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REVIEW OF LITERATURE

2.1.0 INTRODUCTION

This chapter on review of literature provides a historical background to the problem of the study. At the preliminary stage of the research, the writer compiled an index of 97 professional and academic journals of accounting published in English language. Since 1961, a considerable number of research publications have been produced on disclosure of information in annual reports. By using the references and notes sections of the accessible accountancy journals a card index of 741 articles, Ph.D. theses, and monographs on disclosure of accounting information was compiled. The titles and abstracts of them signify the depth and breadth of the field of disclosure of accounting information. Four hundred and one of them were collected. Copies of some Ph.D. theses were not collected, but only referred. By reference to the card index 36 sub-areas of disclosure of accounting and financial information were identified. This study is involved in three of the sub-areas, i.e. aggregate disclosure, measurement of disclosure, and effect of company characteristics relevant to disclosure. For the review of literature 16 academic research articles were selected. In addition, two review articles on studies of disclosure studies were selected. Six unpublished and published Ph.D. theses have been referred for the purpose. Review of literature includes 24 studies relevant to disclosure of accounting and financial information. It is carried out according to the chronological order. In addition to the above, a brief introduction is provided on the first available organized study on corporate reporting.
2.1.1 FIRST ORGANIZED STUDY ON CORPORATE REPORTING (1948)

According to Gyan Chandra, Roper's survey titled 'A Report on What Information People Want about Policies and Financial Conditions of Corporations,' seems to be the first of the organized research on Corporate Reporting. Roper has interviewed several types of users of corporate statements. A widespread ignorance about corporate reports was found. According to his findings analysts and bankers did not have sufficient confidence in the annual report figures.

2.1.2 CORPORATE REPORTING AND INVESTMENT DECISIONS (1961)


The objective of Cerf's study was to examine the disclosure practices of American corporations in their annual reports. Cerf had randomly selected 527 corporate annual reports from the 'Index to Stock and Bond Reports' of Standard and Poor's Corporation, relevant to the industrial sector. The selected annual reports were within the financial period from July 1956 to June 1957, and

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relevant to the New York Stock Exchange, Regional Stock Exchanges, and OTC market. In order to evaluate annual reports an index of disclosure items was developed, which consisted of thirty-one items. Financial analysts were used to assign values to selected disclosure items. The values had been ranged between one and four. In allocating values, relevant literature had been used in addition to the opinions of the analysts. A list of minimum specification was allocated to every item of information. An appropriate score was assigned for each of the disclosure items. Sixty-eight were the maximum score allowable to an annual report, if all the items were disclosed properly. The disclosure items were not applicable to all annual reports in the same way. While some disclosure items were applicable to all annual reports applicability of other disclosure items varied from report to report on the basis of nature and activities of the business. A maximum possible score for each company was developed. A proportionate score was computed by using the actual score and the maximum possible score for each annual report. Annual reports were evaluated by applying the scores allocated to disclosure items. Individual scores of items allocated to an annual report were aggregated to calculate the total score earned by an annual report, so the level of disclosure of each annual report was computed.

In addition to measuring the disclosure in annual reports, Cerf examined the degree of affect of four company characteristics upon disclosure. Asset size, extent of ownership, profitability, and method of trading shares were the four characteristics. He found a positive relationship between the disclosure in annual reports and the four company characteristics. "Cerf (1961) concluded that financial reporting practices of many US companies need improvements. Cerf (1961) also observed that significant differences in disclosing appeared to be a
function of a variety of corporate attributes including asset size, number of shareholders and profitability.\(^3\)

