### **CHAPTER TWO**

#### LITERATURE REVIEW

### 2.1 INTRODUCTION

Chapter one specifies the objectives of the study. This chapter provides the background to the study.

## 2.1.1 The Approach On Literature Review

Various studies have been carried out on cash flow identifying many different issues, concepts and problems. Hence, the literature review on cash flow will be divided into four parts. The first part will discuss prior studies on the format of presenting operating cash flows namely the direct and indirect method. The second part will highlight the inconsistencies and ambiguities in cash flow reporting. The following part of the literature illustrates on how cash flow information can be used to indicate a firm's financial state or health. As the study aims to investigate the relationship between voluntary cash flow disclosures and eight firm-specific characteristics that may, or may not, have some influence over the level of disclosure, hence the relevant literature on voluntary disclosures will be covered in the final part.

## 2.2 Related Literature on Cash Flow.

# 2.2.1 Indirect Method

Studies of Ng (1996), Krishnan and Largay (2000), Bahnson, Miller, and Budge (1996), reveal that the indirect method, was found to be most widely used and there is diversity in the presentation of certain cash flow items. Several reasons and explanations were found for the preference of indirect method. Ng (1996) suggests that the indirect method is deemed to be superior in that it shows the reconciliation between profit and cash flows which readily provides the answer to questions such as why is that the enterprise, which has made a lot of profits, has no cash to pay its debts. He notes that the indirect method is popular because the preparers of financial statements are more familiar with it through use in the computation of "funds from operation" in the now-superseded statement of changes in financial position.

Krishnan and Largay (2000) from their research on the predictive ability of direct method cash flow information highlighted the advantages of indirect

method which include: (1) highlighting the difference between net income and net cash from operating activities (the FASB, 1987, par. 108, states that the indirect method is most useful in extracting the lead and lag between cash flow and income information); (2) highlighting the operating changes in non-cash working capital accounts; and (3) perceived as less costly to implement.

On the drawbacks of indirect method, Bahnson, Miller, and Budge (1996) consider that nonarticulation is a serious problem in indirect method cash flow statement because its frequent presence obscures the meaning of the adjustment to net income and thus diminishes the usefulness of the information. Nonarticulation could be identified by comparing the adjustments reported on the statement of cash flows with the changes in current accounts reported on the beginning and ending balance sheets for the same period. Bahnson, Miller, and Budge (1996) found many unexplained differences between operating cash flows measures and the amounts actually reported in cash flow statements. They suggest that the FASB should at least improve the requirements for presenting the indirect method by mandating that companies fully explain any significant nonarticulation.

The research findings in summary imply that the indirect method though it has its advantages, is not as easy as it was thought to be. The existence of so many significant and widely dispersed differences between estimated and reported measure of operating cash flow show that the conventional concepts underlying indirect method are inadequate for either guiding or describing practice.

## 2.2.2. Direct Method

Conversely, it is believed that direct operating cash flow data is more useful in checking the accuracy of past assessments of future cash flows. Krishnan and Largay (2000) found that past period direct method cash flow data is superior in relative ability to predict future operating cash flows over indirect method cash flow data. They contend that the accuracy of cash flow prediction is enhanced when both direct method cash flow data and earnings and other accrual data are used.

Krishnan and Largay (2000) also argued that the direct method is more consistent with the objective of a statement of cash flows -- to provide information on cash receipts and cash payment --- than the indirect method, which does not report operating cash receipts and payments.

Further, Krishnan and Largay (2000) from their findings, were able to provide evidence on FASB's assertion that direct method cash flow information can be determined indirectly without incurring unduly burdensome costs (FASB 1987, paras. 116-18). Evidence of this assertion is important because, if accurate forecasts of gross cash collections and payments can be developed using information contained in the income statement and balance sheet, then users of financial statement may not be at a loss when preparers do not use the direct method. Clearly, firms that use direct method in the presentation of cash flow statement will have some advantages which, include (1) ability to compare similar types of cash receipts and payments across companies at least annually (Richardson, 1991); (2) better representation of an entity's cash cycle for credit- grantors and more user-friendly format for managers not possessing substantial accounting knowledge (O'Leary, 1988); (3) helpful in cash flow variance analysis as the cash budget can be tied into the cash flow report thereby drawing attention to the real source of any problems (Trout et al., 1993); and (4) facilitates sensitivity analysis of cash flows to volume changes as gross receipts and cash payments may respond differently to changes in activity (Cornell and Apostolo, 1992).

