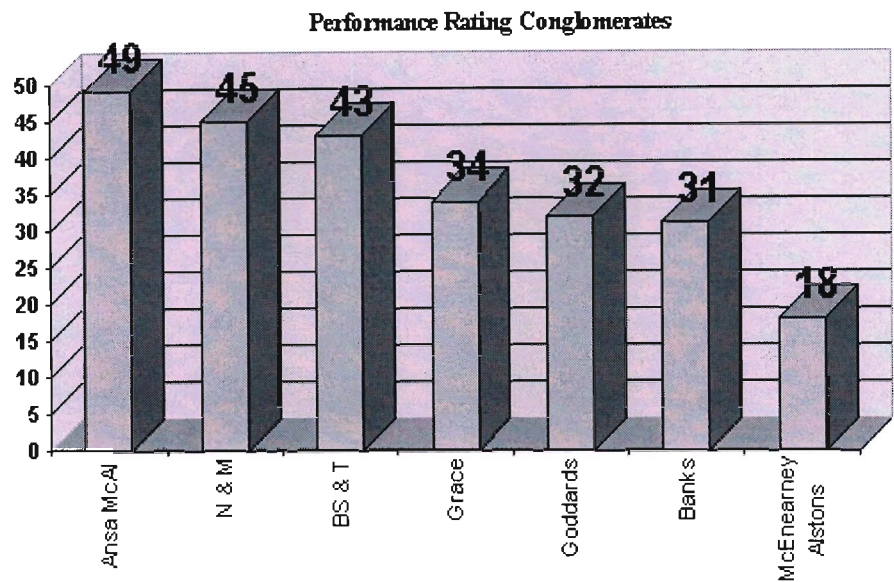
The firms throughout the region are in growth mode as they are characterized by almost annual acquisition or new strategic relationships to their already well-diversified business portfolio. Each company continues to grow from strength to strength as they reap the benefits of diversification. However, the challenges for firms in this segment are different from other industries. The top priority of these firms is cost control and the challenge of finding the right candidates for new

relationships. The right fit that would provide firms with synergistic benefits and firm dynamic is becoming harder to find. The two conglomerate firms that have dominated this market are the Neal Massy Holdings (NMH) generating the largest revenue of approximately US\$395 Million followed closely by Ansa McAl (AMA) with US \$341 million. Even though NMH has greater revenue than AMA, the latter earned US\$46 million of profit before tax compared to NMH of US\$35 million. Nevertheless, both of the firms have performed significantly above Industry averages.

The optimal use of resources is becoming the most important key success factor for firm's growth due to the increase in firms' size and portfolio mix of industries that may hamper firm's growth. A challenge of firms especially with different operations is to find the common goals and strategic plans to achieve them together in the most advantageous way. The industry's efficiency ratio as indicated by Return on Capital employed (ROC) was low at 1.4 percent. The portfolio mix held by the conglomerate has great impact on this ratio. Capital intensive and financial institutions tend to have low ROC. In contrast, distribution and service industries tend to have higher ROC. Industry average Return on Equity is 11.4 percent. The AMA has a highest ROE of 18.1 percent which followed by NMH of 16.1 percent, and Grace, Kennedy Limited (GKL) of 15.7 percent. The companies in this industry and their relative performance are:

- Ansa McAl Holding Ltd
- Bank Holdings Ltd
- Barbados Shipping& Trading
- Goddard Enterprises Ltd
- Grace Kennedy and Company
- McEneaney Alstons
- Neal & Massy Holdings Limited

Figure: 4.1.Conglomerates performance



Source: <http://www.boj.jm.com>

The variance in performance between the three top companies was very narrow with Ansa McAl just marginally outperforming Neal & Massy Holdings Limited. In this category, the top two positions went to T&T companies followed by Barbados and then Jamaica.

4.2.2.2. GKL and Industry ‘Five Forces’ Analysis

An industry analysis provides information regarding the industry driving force and the attractiveness of Conglomerate industry. It gives the key to management on how to plan its strategy to capture the opportunities, to neutralise or even reduce the threats for the firm and its operating environment. It also enables the firm to effectively allocate resources to achieve the company’s goals.

Barriers to Entry

- Low in goods sectors of manufacturing and trading but high in the services sector

- Players can gain access to the sector via relatively cheap and available imports
- Large capital requirements and increased regulation makes financial services industry difficult to enter

Power of Suppliers

- In the services industry the principal supplier is labor. A tightening job market and increased number of qualified people seeking employment has reduced the power of labor

Power of Customers

- As players in services industry expand and fight for greater market share customers will have more power

Risk of Substitutes

- Goods sector rife with a variety of imported substitutes
- Financial services sector is still recovering from collapse.
- Industry is dominated by few powerful players. As the population becomes more aware/educated about choices, providers of services have to improve offerings to keep market share

Industry Rivalry

- Intense rivalry exists in the goods sector between local manufacturers and imports
- Due to Large capital requirements and increased regulation in financial services industry. Thus, it has very little competition.
- Rivalry also, exists in the remittance sector, which has seen a boom in past years – Grace, Kennedy Limited was the innovator in this sector, but in recent times many have jumped on the band wagon, moving into strategic areas of the US to cash in on the highly populated Caribbean areas.

- Increased rivalry is experienced in the retail area (Hi-Lo Stores), where other chains are benefiting from the assumption that they are cheaper and in key areas that Hi-Lo is has yet to enter.

4.2.2.3. GKL and Critical Success Factors

- With respect to the Retail & Trading Division, in order to remain profitable and to get market share, this division needs to invest more in new stores (Hi-Lo and Rapid) in order to have a presence in the market place. The continued return to profitability at Medi-Grace, especially in getting back or finding new principals should be a point of interest over the next year.
- The Food Trading Division's profitability hinges on its continued innovations in new products and product lines while maintaining current principals. In order to increase market share, the division will need to invest in upgrades and creation of new factories and equipment to be competitive both locally and internationally.
- The future of the Financial Division sustainability and profitability is largely dependent on future acquisitions and mergers, as well as the creation of an island-wide network – creating greater access to all areas of the population. Currently, the Financial Services Division is concentrated in the corporate area, which limits it from benefiting from other income generating areas like Mandeville – with a high concentration of returning residents with foreign currency to invest.
- Maritime will take still some time to return to the level of profitability, but in the meantime, its continued investment in new equipment and facility upgrade (<http://www.firstglobalstockbrockers.com/grace.htm>)

4.2.3. SWOT Analysis and Grace, Kennedy Limited

The SWOT analysis provides information regarding the firm's position in its environment. It serves as a step to identify firm internal strengths and weaknesses and includes the external opportunities and threats that the firm encounters. It is an important tool for a firm to generate its strategic plan.

4.2.3.1. GKL: External Analysis

Opportunities

- Expansion into services where the barriers entry are considerably higher than the manufacturing and trading sector
- International expansion
- Expansion through acquisitions
- Synergies between Grace, Kennedy Limited businesses

Threats

- Global competition
- Instability in local economy and political arena
- Stringent import regulations of foreign countries which hurt Grace Export sales

4.2.3.2: GKL: Internal Analysis

Strengths

- Proactive and focused management team
- Diversified operations- profits generated from five core divisions which helps reduce earnings volatility
- Continued introduction of new products
- Openness of company and track record of honesty allows it to enjoy great customer loyalty and goodwill
- Continued investment in technology to reduce costs and increase efficiencies
- Expansion into international markets to reduce group profit dependence on local economy
- Strong consumer and customer base
- Wide base of principals

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Weaknesses

- Approximately 70% of profits are dependent on the local economy and movements in GDP
- Slow to implement change
- High cost of operations
- Short term focus

4.2.3.3. GKL and Current Strategy to the Year 2005

- 1) Moving closer to the final consumer
- 2) Expand faster in services
- 3) To grow international businesses to earn at least 50% of profits from economies outside Jamaica
- 4) Invest in our people

(<http://www.firstglobalstockbrockers.com/grace.htm>)

4.3. CAPITAL STRUCTURE AND GRACE, KENNEDY LIMITED

To understand the financing behavior of the firm according to STOT and POT models, and how GKL determines the Capital Structure, it is necessary to know the level of Capital Investment and sources of funds available to GKL, and what sources of funds have been used during this period. These factors have great influences on the manager's decisions.

4.3.1. GKL and Capital Expenditure

2002-1998

In 1998, JM\$ 277 million was spent on fixed asset additions. The company invested in modernized its tools and operations. It invested heavily on upgrading information technology within the group. This is in line with its group's strategic plan "GKL20/20 VISION" (see appendix V). The capital investment had increased in 1999, up to JM\$ 477 million. Similar to other years during this specific period, the company made heavily investments to improve efficiency, and laid foundations for the coming years as it was aiming to achieve rapid growth and



profitability. New plants and new business unit expansions had increased. In 2000, the capital investment had declined to the same level as of 1998, JM\$ 277 million, and rose up to JM\$ 586 million in 2001. In 2002 the amount of JM\$ 540 million had been invested on major capital expenditure items include the upgrading of factories, particularly at Grace Food Processors (canning) Limited where the Capri-Sun juice line was installed at cost of \$53million and upgrading the information technology at Grace, Kennedy Remittance Services where \$99 million was spent. The group continues to make capital investments in high growth sectors that will maximize returns. In the year 2003, it expected to have higher capital investment then the previous year (See table 4.1).

Table: 4.1 GKL and Capital Investments during the Year 1998-2002

Year		1998	1999	2000	2001	2002
JM\$		'000	'000	'000	'000	'000
CAPEX		277,000	477,000	277,000	586,000	540,000

Source: obtained from annual report 2002: page 29

4.3.2. Investment Criteria

The GKL group operates on the basis that cash generation is the most important measure in driving shareholders’ value. It set a target on revenue growth rate of 10 percent per annum with a return on equity of 20 percent. The new businesses investment decisions will be evaluated according to these criteria. It has a 15 percent overall Weighted-Average-Cost of Capital (WACC) which is used as a hurdle rate. The strategically fit and synergy effects from new business to existing business is important for GKL’s expansion through mergers and acquisitions. The financing decision is in line with the GKL’s corporate strategic planning (Financial Director’s Report: <http://www.gracekennedy.com/head.htm>)

4.3.3. Capital Structure and Leverage ratios

The GKL group’s Capital Structure has been a combination of debt and equity at an average level of debt to equity of 31.2 percent. The hurdle rate as mentioned

above is at the level of 15 percent with the cost of equity 20 percent. The after tax cost of debt is approximately 12.6 percent. This Debt/Equity ratio is close to Neal and Massy Limited (NML), which operate in the same industry with a similar combination of business units. (See Table 4.14). GKL's leverage ratio has a declining trend from 1999 to 2002. A leverage ratio of 30.68 percent in 1998 had increased by 24.2 percent in 1999, up to 38.12 percent. The leverage had reduced by 15.8 percent down to 32.10 percent in 2000. After a slight increase in 2001 by of 3.60 percent, it declined further in 2002 of 22.84 percent further down from 33.27 percent to 25.67 percent in 2002. This indicated that GKL has borrowing capacity available by comparing this ratio with NML of the same year. During the interview with the Financial Manager, Mr.Messado, he indicated that this ratio is likely to increase in the year 2003 as GKL plans to pursue further growth opportunities in international markets.

4.3.4. Sources of Funds

It is important to ascertain each source of fund which has been employed by GKL during this period.

4.3.4.1. Debt

Most funds are obtained from overseas i.e. the United States, Trinidad, and Tobago as they offer lower interest rates accompanied by a more stable economy environment. Secured and Unsecured bank loans, Mortgage loans, and financial leases have been sources for long-term debt. Unsecured loans are normally a larger portion than Secured loans and are supported by promissory notes or letters of comfort from the parent company. Interest rates of these loans range between 6.75 percent to 32 percent in 1999, between 6.83 to 25 percent in 2000, and between 13 percent to 29 percent of the year 2001 and 2002. The range between 1.9 percent and 2.4 percent of total financing capital was minority interest. GKL does not favor making debt issues unless it has major expansion with addition of the right market conditions. It maintains a conservative principle as to employ as little debt as possible. Short term Bank loans are favorable to

GKL. It has an abundance of credit lines available for the firm which accommodates the nature of GKL's operations as traders and distributors worldwide. This advantageous source allows the firm to have a very low level of long term liabilities compared to its total shareholders' funds available. These credit lines have been backed up by the company borrowing capacity which indicated by company capital reserves, cash and cash equivalents. (Appendix VII).

4.3.4.2. Shareholders' Equity

During 1998 to 2002 the number of shares issued increased from 180,491,000 shares up to 323,075,000 shares at a value of JM\$ 1 per share. The aim of issuing these shares was firstly, part of Executive Share Option Scheme and secondly, to provide bonus to shareholders. GKL has not raised funds by using this method as the company has enough funds from other sources. Management sees this vehicle of raising funds as too costly and inconvenient. Furthermore, the capital market in Jamaica is too volatile and too risky for such method. It had planned to go public in 2000 at the NASDAQ stock exchange. The United States markets were focused on technology, telecommunication and media stocks at that time. The GKL has delayed this venture and is waiting to find the right market conditions to enter this stock exchange. (Appendix VIII).

4.3.4.3. Capital Reserves

GKL has a high level of Capital Reserve accumulated from its continuous successful performance over previous years. Capital Reserve has increased substantially from JM\$ 2.1 billion in 1998 up to JM\$ 4.2 billion at the present. The Capital Reserves comprised of:

Transfer from Profit and Loss account.