Krishnan and Largay (2000) observed that very few firms use the direct method. Thus, it is likely that some users of financial statement, particularly lenders and sophisticated investors, demand and obtain direct method information from firms. Because this information may not be available to other users, those relying on disclosures contained in the financial statements may be at a disadvantage. Krishnan and Largay (2000) contend that financial statements users not privy to direct operating method cash flow information are at a disadvantage to those who through their company contacts could have access to that information. Users of financial statements not disclosing direct method information will incur additional costs by estimating and collecting this information. Hence, there will be potential

misallocation of resources when decisions are based on incomplete and incorrect data.

The research findings in conclusion, indicated that if firms continued using the indirect method, will miss an opportunity to make a significant contribution to the quality of financial reporting and enhance user understanding of operating cash flows.

# 2.2.3. Classification of cash flow components and concerns on cash flow reporting

Numberg (1993) draws attention to the inconsistencies and ambiguities in cash flow statements under FASB Statement No. 95. He emphasizes that the three-way classification is loosely based on the finance literature while important modifications result in inconsistent or ambiguous classifications of certain cash flows. Numberg (1993) considers that the amounts reported as cash flow from operating, investing, and financing activities do not reflect all of the cash consequences of these activities and accordingly, the reported amounts should not be used in decision models without adjustment for non-cash transactions. In an example, of a non-cash transaction, such as converting debt to equity, a comparative cash flow statement reports the original borrowing as a financing inflow but settlement of the debt conversion is not reported as a financing outflow because it does not involve cash.

Next Numberg and Largay, (1996) evaluated the cash flow statement classification of transactions relative to operating, financing and investing activities. Numberg and Largay, (1996), examined the cash flow reporting of hedging transactions, sale-leasebacks, rental asset purchases and sales, loan securitisations, and repurchase/reverse repurchase agreements, which varies across companies. Because the SFAS-95 classification guidelines are unclear (Numberg 1993), cash flow statement classification of these transactions is not consistent across companies. Numberg and Largay, (1996) argue that these inconsistencies may impair cash flow statement comparability across companies and some of the apparent inconsistencies may reflect real world differences in how companies manage their operating, investing and financing

activities. They suggest reporting gross, rather net cash flows, and increased disclosures enhances the fineness or informativeness of cash flow statements by enabling report users to reclassify cash flows for their own analytical purposes. This is because users can readily convert reported gross cash flows to net cash flows but not vice versa.

In summary, the rationale for cash flow information is that, since it avoids dubious accounting allocations present in the accrual system, the cash flow data should not only be comparable across entities but could be used accurately to evaluate performance, liquidity and solvency. The research findings due to inconsistencies and ambiguities show otherwise.

## 2.2.4. Cash flow information as indicators of financial state.

Sharma (2001) draws attention to the logical relationship between cash flow and bankruptcy. He emphasizes that cash flow information does contain potentially significant information content over accrual information in discriminating between a bankrupt and non-bankrupt firms, particularly in determination of the probability of bankruptcy. Knowing the probability of failure enables the assessment of the degree of distress and risk association with a particular company. Thus, bankers may lend at a premium interest rates to companies that have a marginal probability of failure.

It is widely recognized that the level of dividend payout is related to the capacity of the firm to make such payments. The ability of an entity to make dividend payments therefore reflects its financial state of affairs. According to Sharma (2001) dividend payment is made out of cash flows and under financial distress where cash flows are poor, it would be expected that dividend payments would be reduced or omitted. Further, in the long term it is cash flows that are important in sustaining dividend payments. Consequently, shareholders pay considerable attention to future cash flows in the form of future dividend flows when ascertaining the value of the firm.

DeAngelo and DeAngelo (1999) suggested that managers of distressed firms with long dividend histories are reluctant to omit dividend payments "because they would be the first managers in many years whose policies have generated insufficient cash to pay dividends." Without adequate

cash flow the alternative is to reduce cash dividend payments, resort to bonus share or rights issues or to borrow to meet dividends payments. Any one or a combination of these alternatives may be an indication of insufficient ongoing operating cash flows and consequently financial distress.