Share Premium

Realized gains on disposal of assets

Capital distributions received

Par value of bonus issued

Profit capitalized by group companies
Unrealized surplus on the revaluation of fixed assets
Goodwill arising on consolidation of fixed assets
Other (Appendix IX)

4.3.4.4. Cash

Cash has been the main preferential source of funding of GKL. It operates on the basis of cash generation. Cash has been used as an important measure in driving shareholders' value. The GKL's cash and short- term investments have increased from JM\$ 2.3 billion in 1998 up to JM\$ 11.2 billion in 2002, Included in this amount are cash at bank and cash in hand, short term deposits and short term investments. The weighted average effective interest rate on short term deposits was 18 percent in 2002. These deposits have an average maturity of less than 90 days. Cash from operating activities also increases results of total Net Cash Position or Free Cash Flow (cash and short-term investments less total gearing, deposit payable and securities sold under agreement to repurchase) increase from JM\$ 1.1 billion in 1998 up to JM\$ 2.4 billion for the year 2002.(see appendix X)

4.3.4.5. Earnings vs. Dividends

GKL has succeeded in steadily increasing its earnings and dividends. It retains a large portion of about 88 percent plowback into the business by maintaining its dividend policy at 11.75 percent after tax profits. GKL's dividends have increased from JM\$ 56.4 million in 1998 up to JM\$ 166.6 million in 2002. In the year 2002 Divided per Share has increased by 43.30 percent and earnings is also increased by approximately of 41 percent. The average EPS growth during this period is 23.52 percent, while an average DPS is at 15.45 percent. (Table 4.2)

Table: 4.2. GKL and Earnings and Dividends during the period 1998-2002

Year	1998	1999	2000	2001	2002
JM\$	'000	'000	'000	'000	'000

No.of shares issued	180,491	180,491	216,588	266,887	323,075
Dividend pay-out	56,395	81,221	90,246	116,260	166,605
Dividend per share (cents)	31	45	42	44	52
% increase over prior year	0.70%	44%	11.10%	28.80%	43.30%
Earnings	505,790	587,010	721,519	1,010,320	1,419,243
EPS	2.83	2.25	2.7	3.13	4.39
% increase over prior year	13.30%	16.10%	22.90%	40.00%	40.48%
g- in dividends (Average)	15.45%				
g- in earnings (Average)	23.52%				

Source: obtained from annual report 1998-2002

4.3.4.6. Retained Earnings

The GKL has been an outstanding performer with a high rate of growth. Also Profitability has increased over the years. GKL retained the amount of JM\$ 1.6 billion in 1998, which has is increased up to JM\$ 3.3 billion in 2002. (See Table 4.3)

Table: 4.3. GKL and accumulated Retained Earning during the period 1998-2002

Year	1998	1999	2000	2001	2002
JM\$	'000	'000	'000	'000	'000
Retained Earnings	1,660,996	1,961,119	2,263,654	2,712,458	3,263,261

Source: obtained from annual report 1998-2002

4.4. GKL AND CAPITAL STRUCTURE DETERMINANTS

4.4.1. Company size

Company size is indicated by its market capitalization value (or market cap) and sales. Market capitalization is the number of a firm's shares held by the public times current stock price. Thus the market capitalization of a given company changes as its stock price changes. According to its market capitalization, the

GKL is the largest firm in Jamaica compared to its peers in the same industry. GKL market capitalization is illustrated in the table 4.4 and 4.5 below:

Table: 4.4 GKL and Market Capitalization

Year	1998	1999	2000	2001	2002
JM\$	'000	'000	'000	'000	'000
No. of shares issued	180,491	180,491	216,588	266,887	323,075
Market Price per Share	20.39	23.5	17.95	19.4	38
shareholders 'equity per Unit(BV)	22	25	24.95	24.11	24.24
Market capitalisation	3,682,016	4,241,539,	3,887,755	5,177,608	*8,875,390
Market cap, average					*4,499,390

Value at July 12, 2002

Source: adapted from <http://www.firstglobalstockbrockers.com/grace.htm>

Table: 4.5 GKL and Sales

Year	1998	1999	2000	2001	2002
JM\$	'000	'000	'000	'000	'000
Turnover	13,543,858	14,063,653	14,103,951	15,442,090	18,309,534
% increase over the period	2.2%	3.8%	0.3%	9.5%	18.6%

Source: Annual Report and Account 2002: page 9

The GKL's size had slightly increased during the period of 1998 to 2001. During the year 2001 to 2002 the company sales has greatly increased by 18.6 percent. Market capitalization had moved up from JM\$ 5.2 billion to JM\$ 8.9 billion in the year 2002. The group average of capitalization is JM\$ 4.5 billion. Thus GKL is one of the largest company in Jamaica compared to its peer groups i.e., Jam Producer, Lascelles, and Pan Jam, which have a market capitalization in 2002 of JM\$ 1.6 billion, JM\$ 5.3 billion and JM\$ 2.3 billion respectively. The company is likely to further increase in size.

4.4.2. Profitability

GKL has been very profitable in spite of Jamaican economic contraction. A well diversified range of businesses have contributed to group profitability. In 2002, Financial and Services sector was the best performer contributing highest profit in the group followed by Information sector, Food Trading, Retail and Trading, and Maritime, respectively. Total profit of the group has increased from JM\$ 696 million in 2001 up to JM\$ 1.75 million in 2002. In 1998, GKL's Group's revenues increased by 5.7 percent to \$14.5 billion. Trading profit increased substantially by 33.3% to \$765.9 million. The Net Profit Attributable to Stockholders increased by JM\$ 59.3 million over the corresponding period of 1998, moving from \$446.5 million to \$505.8 million, an increase of 13.3 percent. In 1999, sales revenues reached \$14.06 billion (1998: \$13.54 billion), an increase of 3.84 percent or \$519.7 million over the previous year (US\$1 = J\$42). The Net Profit Attributable to Stockholders increased by \$81.2 million over the period, moving from \$505.9 million up to \$587.0 million, an increase of 16.1 percent. In 2000, GKL achieved sales revenues of \$14.10 billion (1999: \$14.06 billion), an increase of 2.84 percent. The Net Profit Attributable to Stockholders increased by \$134.5 million over the corresponding period, moving from \$587 million to \$721.5 million, an increase of 22.9 percent. Sales revenues of 2001 had increased by 9.5 percent from previous year. The revenues from sales of \$15.4 billion (2000: \$14.1 billion). The Net Profit Attributable to Stockholders increased by \$288.8 million. In 2002, GKL reported revenues of \$ 18.3 billion with an increase of \$2.9 billion, which accounted for 18.6 percent increase from previous year. The Net profit attributable to shareholders rose to \$ 1.42 billion (2001: \$1.01bn), increased by \$408.9 million or 40.5 percent (Appendix XI, a). Table 4.6 shows the profitability ratios of GKL during the years 1998 to 2002, these ratios have an increasing trends and it is likely to continue generate profit to shareholders. Appendix XI, b illustrates the profits which are generated from different sectors during the period year 1998 to 2002.

Table: 4.6. GKL and Profitability ratios during the year 1998 to 2002

Profitability analysis	1998	1999	2000	2001	2002
Margin before interest and tax	2.6%	1.8 %	2.6%	4.9%	5.4%
Net profit margin	3.73%	4.17%	5.12%	6.54%	7.75%
Return on assets	5.8%	5.8%	6.5%	6.6%	6.5%
Return on total equity	13.40%	13.8 %	14.5%	17.1%	19.9%
Financial leverage effect	1.47%	2.36%	1.91%	1.33%	1.43%

Source: adapted from annual report 1998-2002

GKL's performance has been recorded as seen in Appendix IV, b the Food Trading, Financial Services and Information Divisions have also increased profitability over this period, while Retail and Trading and the Maritime Divisions both recorded reductions in profits in comparison to the previous year. The Financial, Information and Food Trading Divisions are set to be the new profit centres for the group. The Information Division has an increase in competition in terms of remittances leading to reduction of margins in order to remain competitive.

4.4.3. Taxes

Similar to Kester and Chang (1994) the proxy used here for tax rate is the ratio of taxes paid to pre-tax income. Proxy for Non-Debt Tax Shield is the ratio of depreciation, investment tax credits, and Tax-Loss Carry Forwards to Total Assets (Titman and Wessels, 1988). Jamaica's corporate tax is 33.3 percent. The effective tax rate of GKL for the year as follows: (see table 4.7)

Table 4.7 GKL and Taxes

Year	effective tax rate	Tax Shields	Depreciation	Tax credit	Tax loss carry f/w	Total	Total Assets	Results
1998	20.20%	146,979	172,477	31,772	234,604	438,853	8,674,688	5.10%
1999	21.90%	142,803	208,676	37,483	187,403	433,562	9,999,799	4.30%

2000	25.30%	144,705	234,164	53,649	396,558	684,371	1,115,666	6.10%
2001	20.10%	210,014	288,611	56,872	324,517	670,000	15,383,085	4.30%
2002	16.90%	353,429	361,367	59,874	205,968	627,209	21,962,185	2.80%

Sources: calculated from Annual report 1998-2002

4.4.4. Tangibility

Tangibility of GKL is measured by the ratio of book value of depreciated fixed assets to total assets. Table 4.8 illustrates the tangibility of GKL. The company has very low levels of fixed assets total assets, on average 13.94 percent. The consolidated balance sheets for the group have not recorded its assets under-management, which are not beneficially owned by the group, but which the banking subsidiaries manage on behalf of investors. Book value of these assets amounted to JM\$ 3.5 billion, JM\$ 6.3 billion, JM\$ 9.6 billion and JM\$ 11.4 billion, from 1999 to 2002 respectively.

Table: 4.8 GKL and Tangible Assets

Year	1998	1999	2000	2001	2002
JM\$	'000	'000	'000	'000	'000
Fixed assets	1,413,378	1,599,823	1,741,054	1,947,667	2,076,970
total assets	8,674,688	9,999,799	11,156,660	15,383,085	21,962,185
Net F/A ratios	16%	16%	15.6%	12.6%	9.5%

Sources: Adapted from Annual report 1998-2002

4.4.5. Growth

The analysis of ratios (table 4.9) indicates that GKL has an increasing trend of growth. It has retained 88 percent of the earnings within business. The company's ROE has increased from 13.4 percent in 1998 up to 19.9 percent in

2002. The Return on Total Capital has increased during the period year of 1999 to 2002 by 40 percent.

According to $g = ROE \times \text{Retention ratio}$, the company growth rate during this period is at average of 13.85 percent. The company had increased its assets substantially in 2001. Increasing assets are good indicator of the company's future operations. During this period the company has planned to improve its efficiency and has made various acquisitions. During the period of year 1999 to 2000, the company has divested unprofitable businesses on order to increase efficiency, and released cash to be invested in more profitable businesses. The growth of company-owned brands world-wide continued to encouraging sales in international market. Remittance services Ltd, which operates in Caricom continues to show substantial growth both in terms of turnover and profitability. P/E ratios of GKL moved up closer to being similar with other companies of the same industry i.e. in 2002, GKL has moved from 5.12 to 8.65 times, while Lascelles moved from 4.55 to 8.00 times. Pan Jam moved from 7.12 to 8.50 times. Overall, GKL is trended to be continued in growth aspect.

Table: 4.9. GKL and Growth Aspects

Growth Analysis		1998	1999	2000	2001	2002
Retention rate		0.88	0.88	0.88	0.88	0.88
Return on total capital			25%	23.30%	27.70%	35.0%
Return on Equity (ROE)		13.40	13.8	14.5	17.1	19.9
Total asset turnover (TAT) times		n/av	2.33	2.09	1.75	1.36
Total asset/equity		1.41	1.43	1.3	2.55	1.36
Net Profit Margin		3.73	4.17	5.12	6.54	7.75
Sustainable growth rate	13.85					
P/E ratios		7.28	10.68	5.39	5.12	8.65
P/E of market average		5.91	8.8	7.48	9.36	9.32

Sources: Adapted from Annual report 1998-2002

4.4.6. Growth Opportunities

Similar to Bevan and Danbolt (2000), Market to book ratio is a good proxy for growth opportunities for GKL. It is common with most studies which tend to apply proxies, rather than valuation models to estimate growth opportunities (Danbolt et al.1999). From table 4.10 shows that GKL's Market-to-Book Value has been low during the period 1998-2001, and it has improved greatly in 2002. Considering all aspects, it is likely to further increase in the future. The higher the MV/BV ratios indicate the higher growth opportunities.

Table: 4.10. GKL and Market to Book Value

Year	1998	1999	2000	2001	2002
JM\$	'000	'000	'000	'000	'000
Market to book ratios	0.92	0.94	0.72	0.8	1.57
No. of shares issued	180,491	180,491	216,588	266,887	323,075
Market Capitalisation MV	3,682,016	4,241,539	3,887,755	5,177,608	12,276,900
Shareholders' equity BV	3,982,797	4,517,598	5,404,775	6,433,887	7,832,863
Market Price Per Share (MV)	20.39	23.5	17.95	19.4	38
Book value per share (BV)	22.1	25	24.9	24.1	24.24

Sources: calculated from Annual report 1998-2002

Strategically, even though GKL is operating in a maturing industry in Jamaica, it has abundances of growth opportunities especially in overseas markets. For example, in a re-launching of Grace international brands in 1999, National Grocers from Canada approached GKL to have Grace Products listed in 700 stores across the country. The strategy was to tighten up its operations by divesting unprofitable businesses i.e. the divestment of shareholdings in Seprod Ltd and Caribbean Freight Forwards& Custom Brokers Limited, and 60 percent of Computer & Controls Limited. The aim was to increase efficiency and reduce costs. GKL has been pursuing new opportunities in information technology and services and financial sectors which are becoming lucrative sectors in Jamaica. These leads to GKL having better focus on its core business and creating value

to shareholders. More Capital was invested into Financial and service sector i.e. First Global Bank Limited, especially during 2000 to 2002, as it was experiencing rapid growth. Similarly, the remittance services sector has as electronic network of total 162 outlets with 85 outlets in Jamaica 46 outlets in Trinidad, Tobago and 31 in Guyana. These indicated that GKL has excellent growth opportunities.

4.4.7. Internal Liquidity: Flexibility

This can be indicated by GKL's cash, cash and short term investments, cash equivalent and total capital reserves. (See section Cash and Capital Reserves). Table: 4.11 Indicates important liquidity ratios. Cash ratio has an increasing trend. The company increases its cash and marketable securities as a result of its success in generating profits over the years.

Table: 4.11 GKL and Internal Liquidity

Internal Liquidity					
Year	1998	1999	2000	2001	2002
Time interest earned	2.33	2.75	3.37	3.12	2.65
Current ratio	1.31	1.37	1.32	1.29	1.23
Cash ratio	0.54	0.58	0.64	0.75	0.84
Cash from operation ratio	0.35	0.37	0.42	0.16	0.37

Sources: Calculate from annual report 1998-2002

4.4.8. Firm Risk

4.4.8.1. Business risk

Degree Operating Leverage indicates the extent to which fixed costs are used in firm's operations. Generally, firms in capital intensive industry have high fixed costs and having high business risk, this because a relatively small change in sales result in large change in ROE. GKL has a low level of DOL at 1.68 in 2002 compare to DOL of 3.1 in 2001. Degree Financial Leverage measures the percentage changes in net income for a percentage changes in net operating

income. The higher the DFL the greater the fluctuations in net income for changes in net operating income. GKL has a fairly stable DFL at average of 1.55. The Degree Combined Leverage which indicates the overall sensitivity of net income to changes in sales has declined from 7.56 in 1998 down to 2.71 in 2002. (Appendix XII). Table 4.12 shows that the trend of GKL's business risk has reduced substantially. GKL is rated as Good- excellent the BB Credit rating by Standard& Poor's Rating Services. The company is comprised of well diversified business units in different industry. Thus it is expected that unsystematic risks should be eliminated, but only systematic risk remains. The volatility of Jamaican economy, poor GDP growth rate and high inflation leads to high interest rates, the depreciation of the Jamaican Dollar, high unemployment and high crime rate included with natural disaster of flood these have contributed to business risk to all businesses. GKL also have been emphasized on operating internationally as to benefit from local depreciated currency and gain from hard currency from overseas. The GKL's income from operations from overseas has increased in recent years. Currency risk is the risk that the value of financial instrument will fluctuate due to changes in foreign exchange rates. GKL group operates internationally and is exposed to currency risk from various currency exposures primarily with the respect to the United States Dollar. An aggregate net foreign liability for local group companies of approximately US\$ 17,601,000 in 2000, US\$15,276,000 in 2001 and US\$14,874,000 in 2002 which in respect of transactions arising in ordinary course of business, the group currency risk is not considered to be significant. Interest rate risk refers to the value of financial instrument will fluctuate due to changes in market interest rates. The company has some degree of interest rate risk. For market risk, the company has no significant exposure to market risk as the financial instruments subject to this risk are not material to the group. Company credit risk is low as the group has no significant concentration of credit risk attaching to trade receivable as its has a large customer base, with no significant balances arising from any single economic or business sector.

Table 4.12 Degree Combined Leverage

Year	1998	1999	2000	2001	2002
% changes in PBT	10.2	19.7	23.7	29.4	31.2
% changes in Sales	2.2	3.8	0.3	9.5	18.6
DOL	4.64	5.18	1.9	3.1	1.68
DFL	1.63	1.57	1.42	1.47	1.67
DCL	7.56	8.13	2.69	4.55	2.71

Source: calculated from information from annual report 1998-2002

4.4.8.2. Financial risk

The company has a low financial risk. It has maintained conservative financing principles. It has a low level of Debt-to-Equity ratio relative to its peer. Sources of funds are mainly from its cash generated from the operation within the group and from short-term investments. It has a high Net cash position. The company is rated as BB rating by Standard & Poor's Rating Services. GKL has medium market risk with the asset beta of 0.91 compared with NML of 0.81. The company's cost of equity is 20 percent. The Weighted Average Cost of Capital is about 15-16 percent. The company D/E ratios has maintained a level of 25-38 percent. The interest rate coverage is range between 2.63 and 3.62 times which is slightly higher than industry average of 2.43 and 3.0 times.(see table 4.13 and 4.14)

Table.4.13. GKL and Financial Risk ratios

Financial risk			1998	1999	2000	2001	2002
Debt-equity ratio			30.68	38.12	32.1	33.27	25.67
Long-term debt/Long-term Capital			6	12	9.8	8.1	7.1
Total debt / Total capital			1.04	1.02	0.92	1.2	1.62
Interest Coverage				2.62	3.26	3.04	2.62

Sources: calculated form annual report 1998-2002

Table: 4.14. The GKL's Debt-to-Equity Ratios vs. NML, ANSA McAl and GHL

Year	Beta	1998	1999	2000	2001	2002
GKL	0.91	30.68%	38.12%	32.10%	33.27%	25.67%
% increase			24.2%	-15.8%	3.6%	-22.84%
NML	0.81			26.0%	28.0%	31.1%
ANSA McAl	0.98					79%
GHL	1.7	10.0%	20.0%	50.0%	90.0%	90.0%

Source: adapted from <http://www.jamstockex.com>

4.4.9. Industry Specific

GKL is a Conglomerate firm (see its characteristics point above)

After reviewing the GKL financial performance, its position and characteristics within its industry and economic environment have been established. Now we see how financial manager of GKL determined its Capital Structure under such circumstances.

4.5. CONCLUSION

In this chapter has reviewed the information regarding GKL's standing position in its operating environment. The industry attractiveness has evaluated. The company's strategic position and resources have been ascertained. The next chapter provides the reasons which underline a choice of the capital structure mix of GKL by the Management.

CHAPTER 5: QUESTIONNAIRE DESIGN, ADMINISTRATION AND RESULTS: FINANCIAL MANAGER'S PERSPECTIVE ON GKL'S CAPITAL STRUCTURE

5.1. INTRODUCTION

This chapter deals with the questionnaire's design and structure including the results obtained from the interview with GKL Group Financial Manager on how the Capital Structure is established. The results are important for understanding the financing behaviour of GKL how it decides its capital structure under particular firm characteristics and circumstances which were decided in chapters 3 and 4.

5.2. QUESTIONNAIRE DESIGN AND STRUCTURE

The questionnaire was composed based on previous research on the topic and issues of Capital Structure. The design of the questionnaire is a combination of the work from Pinegar and Wilbricht (1989), which was used for surveying firm's financial manager perspectives of U.S.A. firms, and other work from various studies was used as a guideline for designing the questionnaire which can be summarized as follows:

Capital Structure Determinants: Evidence from Literature Review

- Business risk - Titman and Wessels(1988)
- Taxes –MM (1958, 1963)
- Non Debt Tax shield- DeAngelo and Masulis, (1980)
- Bankruptcy and Financial Distress- Myers (1984)
- Reputation – Diamond (1989)
- Management Attitude - Barton and Gordon (1988)
- Corporate planning principle- Whitley (1992)
- Borrowing Capacity - Myers and Majluf (1984)
- Credit rating - Graham and Harvey (1999)
- Stock Price Reactions- Eckbo (1986) and Kim and stulz (1988)
- Growth opportunity-Allen(1991)
- Market Conditions (economy)- Korajczyk & Levy (2002)

- Managerial equity ownerships- Kim & Sorensen (1986)
- Preferences toward funding sources- Donaldson (1961)
- Transactions costs- Donaldson (1961)
- Financial Mobility and Flexibility –Bancel and Mitto(2002)
- Asset characteristics- Titman and Wessels(1988)
- Market timing- Ritter (2000)
- Corporate Control considerations– Jensen (1986)

The first section of the questionnaire investigates the financial manager's attitude towards the sources of funding. The second section aims to ascertain the factors that determine a company's overall capital structure from the manager's perspective. The respondent is the financial manager of Grace Kennedy Limited. The interview took 45 minutes to 90 minutes to complete. The interview was conducted at the company premises at a convenient time for the financial manager.

5.3. FINANCIAL MANAGER'S PERSPECTIVE AND GKL'S CAPITAL STRUCTURE

The following information is obtained from the interview with GKL's Group Financial manager: Mr. Andrew R. Messado, the Group Financial Manager of Grace Kennedy and Company (Appendix XIII). The discussion of the questions is presented according to the relevant issues in addressing.

5.3.1. SECTION 1: Attitude toward Funding Sources

Question 1.a, refers to the importance of company principles in deciding on a particular capital structure. Mr. Messado's response is that the company considers that to strive to maintain approximately constant long term Debt-to-Equity ratios is an important policy. **Question 1.b**. He stated that even though company strives to maintain its Debt-to-Equity ratios at a constant level, the GKL does not have a specific target it is trying to achieve. GKL attempts to use first the most advantageous sources of funds available before deciding to move on to

other sources which are less favourable. This is very important to the firm.

Question 2 The Financial Manager was asked to indicate preferential sources of funds by ranking according to GKL's practice.

He ranked the sources of fund as following order:

1. Internal Equity (Retained Income)
2. Bank Debt
3. External (new) Common Stock
4. Non-Bank Straight debt
5. Non –Bank convertible debt.

Mr. Messado added that the internal funds of GKL are substantively available in the form of cash and short-term investments. GKL has a high level of capital reserves. Internal Equity is considered to be cheaper than other sources. For Bank Debt, GKL has favorable credit lines which the company can choose from the most competitive offers made to the firm. Common stock is expensive, complicated and time consuming. In addition, the capital market in Jamaica is not favorable for this type of issue. The company has not used this method in raising capital for investment. Most issues made every year were part of the Executive Shares Option scheme and to be given as a bonus to GKL's shareholders. Non-Bank Straight Debt and Non-Bank Convertible Debt method have also not been employed by GKL.

Question 3: Features associated with Equity and Debt issues.

Question 3.1. Under what circumstances would you make use of Retained Income?

The Retained Income is the normal source of funds used by GKL. It is used when the company is expanding its internal operations, and when debt and equity are expensive.

Question 3.2: Under what circumstances would you make use of Equity Issues?

When the firm funds major expansion and acquisition, it will make use of Equity Financing. This has not happened in the last five years. The market conditions

are also an important consideration for this method. He adds that GKL has delayed the listing on NASDAQ in the year 2000 due to non-optimal market conditions. The capital markets are more favourable for technology and services sectors.

Question 3.3: Under what circumstance would you make use of Debt financing?

The GKL makes use of Debt under the following circumstances:

- To fund a major expansion and acquisitions
- To add to liquidity
- To fund long term assets if the market conditions are right

In addition, the interest rate on borrowing in Jamaica is higher than in any other country in the Caribbean community and the U.S.A. thus the company borrow more from overseas rather than from locally (see Appendix VI).

5.3.2. SECTION 2: How Financial Manager Determines Capital Structure

Question 4: Mr. Messado was asked to respond to the questionnaire by indicating the relative importance related to issues which he is considering when deciding on a financing mix. These questions were further probed during the interview. The results concluded that Cost of Underwriting is an important consideration to what type of capital it should be issued (4, a). Therefore, the Manager prefers Retained Earnings to the firm this due to it is considered to be cheaper than Debt and Equity. Tax on interest expense is moderately important to GKL, but GKL's capital structures have not been driven by tax saving (4, b), but rather by the Corporate strategic planning principle (4, q). To Maintaining the Debt-to-Equity in line with an industry average is not important to the firm financing decision (4, d). Also, it depends on how advantageous of each source of funds available to GKL. The funds are obtained by weighing the costs against benefits among the various sources. Market conditions are the most important factors in issuing each type of capital (4, l). Market reactions to these issues are important (4, m). However, avoiding under- pricing of securities to be issued (4, c), and to correcting mis-pricing of outstanding securities are not applicable to

GKL (4, f). Mr.Messado strongly emphasized the importance of the possibility of becoming insolvent (4, g). He ranked matching maturity of assets and liabilities as important policy to the firm (4, e).he further that GKL maintains a moderate financing policy stance due to the consideration of costs and risks associated with sources of funds. He explained that the matching principle in which the maturity structure of finance matches the maturity of the project assets, GKL finances fixed assets and current assets which are needed on permanent basis through long term sources, while current assets where financing need vary throughout the year are financed by short term borrowings. He considered projected cash flows from the assets to be financed as very important(4, h) as well as financial flexibility (4, p), Voting Control (4, k) was ranked important, risk of being taken over (4, j), restrictive covenants of senior securities (4, i). Credit rating and company's reputation (4, r) are also most important in deciding capital structure choices. He gave emphasis on GKL's most important aim is to maximize shareholders 'wealth (4, o).Thus, the effect of each sources of funding on cost of capital was considered as the most important as because the lower the cost of capital means the higher the EPS consequently shareholders' wealth increases.

Question 5, 7, and 8: GKL's Equity and equity held by management

These questions aim to ascertain proportions of Equity, Intangible Asset, and proportion of Equity held by management.

Responses: The equity is between 60 percent and 80 percent (Q, 5) compounded in GKL's capital structure. An Intangible Asset over total assets is less than 1 percent (Q, 7). The company has bought international brands but that was paid in cash and has written-off as an expense. Therefore, Intangible Assets is very low compared to Total Assets. Proportion of Equity owned by management is between 10 percent and 20 percent (Q, 8).

Question 6: the questions aimed to ascertain how Jamaican economy affects GKL's choices of financing mix. Mr.Messado strongly agreed that the current

stage of Jamaican economy has an impact on GKL's financing mix and on the availability of sources of capital (Q, 6a, b). Under this economy firm has the preference on Debt over Equity (Q, 6d) even though interest rate in Jamaica is higher than its neighbouring countries in the same region. Q6, c, the recent Jamaica economy affects the preference of equity over Debt is not applicable to GKL as it has not employed this method for the last five years.

Question 9: what is your firm's total market value of equity?

He answered according to the Annual report of 2002; page 9, (see also Table 3.7) current market value of equity is at approximately 12.3 billion which increased from 5.2 billion of 2001. GKL's market value has been lower than its book value during 1998-2001, but in 2002 the market value is reported much higher than book value.

Question 10: What is your weighted Average Cost of Capital?

He answered that the WACC of the company is between 15-16 percent.

Question 11: How would you describe your firm's future investment opportunities?

He answered that the firm has an abundance of opportunities in the year to come both locally and internationally and it has been part of the strategic plan to capture these opportunities (also see chapter 4)

Question 12: How is your firm current strategy affect the firm debt-to-equity mix?

He answered that the firm are in the growth mode and it is employing an aggressive growth expansion. Thus the firm prefers to have lower level of debt. It maintains high capital reserves which important to firm's strategic operation and management flexibility. During this five year period the debt level have been reduced from the highest 38.12 percent in 1999 down to 25.67 percent in 2002(also see chapter 4), this because there has been a massive expansion and improving operating efficiency of existing business. Mr.Messado stated that the

Debt-to-Equity is expected to increase in 2003 due to the company having more investment opportunities to pursue.

Question 13: How risky is your firm position in industry? What are main sources of risk?

He answered that the firm has less risk than its rivals in Jamaica as it has a well diversified range of business in different industry. There is a concern on economical risks as most almost 70 percent of income still depends on the local economy which is volatile.

Question 14: given new profitable opportunities which the company cannot take without doing one of the following, your firm will most likely choose to:

- Depart from the target Debt/ Equity ratio**
- Cut dividends
- Sell-off other assets
- Pass up the profitable investment.