Stephens and Govindarajan (1990) undertook a study to assess a firm's cash generating ability. They contend that there is an inseparable relation between a firm's future ability to generate funds from operating activities and its current need to make investments to maintain itself as a going concern. According to Stephens and Govindarajan (1990), not all investments in operating assets are equivalent. A level of operating investments is required to maintain the operating capacity and this amount should be separated from other funds flow uses. Stephens and Govindarajan (1990), also suggest that any remainder of the operating investments is made either to increase the operating capacity of existing business or to invest in new types of business. They stressed that the distinction is important to an understanding of a firm's fund flows. Expansion of current business or entry into new types of businesses can be undertaken using new debt or equity financing unlike capital maintenance where it needs to funded from current operating fund flows.

In a financial analysis context it has been argued that cash flows provide value relevant information complementary to accrual information to assess a company's financial state. The research findings show very clearly the relationship between cash flow and corporate health.

## 2.3. Related literature on voluntary disclosure

A large academic literature debates the relative desirability of mandatory or voluntary disclosures of information by corporations (Edwards and Smith, 1996). The debates flows around the question of whether market forces will drive organization to produce information needed by the market in a cost effective manner, or whether organizations are inherently so secretive that they will disclose only where there is a mandatory requirement.

Empirical evidence suggests that actual disclosure policies and practices are a response to a complex pattern of pressures and influences on organizations (Edwards and Smith, 1996).

Mak (1991) argues that the amount of disclosure can be expected to vary across firms because it depends upon the interaction of demand for and supply of information, which will vary between firms. He contends that voluntary disclosures are dependent upon the availability of alternative information and the level of uncertainty associated with the company. According to Mckinnon and Dalimunthe (1993), the role of, or demand for corporate information is not the same in that disclosure is expected to be greater for firms with particular characteristics.

Various studies (for examples, Chow and Wong-Boren, 1987; Bradbury, 1992 Mitchell, Chia, and Loh, 1995) have been carried out to examine empirically economic incentives that motivate firms to voluntarily disclose corporate information. Some of the commonly used variables include firm size, financial leverage, and proportion of assets—in-place (for examples, Chow and Wong-Boren, 1987; Bradbury, 1992); earnings volatility (for examples, Bradbury, 1992; Mitchell, Chia, and Loh, 1995); ownership diffusion and industry membership (for examples, Mitchell et al., 1995) and type of audit firm (for examples, Craswell and Taylor, 1992; Hossain and Adams, 1995).

## 2.3.1. Firm Size

Gray and Roberts (1989) examined the impact of firm size on voluntary disclosure. They found that size is positively associated with making voluntary disclosure. A number of explanations have been provided in the literature. For

example, Buzby (1975), suggests that because the accumulation and dissemination of information is costly, smaller firms may not possess the necessary resources for collecting and presenting an array of information. Moreover, smaller firms may be more reluctant than larger firms to release information voluntarily in their annual reports because this could have high proprietary cost for the firm. High proprietary cost, according to Mckinnon and Dalimunthe, (1993), will put the firms at a competitive disadvantage due extensive disclosure. Another reason put forward by Lang and Lundholm (1993) for greater public disclosures by larger firms is that the annual reports of large companies are more likely to be scrutinized by financial analysts than those of smaller entities. Large companies are said to have market-based incentive to disclose more information voluntarily, such as:

- a desire to reduce the incentives for private acquisition of information:
- a wish to protect firm value since non-disclosure could be perceived by financial analysts and investors as bad news.

Studies also have shown that there is some positive association between greater disclosure and reduced riskiness in a company's share price that's listed on the main board of the stock exchange (Firth, 1978; Singhvi and Desai, 1971). Companies who obtain a listing on the stock exchange have to comply with certain regulations regarding disclosure of financial information. This means their minimum disclosure requirements are somewhat higher than other non-listed companies. However it has been argued that listed companies are likely to give extra information in their annual reports. This is because listed companies like to have as favourable a share price as possible, in order to help financing, and greater disclosure will give more confidence to investors (Firth, 1979).