Mr. Messado explained that the company cannot invest in new opportunities without departing from the target Debt / Equity ratios. To cut dividends is not good for the company shareholders. One of the reasons that have increased investor's confidence in GKL performance is that the promise to provide a return on capital to shareholders, and the firm's disciplined approach to Balance Sheet management. Thus, the company set constant dividends of 11.75 percent of earnings with 88 percent remaining in business. The reason is to enable GKL to invest in new opportunities without having to pass up the profitable investment or borrowing funds at the wrong time. The company sells off its assets only when those particular assets are not productive and have very few benefits to the business.

The next question aimed to ascertain the issue of GKL's Information Asymmetry.

Question 15: According to your estimation, your firm's outstanding securities are priced fairly by the market for what percentage of the time:

Mr.Messado responded that GKL's securities are priced fairly of more than 80 percent of the time. The company has been constantly communicating with its shareholders and to the public openly about its stage and strategic plans of management and future prospects.

Question 16: It probed about tax structure in Jamaica and how it affects the firm's decision on particular types of funding sources used in Capital Structure. Mr. Messado said that tax in Jamaica has favoured Retained Earnings, Debt and then the least for External Equity. The company has not been considering Tax reduction on debt interest payment as a mean to increase shareholders' values. It has very little benefit to GKL.

5.4. CONCLUSION

Grace, Kennedy Limited (GKL)'s characteristic behaviour was reviewed. The interview's results with the Financial Manager have added further information on how the GKL deals with its capital structure. This information is important for the evaluation in the next chapter as regards how GKL makes capital structure decisions, and the extent to which practice have met theories.

CHAPTER 6: EVALUATION OF CASE STUDY

6.1 INTRODUCTION

This chapter deals with the discussion of the results obtained from the questionnaire. (Appendix XIII). The factors which are related to the STOT (Tax, Bankruptcy Costs and Agency Costs) and POT (Information Asymmetry and Signalling, Transaction Costs) will be analyzed. The results will be discussed together with the evaluation of the gap between the theory discussed in chapter two and the case study discussed in Chapter 3-5.

6.2 DISCUSSION OF RESULTS

This section is an evaluation of results obtained from the Financial Manager's questionnaire and from the interview. This research is descriptive in nature. The information is obtained from one company, Grace, Kennedy Limited (GKL). Company's past performance and industry average was used as benchmark in this study. In order to comprehensively understand how the firm makes financing decisions, literature reviews have suggested the interview with the Financial Manager would enable us to understand the reason behind the firm financing behaviour. Thus, the financing behaviour of GKL will be discussed following the STOT and POT Model incorporating GKL's characteristics outlined in chapter 3 and 4.

6.2.1. Tax Benefits and Costs of Financial Distress and Bankruptcy

GKL found that tax shield benefits (Q4, b) are slightly important but are not the most important factor for capital structure decision as suggested by MM (1963) and Stewart et al. (1988). Consistent with Norton (1991) and Titi et al. (1995), although GKL has taken a tax factor into account, the Capital Structure decisions are not driven by benefits of tax shield. Mr. Messado, the financial Manager stated that the GKL has only minimal benefits from tax bills reduction of interest's payments. This may be because the firm has a large amount of Tax Loss Carry-Forwards (TLCF) (see Tax, Chapter 3). This was explained by Mackie-Mason (1990) and DeAngelo and Masulis (1980) that firms which have high TLCF and

Non-Debt-Tax Shield are not unlikely to gain benefit of tax reduction, due to the firm's tax saving capacity has already been exhausted through these sources. In contrast to Graham (1996), GKL's effective marginal tax rate has no relationship with the firm debt's level, and consistent with Allen (1991) that the tax considerations would not divert GKL from the broad thrust of the overall strategic policies.

According to Diamond (1989), GKL's characteristics of having a long term track record is considered to have lower default probabilities. It has a beta risk factor of 0.91 with a large and well diversified range of businesses. The firm is financially secure with a high level of cash, strong financial reserves and borrowing capacity. In spite of these facts GKL disagreed with Stewart et al (1988) that it should borrow more in order to take full advantage of tax benefits even though it can comfortably service the debt. Mr. Messado's opinion is that having too much debt in capital structure creates concerns regards potential costs of Financial Distress and Bankruptcy (Q.4, g). Thus, consistent with POT suggested by Myers (1984). GKL has a negative relationship between its profits and growth opportunity and the level of leverage, but threats of bankruptcy costs are not the cause of this relationship. GKL acknowledged the expensive costs associated with bankruptcy situation as suggested by Warner (1977a, 1977b) and Altman (1984). Due to this consideration GKL has an upper limit at 50 percent Debt. GKL's current position is not concerned about these costs as its financial health and overall operations are far from bankruptcy in spite of operating in the poor economy of Jamaica. Instead, GKL gives serious consideration to the relationship with its suppliers and customers in deciding the levels of debt. This may be because GKL has a high proportion of debts which are short-term bank loans, while the main source of GKL's current liabilities has been provided by its suppliers. Therefore, it is very important for GKL to have a low level of debt and therefore lower risk with the level of credit rating at BB, which indicates Good-excellent credit. This fact is in conflict with Haugen and Senbet (1978) who argued that Financial Distress and Bankruptcy Costs have no bearing relationship between the firm and its suppliers or customers, but only for

shareholders and bondholders. More evidence was found to be consistent with the Graham and Harvey survey (2001), which found that although debt provides tax bills reduction, firms are concerned about financial flexibility and credit ratings when issuing debt and are also worried about the dilution of share earnings when issuing equity (4q,r). Tax factor is the most important consideration for large, regulated and dividend paying firms. In contrast, GKL argues that the level of corporate tax is not an incentive to use debt, and also GKL does not have a specified target debt-to-equity ratio and then to issue equity for maintaining that ratio as stated by Graham and Harvey (2001). Mr.Messado pointed out that the company does not have a specific target ratio, but it remains on the conservative side of policy. The levels of leverage have been low on average of 30 percent. It is not only for obtaining credit from suppliers at better rates, but also accommodating the firm's current situation as GKL is pursuing a rapid growth strategy where high levels of growth opportunities are available to the firm locally and internationally. This low level of debt also enables GKL to equip itself for coping with its changing environments and the ability to deal with the unexpected of "worst case scenarios". Furthermore, GKL does not borrow in industry terms as suggested by Geyer et al. (1994), Munshi (1990), and Bevan and Danbolt (2000). The industry effect influences Capital Structure decisions, and even though the debt-to-equity ratio is similar to NML, Mr.Messado stated that industry norms are not important for GKL setting the Capital Structure (4, d).

6.2.2. Agency costs and Capital Structure Decision

Agency Costs of Debt are borne by the Firm owners as the result of potential conflicts between debt holders and equity holders and between managers and equity holders. The choice of capital structure can mitigate these conflicts, and is the one that in some circumstances reduce the costs arising from such conflicts (see Harris and Raviv, 1991).

6.2.2.1. GKL and Conflicts between Managers and Shareholders

The GKL's policy is not in conformance with Jensen and Meckling (1976), who stated that managers spend less effort in investing and managing a firm and firm's resources if they own only a small fraction of residual claim, but have to bear all costs of activities. Consequently, they do not capture the entire gain from the profit enhancement activities. Therefore, the managers may transfer those resources to themselves. For example, by consuming "perquisites" such as a luxurious offices and vehicles, private jets, building "empire" and so on, which these costs are borne by shareholders. Even though GKL's management's interests are only small fraction of between 10 percent to 20 percent total capital (Q.8), GKL has always been operated on prudent policies. Furthermore, GKL has linked compensation with performance by creating the Stock Option Plan for the directors and employees. For example in 2002, the amount of 7,167,792 shares was allocated to executive directors and the amount of 720,000 shares for non-executive directors. GKL feels that managers and employees are more motivated and put their best efforts into achieving the company's target. Mr.Messado explained that the company has a well established corporate governance and strategy which is used as guidelines in pursuing any ventures. GKL has criteria in selecting investments i.e. the return on equity of 20 percent and growth rate of 10 percent, with cash generation along with synergy that new business would contribute to existing businesses. In addition, GKL has a monitoring Board of Directors and Auditors He stated that the Agency Costs of potential conflicts have been monitored and taken into consideration at corporate level. Thus, the Manager responded that agency conflict is not important to GKL in deciding on Capital Structure, as there is already a well defined monitoring system in place. So, management can devote more time and energy in creating shareholders 'value. Thus, GKL does not provide evidence for the claims of Jensen (1986) and Wildsmith (1974) that management does not automatically seek to maximize return on capital, but instead is interested in pursuing growth rather than profitability, in order to gain benefit through larger compensation which is associated with the firm' size. In addition to reasons as given by Jensen and

Meckling (1984), GKL's current strategy is to pursue rapid growth. It is reasonable, as according to SWOT analysis (see above), for the company is in a strong position as regards financial and human capital resources accompanied by high growth opportunities. Thus, pursuing growth is a strategic plan from corporate level and not because of the managers' motive to gain from compensation which is based on increasing size. GKL has a good structure of compensation in place, so agency costs of equity are not the main concern for GKL. In addition, the company has never obtained funds through raising equity. The reason for that is given as follows: i) the company does not need external funds as it has internal funds available; ii) this method is expensive and time-consuming (Donalson, 1961) and Myers (1984) ; iii) the equity market in Jamaica is not suitable for such method; iv) the market timing is not right, i.e. the company's attempt to list its shares in NASDAQ in the year 2000 has been delayed as the US market favors technology and service sectors. Explanations for this were given by the market timing of Banker and Wurgler (2002) and by the window of opportunities of Ritter (2002), which consistent with evidences found by Graham and Harvey (2001). These observations support the POT.

GKL disagreed with Jensen (1986) that debt is used as a control mechanism to reduce agency problems by protecting overinvestment, especially, for mature and profitable firms with substantial cash and capital reserves like GKL. The firm is not in the stage of overinvestment situations because of GKL having an abundance of investment opportunities locally and internationally. It has been paying out cash by declaring dividend, and through stock repurchase plan as suggested by Jensen (1986). However, this amount is at a constant level as part of dividend policy, not because to solve overinvestment problems. Overall Mr. Messado concluded that the GKL does not consider Agency Costs between managers and shareholders when deciding on its capital structure.

6.2.2.2. GKL and Conflicts between Bondholders and Shareholders

Jensen and Meckling (1976) suggested the restrictive covenants as a tool to mitigate potential conflicts of Agency problem imposed by bondholders when debt becomes too risky. GKL stated that restrictive covenants are the most important consideration for deciding on debt issues (4.i). The Financial Manager stated that due to our Jamaican economy (Q.6) with high interest rates due to high rate of inflation the firm has never been using Debt Issues or Convertible Debt issued in raising funds. Covenants are used as a tool to control asset substitutions and overinvestment investment problems (Jensen, 1976), but it put restrictions to management's operating decisions. The Financial Manager therefore prefers internally generated funds. So far they have been able to fund current operations from internal sources. The Company has been having a good relationship with its banks, suppliers and creditors. It has an abundance of credit lines and therefore it does not normally favor issuing debt. This is because GKL does not need such debt as it has internal funds that are liquid enough for its operations. However, he further stated the circumstances where GKL would make use of a debt issue (Q3.3) as follows: i) to fund major expansion and acquisition; ii) to add to liquidity and to fund long-term assets if market conditions are right. In this question the manager did not indicate that the firm will issue debt only when internal fund has already been exhausted as suggested by POT, but the market conditions are the main concern when issuing debt. Thus, this evidence shows support of market timing argument of Ritter (2002), Banker and Wurgler (2002), Bancel and Miito (2002) and Graham and Harvey (2001). When discussing the Agency problems with regards to the issues of direct wealth transfers, asset substitutions, and underinvestment. The Financial Manager agreed with Diamond (1989) and Hirshleifer and Thakor (1989) that GKL have incentive to invest in relatively safe projects out of reputational considerations, but nevertheless those project must meet investment criteria (Q.4 r). GKL reputation as a large conglomerate has been long established since 1922. It has a strong asset structure (see tangibility) with a proportion of less than 1 percent of intangible assets (Q.7). Tangibility (ratio of fixed assets to total assets)

represents the effect of collateral value on the firm's leverage level which was suggested having a positive relationship with leverage (Rajan and Zingales, 1995). GKL has employed only small portion of long-term debt in its capital structure. The main sources of debt come from short-term bank borrowing and from Creditors. The proportion unsecured debts are much larger than the secured debt for short-term loans and long-term loans. (Appendix VII). This shows that the firm's reputation of its long term success for more than 80 years has contributed to such advantages. Thus, cost of debt covenants creates cost of lost investment opportunities due to firm have incentive to invest in suboptimal projects is not applicable to GKL. Mr Messado agrees with Harris and Raviv (1991) that too much debt causes the firm to have less efficiency and flexibility especially in economic down-turn. Thus, he prefers to maintain the capital reserves, and having lower levels of debt as the company is planning to further its expansion in the near future, and capturing its growth opportunities. This is contrast with Jensen (1986) and Barclay and Smith (1995), who suggested that the debts to equity ratios for mature firms are expected to be high in order to control overinvestment problems. However, GKL's leverage level is maintained at fairly constant and low level (see leverage). This may be because of, even though GKL is a mature firm in Jamaica. It has great investment opportunities. Thus, the evidence is consistent with Rajan and Zingales (1995) and Titman and Wessels (1988), who suggested the negative relationship between firm's growth opportunities and its D/E ratios.

6.2.3. GKL and Attitude toward Funding Sources

Evidence as regards GKL's attitude towards funding sources was found to be consistent with the POT of Donaldson (1961), Myers and Majluf (1984), Pinegar and Wilbrincht (1989), and Graham and Harvey (2000). GKL has no well defined target Debt/Equity ratio, in contrast to Static Trade-Off Theory (STOT) where the optimal structure is the balance of the trade-off between cost and benefits of debts as discussed by Jensen and Meckling (1976), Myers (1984), and Jensen (1986). GKL raises funds according to its preferred order due to the costs

associated with each of the sources. Internally generated funds (Retained Income) are the most preferred to debt, and the last resources are equity.

GKL's financing behaviour was found to follow patterns of financing hierarchies, i.e. POT (Myers, 1984). GKL does not have target debt ratios in deciding on its capital structure. The questions (Q.1b) and (Q.2) aimed at ascertaining Financial Manager's attitude toward sources of funding by ranking the sources of preferences. He ranks Internal Equity or Retained Earnings as the most preferable, then Bank Debt, and the last resource is External Equity or Common Stock. The company has never been employed Non-Bank Straight-Debt and Non-Bank Convertible Debt. He gave reasons that Retained Earnings are cheapest and convenient due to no transaction costs and fees involved (Q.4.a) (Myers, 1984 and Donaldson, 1961). It is used when the firm is expanding its internal operations and when debt and equity are expensive (Q.3.1). Bank debt is secondly preferred as GKL has good relationship with banks, thus it can borrow at reasonable rates. It uses debt to fund major expansion and acquisitions, to add to liquidity and to fund long term assets if the market conditions are right (Q.3.3). The last resources are equity. However, the firm has never been employed this method for raising funds, because it is considered as too expensive and too time consuming (Allen, 1991). Furthermore, He added that lower level of debt allows firm more flexibility. Mr. Messado neither agreed with Stewart et al (1988) that GKL should increase its debt in capital structure in order to gain benefit from tax reduction nor did he agree with Jensen (1986) as to employ more debt as tool for controlling an overinvestment even though GKL's characteristics and position favourable for such activities. GKL is a mature and profitable corporation with massive cash and near cash available for taking any venture. The investment strategy and corporate financing principle are used to underline each investment decisions. Thus, the firm has no concern on overinvestment problems. GKL prefers to have Capital Reserves (Q.4p) in order to take advantage of cheap borrowing and good investment opportunities when they arise. The large sum of GKL's debt in capital structure is from short-term bank loans and creditors. Therefore, maintaining low level of D/E ratios is

important for seeking loans as it perceived as lower risk. It seemed like to maintain credit rating is important to GKL's financing decision, which consistent with the evidence found by Graham and Harvey (2000).

6.2.4. GKL Information Asymmetry and Signalling

Mr. Messado agreed with Myers and Majuf (1984) that managers act in the best interest of existing shareholders as GKL seeks to maximize shareholders' wealth as the most important consideration (Q.4.0). He also recognised the importance of information problem to stock market reactions to the issue as suggested by Ross (1977). The information problem does not only lead to a higher cost of borrowing but also the declining in share price on an announcement. Thus, to ensure that outside investors have the right information is important for GKL's issuing of capital whether to issue debt or equity. Mr. Messado stated that GKL has less Information problems. The company has been communicating with shareholders and public regularly and openly regards a firm's operations, current earnings, growth opportunities and future prospects. Thus, most of its securities are fairly priced by the market more than 80 percent of most of the time (Q.17). GKL has never faced a situation where it has to pass-up positive NPV projects as it has large cash, marketable securities and large reserves available to take up with such projects whenever opportunity exists. GKL has never issued equity as a means to raise capital because the firm does not need external funds, so avoiding under pricing of securities to be issued thus is not inapplicable to GKL (Q.4.c). GKL's financial manager stated that he does consider Information Asymmetry factor in deciding about capital structure. Stock market reactions to the issue are a very important consideration to what kind of capital to be issued. Even though, he stated that GKL does not have an Information Asymmetry problem. He agreed with Ross (1977), Fama (1985) and Myers and Majluf (1984) that GKL uses leverage raise its debt's level in capital structure to convey its optimism of future prospect as good news, but this method has only very short term effects, but Mr. Messado did not give a clear answer to the argument of Leland and Pyle (1977).

In contrast to Hull (1999), Hatfield et al. (1994), and Masulis (1983) who studied the relationship between firm's leverage and industry average, GKL is not taking industry norm into consideration when deciding on the Capital Structure. GKL is more concerned about its strategy and availability of positive NPV projects, and the firm's need for funds (Q.4. d,q). The extent to which the POT model holds relates to the aspect of stock market price reactions as suggested by Viswanath (1993), Mikkelsen and Partch (1986) and Eckbo (1986) could unfortunately not be ascertained, because GKL has never issued convertible debt or straight debt. Thus, no information is given on these issues as well as on equity issues. Nevertheless, he agreed with Myers (1984) that an Equity Issue is not only an expensive method to raise capital, it also subjected to outside interference which endangers the potential loss of control to outsiders (Hutchison et al., 1998).

6.3. GKL AND THE STATIC TRADE-OFF MODEL

According to the analysis above, Financing behaviour of GKL is not clearly identified with the STOT model which suggests the firm has a specific target of an optimal capital structure and can be found through balancing the benefits of tax shield against costs of financial distress (Myers, 1984), Agency costs of debt and equity against tax shield benefits (Jensen and Meckling, 1984), and benefit of debt as a control mechanism of overinvestment against the costs of lost investment opportunities (Jensen, 1986). Even though GKL strive to maintain an approximately constant long term Debt/Equity ratio (Q,1a) as if the firm has a target, but the results from the interview have shed light to an answer that GKL does not have a specific target Debt/Equity ratio. Instead the evidence found that firm financing behaviour is more clearly identified with POT model predictions. However, there are some questions that can be debated here that GKL's financing behaviour may follow the STOT Model.

i) In accordance with Myers (1984) where tax benefits are trade-off against cost of financial distress. It is possible that GKL may trade off the costs of financial distress and bankruptcy cost with the benefit of tax shield, but because GKL is in a tax loss position the amount of which higher than tax shield benefits (see tax

Chapter 3). Therefore, the firm may have acknowledged that the benefits of tax-shield are minimal compared to the cost of having more debt which would increase risk for the firm. Thus tax saving on interest expenses was considered by GKL financial Manager only slightly important (Q4, b) for deciding on the capital structure. However GKL does benefit from the Non-Debt Tax Shields. GKL taxes information was found to be inconsistent with DeAngelo's and Masulis's (1980) suggestion that firms with a high non-debt tax shield are expected to have less debt, and also Ross (1985) that firm have less incentive to use debt as Non-Debt Tax-Shield Increase. Instead the evidence was found that the level of debt is not affected by the level of non debt tax shield or the expected marginal tax rate as suggested by Mason (1990) and Graham (1996). (see Tax Chapter 4).

ii) In accordance with the Agency Problem issues Trade-off against benefits of debt and/or equity. It is very likely that GKL may also acknowledge the Agency problems suggested by Jensen and Meckling (1976) as it has already established the tool as suggested by Jensen (1986) and Shleifer and Vishny (1977) in its corporate governance (Stock Option plans and performance linked based compensation) in order to mitigate such conflicts. This tool also provides the solution to the problem that may arise in accordance to the Free Cash Flow problem in a mature and highly profitable firm according to Jensen (1986) and Stewart et al. (1988). However, the STOT suggest that GKL should have high level of debt. In contrast with GKL which having a lower level of leverage in spite of having large amount of cash and near cash available. This because GKL need to increase its flexibility in order to take advantage of profitable investment opportunities, hence it follows the POT rather than the STOT where lowering the leverage due to the concerns of risk for financial distress and high costs of potentially bankruptcy. However, GKL does give consideration to the bankruptcy issue, but because the firm is not in this position therefore the trade off between these costs may not be seen clearly. Thus the firm may follow the STOT model, but it does not try to find the optimal capital structure where the trade-off between costs and benefits is optimal. Hence, the firm has no specific target debt ratio.

Instead, its capital structure is driven by the consideration of the availability of profitable investment opportunities, the need of capital investments, the costs which are associated with each source of fund and more importantly by its strategic planning at corporate level.

6.4. GKL WITH PECKING ORDER THEORY

GKL's financing behaviour was found to be clearly consistent with predictions of the POT model by Myers (1977), Donaldson (1961), Myers and Majuf (1984), Penigar and Wilbrincht (1989) and Graham and Harvey (2001).

GKL does not have the target Debt/ Equity ratio. The Firm has preference toward funding sources (Q, 2) by internal retained earnings is most preferred then debt and the last resource is new issue of common equity. This because of the consideration of costs which are associated with each source of the funds as suggested by Myers (1977), Myers and Majluf (1984) and Jensen (1986). The GKL makes a debt issue only when the internal source of funds is not sufficient. However, debt issues have never been employed in this period. Thus, the capital structure of GKL is driven by the accumulated need for funds. Operating and strategic plan decisions are the prime determinants of GKL financing needs. GKL is a well established firm with sufficient cash and near cash in form of marketable securities available. GKL's financial behaviour favours the POT model as GKL has maintained the leverage at lower levels in spite of its high profit and Free Cash Flow. To maintain high levels of financial reserves is motivated by the desire to maintain flexibility (Bancel and Mitto, 2002), the cheaper cost of Internal Fund than other sources (Myers, 1984), and Information Asymmetry problems (Myers and Majluf, 1984; Brigham and Gapenski, 1997). The latter factor is considered important as it allows a firm to access funds at the most advantageous costs and to take advantage of good investment opportunities. Locally, the information problem for GKL does not exist due to its solid reputation with good-excellent (BB) Credit Ratings and its excellent communication with the public openly and regularly. Internationally, GKL considers this factor as very important in deciding on levels of Debt in Capital Structure, especially while

preparing itself for public listing of securities at the NASDAQ in near future. This method of GKL is consistent with the explanation of market timing and window of opportunity (Banker and Wurgler, 2002; Ritter, 2002; Graham and Harvey, 2001).

6.5. CONCLUSION

As can be seen in the analysis above, the GKL's Financial Manager, Mr. Messado has given much insight into how GKL deals with its Capital Structure. The explanation of the relationships between Debt to Equity ratios and GKL's characteristics associated with GKL's financing behaviour has been clarified. GKL's financing behaviour according to the STOT and POT seemed not mutually exclusive. It can arguably be that GKL follows the STOT model, but there was a clear pattern of the firm financing behaviour consistent with the POT model. It is evident that even though the firm may have changed its leverage in the same manner as predicted by the theoretical model, the reasons for changing D/E ratios cannot be precisely predicted and understood. Thus, the interview is an important tool to close this gap. (Appendix XIV)

CHAPTER 7: CONCLUSION

7.1. INTRODUCTION

The optimal Capital Structure is the specific D/E mix that maximizes the company's overall value. This study has ascertained how GKL, a Jamaican leading corporation determines financing mix according to the two contrasting theories. The STOT, which assert that an optimal capital structure exists and firm is trying to achieve that target ratio versus the POT, which assert there is no target Capital Structure. The Capital Structure for the POT derives from a firm's accumulative need of funds and cost factors associated with each source which lead the firm to have different preference toward each funding source. The evidence found that GKL financing behavior is consistent with POT. The interview with GKL Group Financial Manager explains the fundamental issues underlining the GKL's capital structure decision.

7.2. GKL FINANCING BEHAVIOR

GKL financing behavior possess the characteristic of the trade-off model but the evident found more clearly that GKL's financing behaviour is consistent with POT as suggested by Myers and Majluf (1984) and Pinegar and Wilbrincht (1989). The following conclusions can be drawn:

- i) GKL follows the financing hierarchy by using Internal Capital funds as most preferable and short-term bank loans and advantageous credit lines. GKL has never made public issues of debt and equity to fund its business. It has no specific target of the capital mix. If it would seek external finance it would take the cheapest source first.
- ii) Financing decisions appear to be more related to the characteristics of the firm's current investment projects rather than the firm's tax and bankruptcy circumstances.
- iii) There is evidence found in support of Signaling argument related to financing decisions by the use of debt but only for short-term effect. The company is free from Information Asymmetry problems locally, but there is some concern in this area related to GKL's international public offering plan.

- iv) Corporate strategic financial planning principles are more important in governing financing decisions than the Capital Structure Theories; corporate governance is a tool to reduce Agency conflicts has already been put in place . GKL is likely to have only few Agency problems.
- v) Capital Structure decisions are less binding than investment or dividend decisions.
- vi) The market timing and economic circumstances play an important role in Capital Structure decisions, but industry norms do not.
- vii) The company history and reputation is an advantageous factor for GKL's Capital Structure.

7.3. GKL AND THE DETERMINANTS

The Fundamental factors GKL takes into consideration in deciding on Capital Structure are as follows:

- | | |
|--|-------------------------------|
| 1. Corporate strategy | 8. Bankruptcy costs |
| 2. Taxes | 9. Control |
| 3. Transactions costs | 10. Investment opportunities |
| 4. Investment opportunities | 11. Lenders and credit rating |
| 5. Market conditions and timing | 12. Cost of Capital |
| 6. Reputation | 13. Management attitude |
| 7. Financial flexibility and Capital reserves and Borrowing capacity | |

7.4. RECOMMENDATIONS

According to the evidence gained from the above analysis, GKL is a well established and financially strong company. Characteristically GKL has a high level of Tangibility of JM\$2.1bn, capital reserves of JM\$ 4.2 billion, massive cash and marketable securities of more than JM\$ 11.2 billion in 2002, which shows that it is comparatively has low to medium business risk and financial risk. In addition, it is a well diversified business into six different industries. It could be theoretically possible to increase its leverage without suffering financial distress. Also GKL can comfortably service its debt thus it is also recommended that GKL

should try to optimize shareholders' wealth (to lower the cost of capital) by trying to find the trade-off level where debt should be accepted as long as the gain from tax exceeds the cost of financial distress as suggested by the STOT. The level capital structure has been at 25 percent compared to NML of 31. It is considered to be under-gearred, but the company has preferred to maintain its capital structure at this level, for the reason that GKL follows prudent policy. In terms of the strategic planning of GKL, pursuing Rapid Growth Strategies, it has been expanding geographically in local and international markets. It aims at increasing the earnings from outside Jamaica by 50 percent in 2005. GKL's master plan is to become independent from Jamaican economy and to reduce its volatility of earnings by diversifying sources of income, especially from overseas. Thus, it is reasonable to conclude that GKL has an appropriate level of capital structure, which provides efficiency and flexibility in achieving its strategic plans.

7.4.1. Recommendations for Future Research

The rapid changes of the economic environment lead to the firm to find new ways of doing business. The thus effect of these dynamic changes on the firm's optimal capital structure relates to sources of funding is an interesting area of future study. Also the challenge of a newly emerging theory, Market Timing which argues that firm's optimal Capital Structure is not related to the POT or STOT, but an accumulated outcome of past attempts to time the market (Banker and Wurgler, 2002). Also, the extent to which POT holds as suggested by Viswanath (1993, pg214) can be further investigated in relation to the market condition in 2000s. The Market condition in the 2000s allows firms which are newer, smaller, and riskier in growth option to have greater access to equity market which can be used as a means to draw large cash reserves (Sheehan 2001).