### 2.3.2. Financial Leverage

Leftwich, Watts, and Zimmerman (1981) suggest that larger firms tend to have greater financial leverage. And, Jensen and Meckling (1976) note that agency costs tend to increase with financial leverage. Hence a positive relation is expected between voluntary and leverage, as suggested by agency

theory. Empirical evidence supporting such relation is, however, not unanimous (Chow and Wong-Boren, 1987).

## 2.3.3. Proportion of Assets in Place

Myers (1977) considers that the value of a firm is made of two elements: assets- in-place and growth opportunities (called assets-yet-to-be acquired). His analysis implies that firms with more assets-in-place are likely to have high leverage. However, he contends that conflicts of interest between managers and shareholders also arise as firms use more equity to finance their growth opportunities. One way to reduce such incentive conflicts between managers and shareholders is to increase disclosure about corporate performance. Conversely, Bradbury (1992) argues that if a firm's value is made up largely of assets-in-place, wealth transfers will be difficult (hence lower agency costs), thus implying an inverse relationship. However, the empirical evidence reported in most previous disclosure studies (e.g. Leftwich et al 1981, Chow and Wong-Boren 1987, Bradbury 1992) does not support this notion.

## 2.3.4. Ownership Diffusion

Agency costs are likely to be higher when a firm's shares are widely held than they are held by a relatively small number of shareholders, thereby increasing the need for additional information (Craswell and Taylor, 1992). These agency costs arise from the separation of the principals (shareholders) from the decision making function in the firm. Its been argued where a firm's shares are widely held, there is a greater separation between the firm's decision-making function and its principals than where the firm's shares are held by a relatively small number of shareholders [Schipper, 1981; Bradbury, 1991; Craswell and Taylor, 1992]. Conversely, Mckinnon and Dalimunthe (1993) found support for the ownership diffusion variable, but not Mitchell et al., (1995).

# 2.3.5. Type of Audit Firm

Schipper (1981) and Watts and Zimmerman (1986), report that in agency theory, the appointment of an external auditor is a primary mechanism for controlling the incentive conflict between principals and agents. It is contended that large accounting firms have incentives to provide higher quality audit services in order to enhance their public reputation as credible monitors (DeAngelo, 1981). They will therefore encourage their clients to disclose comprehensive information in their annual reports. Empirical evidence supporting this notion is, again mixed (Hossain and Adams, 1995).

# 2.3.6. Industry Membership

Watts and Zimmerman (1996) have identified industry membership as a crucial variable in determining accounting policy choice. Certain industries, because of their strategic importance, may attract a disproportionate share of scrutiny from government agencies and interest groups (McKinnon and Dalimunthe, 1993). Their motivation of this variable is on the basis that different industries have different accounting treatments and also some are politically sensitive (Mitchell et al., 1995).

## 2.3.7. NACRA AWARDS

NACRA is now the country's most prestigious award in recognition of excellence in corporate reporting (Lam, 1999). According to Lam, (1999) the award does wonders for a company's image as only a handful win. To win the award, a company must not only display the highest standards of reporting in the annual reports but also the inclusion of voluntary disclosures.

The only prior research that, have empirically tested whether corporate reporting by companies commended with awards differed from those not commended was by Low, Koh and Yeo (1995) in Singapore. Low et al., concluded that commended companies have a higher standard of corporate reporting than the non-recommended companies. Further, Tan et al., (1990) agreed that corporate reporting is enhanced with the emergence of the annual corporate report awards. Thus it is the aim of this study to determine whether companies with annual reports for the year 2000 that won the NACRA Award

disclosed voluntarily more cash flow information than the companies that did not win.

### 2.4. Conclusion

Various prior studies have advocated that economic incentive exists in relation to voluntary disclosure of information. Economic variables which have been identified in the literature as potential factors motivating voluntary disclosure of cash flow information include firm size, listing status, financial leverage, proportion of assets-in-place, ownership diffusion, industry membership and type of audit firm. This chapter provides a review of related accounting literature, mainly overseas on cash flow and voluntary disclosure. Chapter Three outlines and justifies the methodological framework.