7.5. CONCLUSION

This study has shown factors that influence GKL's financing decisions. The optimal Capital Structure cannot be explained solely by one singular theory. The evidence on GKL financing behavior has some support for the STOT, but more

clear evidences on the POT model. The interview provided insights in GKL's Corporate Strategic Planning, Financial Flexibility, Transactions Costs, Reputation, Credit rating, investment opportunities and Market conditions as important factors or considerations. There is some concern related to Information Asymmetry but no evidence found on Agency Costs and Tax shield benefits. GKL maintain lower level of D/E ratios according to its conservative policy and to have the ability to meet future challenges. However GKL approaches financial policy it is evident that it is suitable for GKL as it has been enjoying continuous success for almost 84 years.

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Annual reports

Grace Kennedy and the Company Annual report, 1998-2002

Interviews

Messado, R. A. (2003-6-10), Group Financial Manager at Grace Kennedy and the Company, Corporate Finance. Kingston, Jamaica.

Homemade Leverage

Original capital structure: NO DEBT
Assets R8 million
Debt 0
Equity R8 million
Debt:equity: 0
Share price: R20
Shares in issue: 400,000
Interest rate: 10% pa

Proposed Capital Structure: 50% debt
Assets: R8 million
Debt R4 million
Equity: R4 million
Debt:equity: 1:1
Share price: R20
Shares in issue: 200,000
Interest rate: 10% pa

Proposed Capital Structure			
	Recession	Expected	Expansion
EPS	R0.50	R 3.00	R 5.50
Earnings for 100 shares	50.00	300.00	550.00
Net cost = 100 shares at R20 = R2000			
Original Capital Structure and Homemade Leverage			
	Recession	Expected	Expansion
EPS	R 1.25	R 2.50	R 3.75
Earnings for 200 shares	250.00	500.00	750.00
Less: interest on R2000 at 10%	200.00	200.00	200.00
Net earnings	50.00	300.00	550.00
Net cost = 200 shares at R20/share - amt borrowed = R4000 - R2000 = R2000			

Source: [www.commerce.uct.ac.za/managementstudies/ bus219/Documents/m&m.ppt](http://www.commerce.uct.ac.za/managementstudies/bus219/Documents/m&m.ppt)

APPENDIX II (page, 34 and 42)

Summary of result from previous studies

Size		
+e	-e	GKL
Rajan and Zingales(1995)	Titman and Wessels(1988)	-e
Friend & Lang (1988)	Baton and Gordon (1988)	
Tangibility		
Rajan and Zingales(1995)	Barton and Gordon(1988)	+e
Friend and Lang (1988)		
Jensen,Solberg and Zorn(1992)		
Non-debt tax shield		
Bradley/Jarrell/Kim (1984)	Kim&Sorensen (1986)	-e
Industry effect		
Bradley/Jerrell/ Kim(1984)		
Friend & Lang (1988)		
Earnings Volatility / Risks		
Kim & Sorensen(1986)	Bradley/Jarrell/ Kim(1984)	
	Friend & Lang (1988)	
Growth opportunities		
	Jensen and Meckling (1976),Agency	
	Barcly et al (1995)	
	Myers(1977) info Asym	
	Titman &Wessels (1988)	
	Rajan and Zingales (1995)	

-e indicates negative relationship with D/E ratios.

+e indicates positive relationship with D/E ratios.

Source: Obtained from literature review of previous studies

APPENDIX III (page, 33 and 42)

According to the literature review above, summary of finding from previous research on firm optimal capital structure decision follows the POT or STOT Model, the determinant factors were founds to be as follows ;

Taxes and Bankruptcy Costs	
1, firm should have more debt as possible, to gain from tax shield benefit (MM (1958,1963)	Yes: Graham and Harvey (2001), corporate tax advantage of debt most important in capital structure decision especially for large firm.
2. firm with non-debt tax shield has less incentive to use debt (DeAngelo and Masulis, 1980)	NO; Bradley, Jarrel and Kim (1984) Yes : Mackie-Mason (1990)
3. firm with high marginal tax rates has greater incentive to use debt (Mason,1990: and Graham, 1996)	

Agency Models	
Theoretical result (source)	Empirical evidence
	<u>Debt Issues</u>
1) Stock price increase on announcement of debt issues, debt for equity exchanges, or stock repurchases and decreses on announcement of equity issues or equity for debt exchanges (Harris & Raviv (1990a), Stulz(1990) Hirshleifer & Thakor(1989)	Yes: Kim & Stulz (1988) No : Eckbo (1986)*,Mikkelson&Partch(1986)*
	Debt for equity exchanges Yes: Masulis (1980,1983)

	<p>Stock Repurchases</p> <p>Yes; Masulis (1980), Dann,et al.(1989)</p> <p>Equity Issues</p> <p>Yes: Mikelsom and Partch (1986), Masulis & Kowar(1986)</p> <p>Equity for Debt exchanges</p> <p>Yes: Masulis (1980,1983), Eckbo (1986)</p>
<p>-----</p> <p>Leverage is positively correlated to firm value (Harris & Raviv (1990a), Stulz(1990)</p>	<p>-----</p> <p>Yes: Cornett & Travlos(1989), Dann,et al.(1989)</p>
Leverage increases with lack of growth opportunities(Jensen & Meckling,1976), Stulz(1990)	<p>Yes: Kim& Sorensen(1986), Titiman & Wessels(1988)</p> <p>NO: Kester(1986)</p>
Leverage increases with decreases in profitability (Change, 1987)	Yes: Kester (1986), Friend & Hasbrouck(1988), Friend& Lang (1988)
Leverage increase with increase in Free-Cash –Flow(Jensen,1986),(Stulz,1990)	No: Chaplinsky&Niehaus(1990)
Firm with longer track records have lower default probabilities(Daimond,1989)	
Leverage is negatively correlated with interest coverage ratio (Harris and Raviv,1990a)	
Leverage increase with increases in importance of managerial reputation (Hirshleifer& Thekor, 1989)	
Asymmetry Information Model	
Stock price increases on announcement of debt issues, debt-for-equity	<p>Debt Issues</p> <p>Yes: Kim & Stulz (1988)</p>

exchanges, or stock repurchase and decreases on announcement of equity-for-debt exchanges(Ross,1977; Narayanan,1988)	<p>No: Dann& Mikkelson(1984)*, Eckbo(1986)*</p> <p>Debt-for-Equity exchanges</p> <p>Yes: Masulis (1980,1983), Cornett& Travlos(1989)</p> <p>Equity-for-Debt Exchanges</p> <p>Yes: Masulis(1980,1983), Eckbo (1986), Mikkelson &Parth (1986)</p> <p>Stock Repurchases</p> <p>Yes: Masulis (1980), Dann(1981), Dann(1981)</p>
Stock price is unaffected by the debt issues (Myers& Mujluf,1984), Korajczyk,et al.,1990c)	See previous cell
Leverage increases with increases in profitability(Ross ,1977; Leland& Pyle,1977)	<p>Yes: Long & Malitz(1985)*</p> <p>No; Kester(1986), Titman & wessels(1988)</p>
Leverage increases with decreases in free cash flow (Myers & Mujluf,1984)	Yes: Chalin & Niehaus(1990)
Stock price decreases on announcement of equity issue (Ross,1977; Myers& Mujluf, 1984; Narayanan,1988)	Yes: Masulis & Kowar(1986), Mikkelson & Partch(1986)
Leverage is positively correlated with firm value(Ross,1977)	No:Castanias(1983)
Leverage is positively correlated with the extent of managerial ownerships (Leland& Pyles,1977)	<p>Yes: Kim &Sorensen(1986)</p> <p>No: Friend Lang(1988)</p>
Firm tend to issue equity when information asymmetry is smallest (Myers & Mujluf,1984)	Yes: Korajczyk,et al(1990a)
Corporate Control Model	
Stock price increase on announcement	Debt Issues

<p>of debt issues, debt-for –equity exchanges, or stock repurchases and decreases on announcement of equity issues or equity-for –debt excahnsges(Harris & Raviv,1988; Stulz,1988)</p>	<p>Yes: Kim& Stulz (1988) No: Eckbo(1986)*</p> <p>Debt-for-Equity echanges</p> <p>Yes: Masulis(1980,1983)</p> <p>Stock Repurchases</p> <p>Yes:Masulis(1980),Dann et al.(1989)</p> <p>Equity issues</p> <p>Mikkelson& Partch(1986)</p> <p>Equity –for-Debt exchanges</p> <p>Yes:Masulis(1980, 1983), Eckbo(1986)</p>
<p>Leverage is positively correlated with th extent of managerial equity ownership (Harris & Raviv, 1988)</p>	<p>Yes: Kim & Sorensen(1986)</p>

APPENDIX IV (page, 43)

COMPANY PROFILE

Mission Statement

“The leading Jamaican based trading organization that creates value for its customer, principals and stockholders by providing quality goods and services through the distribution of food and other products and provision of services in finance, maritime activities, and information technology through a motivated and competent staff.”

Eighty years of continuous growth have made Grace, Kennedy one of the largest and most dynamic corporate entities in Jamaica and the Caribbean. The company, which began life as a small trading establishment and Wharf founders, on February 14, 1922, has expanded and diversified over the years. Today it comprises a formidable network of some 62 subsidiaries and associated companies, employing over 2000 staff members and operating in the areas of maritime, distribution, finance, information technology and food manufacturing. (Organizational Chart)

A truly regional company, Grace, Kennedy is the only conglomerate listed on all three Caribbean stock exchanges. As it gears itself to meet the challenges of the future, Grace, Kennedy in 1995, developed a strategic plan which it has called the "2020 Vision". This sets out the path, which the company will follow to increase training of its staff and to employ state-of-the-art technology as tools to achieve increased productivity and maintain the high quality of its goods and services.

Already the new policies and programmes have begun to prove their effectiveness as the Company has recorded a 120% increase in net earnings over the last five years.

Financial Services Division

The Financial Services Division is perhaps the division that has experienced the fastest growth in recent years with its rapidly expanding portfolio of services. The companies of the Division provide a wide range of financial services including general insurance, merchant banking, commercial banking, investment lease financing and stock brokering. Recently the division launched the Caribbean's first US\$ mutual fund in Cayman.

- Allied Insurance Brokers Ltd. (general insurance brokerage)
- George & Branday Ltd. (merchant banking)
- H. Macaulay Orrett Insurance Ltd. (Life insurance brokerage)
- Jamaica International Insurance Co. Ltd. (general insurance)
- Knutsford Re (group fire & book debt insurance)
- First Global Commercial Bank Ltd. (commercial banking)
- First Global Stock Brokers Limited (Stock Brokers)
- Global Capital Leasing (Lease Finance)
- Grace, Kennedy Trade Finance (Trade Financing)
- Grace, Kennedy Capital Services Ltd.

Food Trading Division

The Food Trading Division comprises those companies which are involved in the development, manufacturing and distribution of the Grace-owned food products, the food products of its major principals, and a range of household products.

With branches in Belize, and Canada and with distributors in 25 countries, this division currently has the widest international reach. Its range of exports includes items under the Grace label, as well as other Grace owned brands. Products include jams, jellies, sauces, condiments, juices, nectars, drink mixes and processed meats.

- Dairy Industries (Ja.) Ltd. (manufacture of dairy products)
- National Processors Ltd. (production of drink & soup mixes)

- Grace Food Processors Ltd. (processing of meat products)
- Grace Food Processors (Canning) Ltd. (manufacture of canned products)
- Grace, Foods and Services Company
- World Brands Services Limited
- Grace, Kennedy (Belize) Limited
- Grace Foods International Limited
- Grace, Kennedy (Ontario) Inc.
- Grace, Kennedy (U.S.A) Inc.

Retail and Trading Division

The Retail and Trading Division is comprised of companies which focus on the sale of pharmaceutical products, hardware and building supplies and farming inputs, industrial catering and food retailing. Through a joint venture with Goddard Enterprises Ltd. of Barbados, the division recently established Fidelity Motors Limited, as the exclusive authorized distributor of new vehicles manufactured by Nissan Motors Ltd. (Japan).

The companies in this division include:

- Agro-Grace Ltd. (retailing & trading of agricultural inputs)
- Hi-Lo Food Stores (Ja.) Ltd. (Island-wide chain of supermarkets)
- Industrial Catering Services Ltd. (industrial catering)
- Medi-Grace Ltd. (distribution of pharmaceuticals, and Caribbean Greetings Cards)
- Rapid & Sheffield Co. Ltd. (retailing of hardware & building supplies)
- Versair In-Flite Services Ltd. (airline catering)
- Fidelity Motors

Information Services Division

The companies within the Information Services Division represent such well-known international principals as Sprint International Communications Corporation

(SPRINT) and Western Union. In 2001, the division introduced the Sprint collect call service to Guyana.

Grace, Kennedy Remittance Services, Ltd – the flagship company of the division, has aggressively implemented the representation of Western Union in Jamaica and the Caribbean. Today the company boasts a network of 120 branches in Jamaica, 51 in Trinidad & Tobago, and 72 in Haiti, and 35 in Guyana.

In addition to the Western Union Money Transfer Services, GKRS Ltd. introduced FX Trader cambio services, and Bill Express, a bill payment service, to the region

- The five companies in this Division are: Grace, Kennedy Remittance Services Ltd. (GKRS) (Remittance Services)
- Grace, Kennedy Remittance Services (Guyana) Ltd. {remittance services}
- Grace, Kennedy (Trinidad & Tobago) Ltd. {remittance services}
- International Communications Ltd. (telecommunication products & services and SPRINT representative)

Maritime Division

The Maritime Division is made up nine companies which provide a range of services for the shipping industry including:

- Stevedoring
- Wharfage
- Specialised security for port and marine vessels
- Cold storage and reefer maintenance
- Representation of international shipping lines

The companies in this Division include:

- Carib Star Shipping Ltd. (exclusive shipping agency)

- Grace, Kennedy & Co. (Shipping) Ltd. (general shipping agency)
- Harbour Cold Stores Ltd. (cold storage & warehousing)
- Hamburg-Sud/Columbus Ja. Ltd. (general shipping agency)
- International Shipping Ltd. (general shipping agency)
- Kingston Wharves Ltd. (wharf age operations)
- Port Services Ltd. (port haulage & stevedoring)
- Security Administrators Ltd.(port& Wharf security)

Source: <http://www.gracekennedy.com>

APPENDIX: V (page, 43)

VISION 2020

As Grace, Kennedy & Co. Ltd. gears itself to meet the challenges of the future, the Company has set out its policy prescriptions in a programme which it has called "2020 Vision". The vision was developed in 1995. Our vision is to be:

- A dynamic group comprising strong, viable business units.
- A group of business units that gives value to our customers not added cost.
- A Company whose consumers demand our products, our services and our brands.
- Continuously increasing productivity to raise the standard of living of our staff.
- A high stock market value for our Company to benefit our shareholders, and to lower the cost of capital.
- Ethical in our conduct of doing business.
- Responsible members of our community – **"Grace – We Care"**
- Truly international by acting on appropriate opportunities wherever they may arise in the world.

A critical component of our 2020 Vision is to earn at least 50% of our profits outside of Jamaica by the year 2005.

Source: <http://www.gracekennedy.com>

APPENDIX VI (page, 44)

INTEREST RATES

Interest rates from different countries sources during the period 1998 to 2002.
(<http://www.boj.im.com>)

COMPARATIVE BANK AND TREASURY BILL RATES

End of Period	JAMAICA		UNITED KINGDOM		UNITED STATES		CANADA		GUYANA		T'DAD & TOBAGO	
	Treasury Bill	Reverse* Repurchases	Treasury Bill	Lending Rate	Treasury Bill	Bank Rate	Treasury Bill	Bank Rate	Treasury Bill	Bank Rate	Treasury Bill	Bank Rate
1998												
Jan.	25.32	29.00	6.84	7.00	5.09	5.00	4.18	4.50	8.20	11.00	11.69	13.00
Feb.	24.83	29.00	6.88	7.00	5.11	5.00	4.57	5.00	8.20	11.00	11.84	13.00
Mar.	24.56	29.00	6.95	7.00	5.03	5.00	4.56	5.00	8.10	10.50	11.89	13.00
Apr.	24.21	26.50	7.02	7.00	5.00	5.00	4.82	5.00	7.90	10.50	11.93	13.00
May	23.79	25.00	6.99	7.00	5.03	5.00	4.75	5.00	7.90	10.30	11.90	13.00
June	23.25	24.00	7.29	8.00	4.99	5.00	4.88	5.00	8.20	10.30	11.93	13.00
July	22.60	23.00	7.22	8.00	4.96	5.00	4.93	5.00	8.30	10.50	11.88	13.00
Aug.	20.41	22.00	7.19	8.00	4.94	5.00	4.88	5.00	8.30	10.80	12.00	13.00
Sept.	20.34	22.00	6.94	8.00	4.74	5.00	4.94	5.75	8.50	10.80	11.93	13.00
Oct.	21.28	22.00	6.54	7.00	4.08	4.75	4.74	5.50	8.50	11.50	11.96	13.00
Nov.	20.25	22.00	6.31	7.00	4.44	4.50	4.81	5.25	9.00	11.50	12.11	13.00

Dec.	21.31	22.00	5.72	6.00	4.42	4.50	4.70	5.25	8.80	11.30	11.88	13.0
End of Period	JAMAICA		UNITED KINGDOM		UNITED STATES		CANADA		GUYANA		T'DAD & TOBAGO	
	Treasury Bill	Reverse* Repurchases	Treasury Bill	Lending Rate	Treasury Bill	Bank Rate	Treasury Bill	Bank Rate	Treasury Bill	Bank Rate	Treasury Bill	Bank Rate
1999												
Jan.	20.33	22.00	5.28	6.00	4.34	4.50	4.66	5.25	10.50	11.00	11.57	13.0
Feb.	19.70	22.00	5.04	6.00	4.45	4.50	4.83	5.25	10.40	13.00	10.81	13.0
Apr.	19.27	20.75	4.90	5.00	4.28	4.50	4.60	5.00	12.40	15.00	10.57	13.0
May	19.70	18.85	4.93	5.00	4.51	4.50	4.42	4.75	12.10	14.80	10.32	13.0
June	18.33	18.85	4.75	5.00	4.59	4.50	4.62	4.75	11.90	14.50	10.07	13.0
July	18.22	18.85	4.76	5.00	4.60	4.50	4.64	4.75	11.10	14.30	10.11	13.0
Aug.	18.71	18.85	4.84	5.00	4.76	4.75	4.83	4.75	10.40	13.30	10.23	13.0
Sept.	17.52	18.35	5.07	5.00	4.73	4.75	4.69	4.75	11.20	14.00	10.17	13.0
Oct.	17.51	18.35	5.25	5.00	4.88	4.75	4.85	4.75	11.00	13.80	10.05	13.0
Nov.	18.41	18.35	5.20	6.00	5.07	5.00	4.81	5.00	10.80	13.50	10.08	13.0
Dec.	18.68	18.35	5.49	6.00	5.23	5.00	4.93	5.00	11.00	13.30	10.09	13.0
2000												
Jan.	18.63	18.35	5.72	6.00	5.34	5.00	5.07	5.00	10.70	13.50	10.14	13.0
Feb.	18.71	18.35	5.83	6.00	5.57	5.25	5.05	5.25	10.70	13.25	10.09	13.0
Mar.	16.48	17.30	5.86	6.00	5.72	5.50	5.28	5.50	10.60	13.50	10.24	13.0
Apr.	16.16	17.00	5.90	6.00	5.67	5.50	5.45	5.50	10.50	13.00	10.14	13.0
May	16.21	17.00	5.95	6.00	5.92	6.00	5.75	6.00	10.30	13.00	10.61	13.0
June	16.06	17.00	5.85	6.00	5.74	6.00	5.55	6.00	10.20	13.00	10.87	13.0
July	15.95	16.75	5.83	6.00	5.93	6.00	5.63	6.00	9.80	12.50	10.71	13.0
Aug.	15.70	16.45	5.80	6.00	6.11	6.00	5.62	6.00	9.70	12.25	10.61	13.0

Sept.	15.78	16.45	5.80	6.00	5.99	6.00	5.56	6.00	9.10	12.25	10.74	13.00
Oct.***		16.45	5.75	6.00	6.10	6.00	5.62	6.00	8.80	11.50	10.94	13.00
Nov.	15.91	16.45	5.69	6.00	6.18	6.00	5.74	6.00	8.90	11.25	10.82	13.00
Dec.	18.32	16.45	5.63	6.00	5.83	6.00	5.56	6.00	9.20	11.75	10.79	13.00

End of Period	JAMAICA		UNITED KINGDOM		UNITED STATES		CANADA		GUYANA		T'DAD & TOBAGO	
	Treasury Bill	Reverse* Repurchases	Treasury Bill	Lending Rate	Treasury Bill	Bank Rate	Treasury Bill	Bank Rate	Treasury Bill	Bank Rate	Treasury Bill	Bank Rate
2001												
Jan.	17.70	16.45	5.49	6.00	5.27	5.00	5.14	5.75	8.90	11.50	10.38	13.00
Feb.	16.75	16.45	5.46	6.00	4.93	5.00	4.80	5.75	8.90	11.50	10.39	13.00
Mar.	15.57	15.50	5.23	6.00	4.50	4.50	4.60	5.25	9.40	12.00	10.42	13.00
Apr.	15.25	15.50	5.12	6.00	3.91	4.00	4.41	5.00	9.10	12.00	10.17	13.00
May	14.35	14.75	4.98	5.00	3.66	3.50	4.40	4.75	8.90	11.50	9.10	13.00
June	14.99	14.25	4.98	5.00	3.48	3.25	4.24	4.75	8.50	11.00	9.69	13.00
July	15.37	14.25	5.01	5.00	3.54	3.25	4.03	4.50	7.70	10.30	8.84	13.00
Aug.	14.85	14.25	4.72	5.00	3.39	3.00	3.80	4.25	6.70	9.30	6.39	13.00
Sept.	14.04	14.25	4.43	5.00	2.87	2.50	3.04	3.75	6.40	9.00	6.83	13.00
Oct.	14.06	14.25	4.16	4.00	2.22	2.00	2.54	3.00	6.20	8.80	5.36	13.00
Nov.	16.37	14.25	3.78	4.00	1.93	1.50	2.21	2.50	6.40	9.00	6.05	13.00
Dec.	15.70	14.25	3.83	4.00	1.72	1.25	2.00	2.50	6.30	8.80	6.49	13.00

End of Period	JAMAICA		UNITED KINGDOM		UNITED STATES		CANADA		GUYANA		T'DAD & TOBAGO	
	Treasury Bill	Reverse* Repurchases	Treasury Bill	Lending Rate	Treasury Bill	Bank Rate	Treasury Bill	Bank Rate	Treasury Bill	Bank Rate	Treasury Bill	Bank Rate
2002												
Jan.	15.74	14.25	3.83	4.00	1.66	1.25	1.97	2.25	6.10	8.50	5.93	13.00
Feb.	14.76	13.75	3.87	4.00	1.73	1.25	2.07	2.25	5.90	8.30	5.58	13.00
Mar.	13.35	13.25	3.97	4.00	1.81	1.25	2.34	2.25	5.88	8.30	5.60	13.00

Apr.	12.95	13.25	3.97	4.00	1.72	1.25	2.41	2.50	5.74	8.00	5.19	13.0
May	12.90	13.25	3.95	4.00	1.74	1.25	2.62	2.50	5.49	7.80	4.60	13.0
June	12.92	13.25	3.98	4.00	1.71	1.25	2.74	2.75	5.49	7.80	5.05	7.7
July+	12.90	12.95	3.84	4.00	1.68	1.25	2.85	3.00	4.45	6.75	4.55	7.7
Aug.	12.89	12.95	3.77	4.00	1.63	1.25	3.00	3.00	4.45	6.75	4.25	7.2
Sept.	15.40	12.95	3.79	4.00	1.63	1.25	2.83	3.00	3.93	6.25	4.13	7.2
Oct.	17.80	12.95	3.75	4.00	1.59	1.25	2.81	3.00	4.01	6.25	4.22	7.2
Nov.	15.58	12.95	3.80	4.00	1.25	0.83	2.73	3.00	3.91	6.25	4.00	7.2
Dec.	15.68	12.95	3.84	4.00	1.20	0.75	2.67	3.00	3.91	6.25	4.52	7.2
End of Period	JAMAICA		UNITED KINGDOM		UNITED STATES		CANADA		GUYANA		T'DAD & TOBAGO	
	Treasury Bill	Reverse* Repurchases	Treasury Bill	Lending Rate	Treasury Bill	Bank Rate	Treasury Bill	Bank Rate	Treasury Bill	Bank Rate	Treasury Bill	Bank Rate
2003												
Jan.	16.90	12.95	3.80	4.00	1.17	2.25	2.81	3.00	2.88	6.25	4.60	7.2
Feb.++		12.95	3.50	4.00	1.16	2.25	2.86	3.00	2.88	5.25	4.68	7.2
Mar.	28.68	12.95	0.00		1.12	2.25	3.14	3.25			0.00	0.00

*30-day Maturity

***Jamaica had no Treasury bill issue for October 2000

+ Revised

++ There were no Treasury bills Issued for Jamaica

APPENDIX VII (Page, 54)

SOURCES OF FUNDS-DEBT					
Bank and Short term Loans					
Year	1998	1999	2000	2001	2002
JM\$	'000	'000	'000	'000	'000
Secured assets	81,491	82,419	108,922	121,085	58,449

Unsecured	698,201	873,388	931,991	1,343,744	1,195,668
Total	779,692	955,807	1,040,913	1,464,829	1,254,117
L/T Liabilities					
Bank Loans	378,060	693,965	548,718	526,063	645,440
Mortgage Loans	14,312	10,306	14,853	61,865	62,321
other	37,355	10,795	20,856	62,857	0
Customer deposits	0	9,915	47,454	1,500	4,315
Financial lease	12,518	7,369	19,408	23,910	35,452
Associated company	0	34,050	40,334	0	0
Total Group L/T liabilities	280,144	629,695	600,827	581,804	613,998
Secured on assets				223,413	203,705
Unsecured				452,782	543,823
				676,195	747,528
secured on assets	n/v	255,732	250,113		
Unsecured **	n/v	510,668	441,510		

Source: obtained from Annual report 1998 -2002

APPENDIX VIII (page, 54)

The company Sources of finance from 1998-2002

(Year ended 31 December)

EQUITY					
Year	1998	1999	2000	2001	2002
JM\$	'000	'000	'000	'000	'000
No.of shares issued	180,491	180,491	216,588	266,887	323,075
shareholders 'equity per unit (BV)	20.39	23.5	17.95	19.4	27.47
Market capitalisation	3,682,016	4,241,539,	3,887,755	5,177,608	8,875,390
Shareholders Capital	180,491	180,491	216,588	266,887	323,075
Capital Reserves	1,806,872	2,001,798	2,380,861	2,779,571	3,239,828
Other Reserves	334,438	374,189	543,672	674,971	1,006,699
Total Reserve**	2,141,310	2,375,987	2,924,533	3,454,542	4,246,527

Retained Income	1,660,996	1,961,119	2,263,654	2,712,458	3,263,261
Total shareholders equity	3,982,797	4,517,597	5,404,775	6,433,887	7,832,863
Net Cash Position**	1,073,000	977,000	1,400,000	1,512,000	2,393,000
Cash and cash equivalents at year end	2,302,262	2,767,590	3,200,432	6,162,953	11,222,119
Cash from operation activities	*	590,867	957,867	1,290,628	2,468,641

Source: obtained from GKL's annual report 1998-2002

APPENDIX IX (page, 55)

CAPITAL RESERVES

Grace Kennedy Limited and Capital Reserves during period 1998 to 2002

Year	1998	1999	2000	2001	2002
JM\$	'000	'000	'000	'000	'000
a.					
Transfer from profit and loss account	171,407	205,814	225,581	303,233	423,075
b.					
Share premium	15,356	15,356	15,356	88,464	125,798
Realized gains on disposal of assets	96,923	97,317	101,214	101,241	77,604
Capital distributions received	28,507	32,993	38,515	38,515	38,515
Par value of bonus shares received	5,652	5,652	36,872	36,872	36,872
Bonus shares issued	(41,803)	(41,803)	(41,803)	(41,803)	(41,803)
Asset replacement, rehabilitation and dep. Reserves	-	-	-	8,623	19,927
Profits capitalised by group companies	612,282	814,527	1,031,529	1,321,904	1,760,140
Unrealised surplus on revaluation of fixed assets	1,194,300	1,165,636	1,289,118	1,279,334	1,279,334
Goodwill arising on consolidation	(110,565)	(92,789)	(92,789)	(60,458)	(60,630)
Other	6,220	4,909	2,849	4,906	4,071
Total Reserves	1,806,872	2,001,798	2,380,861	2,779,571	3,239,828

Source: obtained from GKL's annual report 1998-2002

APPENDIX X (page, 55)

Cash and cash equivalent

Statement of Cash Flows

Year	1998	1999	2000	2001	2002
JM\$	'000	'000	'000	'000	'000
Sources /(uses) of Cash					
1.Operating activities	318,645	590,666	957,867	1,290,628	2,468,641
2.Financing activities	81	107,839	(75,877)	263,059	432,479
3.Investing activities	(168,358)	(485,539)	(567,682)	(1,594,072)	595,426
4.Exchange and translation gains on net foreign cash balances	3,290	15,580	1,743,452	9,551	44,451
5.Cash & cash equivalents beginning of year	1,361,248	1,514,906	33,750	1,375,984	1,345,150
Cash and cash equivalents at year end	1,514,906	1,743,452	2,091,510	1,345,150	4,886,147

Cash and Short- term investments

Year	1998	1999	2000	2001	2002
JM\$	'000	'000	'000	'000	'000
Cash and cash equivalents at year end	1,514,906	1,743,452	2,091,510	1,345,150	4,886,147
Cash and short-term investments	2,302,262	2,767,590	3,200,432	6,162,953	11,222,219
Net Cash position (FCF)***	1,073,000	977,000	1,400,000	1,512,000	2,393,000

*** cash& short- term investments less total gearing, deposit payable and securities sold under agreement to repurchase)

Source: obtained from GKL's annual report 1998-2002

APPENDIX XI (page, 58)

a. GKL and Group Profitability

Profitability					
Year	1998	1999	2000	2001	2002
JM \$	'000	'000	'000	'000	'000
Market capitalisation	3,682,016	4,241,539	3,887,755	5,177,608	12,276,900
Turnover	13,543,858	14,063,653	14,103,956	15,442,090	18,309,534
Operating Income	345,101	248,504	377,332	760,534	995,001
Pre-tax Profit	695,711	832,499	1,030,077	1,333,249	1,749,746
Profit After Tax	555,341	650,086	769,630	1,056,976	1,453,822
Net profit attributable to S/Hs	505,790	587,010	721,519	1,010,320	1,419,243
Net Dividend-amount	56,395	81,221	90,246	116,260	166,605
EPS*	1.57	1.82	2.23	3.13	4.39
Interest expenses		475,964	434,160	630,107	1,060,394
Depreciation		208,676	234,164	288,611	361,367
corporate tax 33.33 %	140,370	182,413	260,447	276,273	295,924
Taxation recoverable	76,840	211,670	280,846	302,307	291,791
Cash from oprationg activities	*	590,867	957,867	1,290,628	2,468,641

b. GKL and Profitability Contributed by Sector

Contribution to Pre-Tax Profit By Sector 1998-2002						
Year	1998	1999	2000	2001	2002	
JM\$	'000	'000	'000	'000	'000	
Sector						
Food Trading	81.3	41.9	67.2	266.1	358.5	
Retail & Trading	153.8	177.1	146.5	105.6	128.5	
Financial	149.4	190.6	280	386.6	683.7	
Maritime	135.1	103.2	118.1	86	134.8	
Information	176.2	319.7	418.3	489	444.2	
Total	695.8	832.5	1030.1	1333.3	1749.7	

Source: obtained from annual report 1998-2002

APPENDIX XII (page, 64)

DEGREE COMBINED LEVERAGE

Year	1998	1999	2000	2001	2002
	'000	'000	'000	'000	'000
Pre-tax Profit	695,711	832,499	1,030,077	1,333,249	1,749,746
Interests	441,381	475,964	434,160	630,107	1,060,394
Pre-tax profit(incl.interest)	1,137,092	1,308,463	1,464,237	1,963,356	2,810,140

DFL = PBIT / PAIBT					
Pretax profit(incl.interest)	1,137,092	1,308,463	1,464,237	1,963,356	2,810,140
PAIBT	695,711	832,499	1,030,077	1,333,249	1,749,746
DFL	1.63	1.57	1.42	1.47	1.61

DOL (% changes in NOI / % changes in Sales)					
% changes in PBIT	10.2	19.7	23.7	29.4	31.2
% changes in Sales	2.2	3.8	0.3	9.5	18.6
DOL	4.64	5.18	1.9	3.1	1.68

DOL	4.64	5.18	1.9	3.1	1.68
DFL	1.63	1.57	1.42	1.47	1.61

DCL = DOL*DFL	7.56	8.13	2.69	4.55	2.71
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Source: calculated from information from annual report 1998-2002

APPENDIX XIII (page 75)

Questionnaire

Instructions:

Please choose the option of following questions that you feel most appropriate relating to the decisions you make in raising new capital.

SECTION 1

1).Please indicate the relative importance of the following principles your company adopts in deciding the capital structure (please tick X on the relevant number)

a. We strive to maintain an approximately constant long term debt/ equity ratio

0	1	2	3*	4
Not Important	Slightly Important	Somewhat Important	Important	Very Important
----	-----	-----	-----	-----

b. We follow an order of priority. Exhaust the most advantageous sources of funds before using other sources

0	1	2	3	4*
Not Important	Slightly Important	Somewhat Important	Important	Very Important
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2). Attitude to Funding Sources

Please rank the following capital raising instruments according to your firm's order of preference. (1 = most preferred, 5 = least preferred)

 1 Internal equity (retained earning)

 3 External (new) common stock

 2 Bank debt

 4 Non-bank straight debt

 5 Non- bank convertible debt

3). Features Associated with Equity and Debt Issues

Please fill X into _____ of the following options according to your practice in making capital structure decisions. (Can choose more than one answer)

3.1. Under what circumstances would you make use of Retained Income?

 * when equity is expensive

 * when debt is expensive

 * when the company is expanding its internal operations

_____ when we have retained income available

_____ other _____

3.2. Under what circumstances would you make use of Equity issues?

 * To fund a major expansion and acquisition

_____ When debt is expensive

_____ To reduce leverage

 * If market conditions are right (fair, under, or overvalued by the market)

_____ To reduce leverage if market conditions are right

_____ others _____

3.3. Under what circumstances would you make use of Debt issues?

 * To fund a major expansion and acquisitions

_____ When internal sources of fund has already exhausted

___ * ___ To add to liquidity
 ___ If market conditions are right
 ___ * ___ To fund long-term assets if market conditions are right
 ___ other _____

4). Please indicate the relative importance of the following factors in governing your firm's financing decision in choosing among internal equity (i.e., retained earnings), external equity, or external debt. (Likert Scale: 0 = Not Important, 1 = Slightly Important, 2 = Somewhat Important, 3 = Important, 4 = Very Important)

		0	1	2	3	4
a)	Cost of underwriting					X
b)	Tax savings on interest expenses			X		
c)	Avoiding under pricing of securities to be issued	X				
d)	Maintaining comparability with firms in the industry	X				
e)	Matching maturity of assets and liabilities				X	
f)	Correcting mispricing of outstanding securities	X				
g)	Probability of becoming insolvent					X
h)	Projected cash flows from the assets to be financed					X
i)	Restrictive covenants of senior securities					X
j)	Risk of being taken over					X
k)	Voting Control				X	
l)	Whether market conditions are favourable to a particular source of financing					X
m)	Stock market reaction to the issue, and signalling tool to investors				X	
n)	Effects on cost of capital					X
o)	Maximization shareholders' wealth					X
p)	Financial flexibility				X	
q)	Corporate strategic planning principle					X
r)	Credit rating and reputation					X

5. What is the percentage of equity in your company’s capital structure?

- _____ More than 80 %
- ___ * ___ Between 60% and 80 %
- _____ Between 40 % and 60 %
- _____ Between 20 % and 60 %
- _____ Less than 10 %

6. The recent Jamaica economy (“0” for strongly disagree and “4” for strongly disagree)

		0	1	2	3	4
a.	Has an impact on my company’s choices of financing mix					x
b.	Affect availability of different sources of capital					x
c.	Affects the preference of equity over debt as source of capital				x	
d.	Affects the preference of debt over equity as source of capital					x
	Explain:					

7. The total of your firm intangible assets over total assets is

- _____ over 10%
- _____ Between 5% and 10%
- _____ between 1% and 5%
- ___ * ___ other

8. The percentage of equity held by the management of the company is

- _____ Over 50%
- _____ Between 40 % and 50 %

_____ Between 20 % and 30 %

___ * ___ Between 10 % and 20 %

_____ Less than 10%

9. What is your firm's total market value of equity? (JMS)

Answer: _____

10. What is your firm's Weighted Average Cost of Capital?

Answer: _____

11. How would you describe your firm's future investment opportunities?

Answer: _____

12. How is your firm current strategy affecting your firm debt-to-equity mix?

Answer: _____

13. How risky is your firm position in industry? What are main sources of these risks?

Answer: _____

14. Given that new profitable investment opportunity cannot be taken without doing one of the following, your firm will most likely choose to:

___ * ___ Depart from the target debt/ equity ratio

_____ Cut dividends

_____ Sell off other assets

_____ Pass up the profitable investment

15. According to your estimation, your firm's outstanding securities are priced fairly by the market for:

___ * ___ More than 80% of the time

___ Between 50 % and 80 % of the time

___ Between 20 % and 50 % of the time

___ Less than 20 % of the times

16. The tax structure of Jamaica is favorable for which financing source?

(Please rank "1" most favorable and "3"least favorable)

___ 1 ___ Retain earnings

___ 3 ___ external equity financing

___ 2 ___ favors debt financing

APPENDIX XIV (page, 87)

Summary of the relationship between evidence form Grace, Kennedy Limited and Capital Structure theories

A capital structure theory or concept is listed in the first column, followed by the related evidence found from Grace, Kennedy Limited in the column.

Theory or Concept	Grace, Kennedy Limited evidence	Y	N
1. Trade-off benefits and costs of debt (Myers, 1986). Often taxes benefits are traded off with expected distress costs (MM,1963)	<ul style="list-style-type: none">• Corporate interest deductions moderately important• Cash flow volatility important• Financial distress and bankruptcy costs is important• Maintain financial flexibility is important• Related to firm has target debt ratio	X X X	X X
2. Firm has target D/E ratio; A static version of the trade off implies that firm has an optimal, target debt ratio.	<ul style="list-style-type: none">• Same industry debt ratios is important• GKL has some what strict target/ range• GKL has no target debt ratio	X	X X
3. the effect of transactions costs on D/E ratios; Transaction costs can affect the cost of external funds. Firms may avoid or delay issuing or retiring security because of issuance costs Fisher et al. (1989).	<ul style="list-style-type: none">• Transactions costs affect debt policy• Transaction costs make GKL prefer internal generated funds.	X X	
4. Pecking Order Theory of financing hierarchy; Financial securities can be undervalued due to information asymmetry between managers and investors. Firm should use securities in reverse order of asymmetry: use of internal	<ul style="list-style-type: none">• Financial flexibility• Desire for flexibility is unrelated to degree of information asymmetry(size) or growth status• Issue debt only when internal fund insufficient• No relation to growth or dividend status• Equity issue only internal fund is		

funds first, debt second, convertible security third, equity last. To avoid need for external funds firm may prefer to store excess cash(Myers & Majluf, 1984)	<ul style="list-style-type: none"> insufficient Equity issuance decision affected by equity undervaluation POT has no relation to size, dividend status, executive ownership Equity issuance decision unaffected by ability too obtain fund from debt, convertibles, or other sources 		
5. Stock price: Firm with low leverage issue equity when their valuation is high. Firm with high leverage issue equity when there valuation is low.	<ul style="list-style-type: none"> 		
6. Credit rating	<ul style="list-style-type: none"> In general, rating is very important to debt decision 		
7. Interest rates	<ul style="list-style-type: none"> Issue debt when interest rates low 		
8. Underinvestment: firm may pass up NPV>0 project because profits flow to existing bondholders. Can attenuate by limiting debt or S/T debt. more severe for growth firms(Myers,1977)	<ul style="list-style-type: none"> Growth status has no effect on relative use of S/T debt Growth status affects relative important of debt policy Borrowing S/T to avoid underinvestment 	x	x
9. Asset substitution: shareholders take on risky projects to expropriate wealth from bondholders(Jensen& Meckiling,1976)	<ul style="list-style-type: none"> Restrictive covenants are important considerations in borrowing. Company has no problem regards assets substitution. GKL makes investments on projects that meet investment criteria. 	X	
10. Industry norms and Debt policy. Debt ratios are industry specific (Bradley et al.,1984)	<ul style="list-style-type: none"> GKL takes Industry Norm into account when decides it capital structure 		x
11. Corporate control (Harris and Raviv,1988)	<ul style="list-style-type: none"> Equity issued to dilute holdings of particular shareholders 		X
12. Risk management: finance foreign operation with foreign debt as a means of hedging FX risk	<ul style="list-style-type: none"> Foreign debt is frequently viewed as a natural hedge 	X	
13. Maturity-matching: matching maturity between assets and liabilities	<ul style="list-style-type: none"> Important to choice between S/T and L/T debt 	x	
14. Employee stock/bonus plans: shares of stock need	<ul style="list-style-type: none"> When funding employee plans, firms avoid issuing shares, which would 	x	

to implement employee compensation plans	<ul style="list-style-type: none"> dilute the holding of existing shareholders. The company has Stock Option plan to management and employees 	x	
15. Bargaining with employees; high debt allows effective bargaining with employees(Chang,1992)	<ul style="list-style-type: none"> Debt policy is used as a bargaining device 		x
16. EPS dilution	<ul style="list-style-type: none"> Important too equity issuance decision 	x	
17. Debt is used to signal production decisions(Ross,1977)	<ul style="list-style-type: none"> GKL use debt to signal optimism in its operation. 	x	
18. Equity ownership of management used to signal project quality(Leland and Pyles,)	<ul style="list-style-type: none"> Company used proportion of managers' shares ownership to signal the quality of projects. 		x
19. Corporate planning principle	<ul style="list-style-type: none"> The most important factor influences debt policy 	x	