2.1.3 EXTENT OF DISCLOSURE (1968)

Copeland and Frederick\(^4\) measured the extent of disclosure for increase of the company’s outstanding common stock and related the measure to the materiality of the increase. They listed out 310 reasons for subsequent issues of common stocks by investigating a random sample of 200 subsequent listing applications of the New York Stock Exchange. They were classified into six reasons as convertible stock, cash, acquisition, convertible bonds, other, and stock options. Items of information, which should have been appeared in an annual report for each of the reasons, were separately specified. The total number of criteria for each purpose was counted and multiplied by the number of companies, which listed stock for that purpose. This was considered as the maximum score an annual report could obtain. The actual score of an annual report was calculated by recording the presence of items of information on a check list. By using the actual score and the maximum score the extent of disclosure percentage was calculated. Spearman’s rank correlation was used to test whether ranking by materiality was significantly different from the ranking by disclosure. Positive relation between materiality and disclosure was found. However, the relation was not significant at the 0.05 level of confidence.

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2.1.4 AN EMPIRICAL ANALYSIS OF THE QUALITY OF CORPORATE FINANCIAL DISCLOSURE (1971)

This study by Singhvi and Desai\(^5\) was an attempt to examine the quality of disclosure and its relationship with 6 company characteristics, i.e. (1) asset size, (2) number of stockholders, (3) listing status, (4) rate of return, (5) earnings margin, and (6) CPA firms. The study also provided evidence regarding influence of corporate disclosure of information on security price fluctuations.

Annual reports of 100 listed and 55 unlisted corporations for the fiscal years ending between April 1, 1965 and March 31, 1966 were examined with an index of disclosure constructed for the purpose. The index of 34 items of information consisted of 28 items taken from Cerf’s index of disclosure and other six introduced by the author on the basis of a review of relevant literature and interview with four financial analysts. The weights were assigned to disclosure items according to their relative importance. The disclosure score was variable up to 68. The disclosure score of each annual report was computed by applying the index. The relationships between the disclosure and six corporate characteristics were examined through individual testing of each independent variable and by applying multivariate analysis. The chi-square test was used for the asset size, number of stockholders, rate of return, and earnings margin. The asset size and number of stockholders had shown a positive relationship at 0.01 level; rate of return at 0.02 level; and earning margin at 0.05 level. The Z-test was applied to test disclosure with independent variables of listing status and CPA firms. The quality

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of disclosure was better in the case of listed and big eight CPA firm related corporations. According to the study 43.4 per cent of the variation in the quality of disclosure was explained by six independent variables. The multiple correlation coefficient was 0.66 and it was significant at 0.01 level. The regression coefficient of 8.1 for listing status was significant at 0.01 level. The regression coefficient of 0.25 for earnings margin was significant at 0.05 and 0.1 levels. The regression coefficients of other independent variables were not statistically significant. The listing status had produced a coefficient of determination of 0.3812.

2.1.5 AN EMPIRICAL STUDY OF THE EXTENT OF DISCLOSURE IN THE PUBLISHED ANNUAL REPORTS OF LARGE INDUSTRIAL CORPORATIONS (1974)

This study by Stanga had three objectives. The first was to develop a comprehensive, user oriented disclosure model applicable to the published annual reports of large industrial corporations. The second was to use the disclosure model to critically examine the current state of reporting in the published annual reports of large industrial corporations. Third objective was to examine the influence of two independent variables, the corporate size, and industry, in explaining annual report disclosure differences among large industrial corporations.

The study consisted of six chapters. The study was introduced in the first chapter. A theoretical aspect of disclosure was presented in the chapter two. The chapter three was devoted for the review of related literature. Stanga reviewed three research studies. Corporate Reporting and Investment Decisions by Alan Robert Cerf (1961), Some Factors Influencing the Annual Reports of North American Corporations by Murray Scott Henderson (1969), and An Empirical

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6 Stanga, Keith George; An Empirical Study of the Extent of Disclosure in the Published Annual Reports of Large Industrial Corporations; Unpublished Ph.D. Dissertation, the Louisiana State University and Agricultural and Mechanical College, 1974.
Analysis of the Quality of Corporate Financial Disclosure by Surendra S. Singhvi and Harsha B. Desai (1971) were the three studies reviewed. Chapters 4 and 5 were devoted for the design and application of the disclosure model. The summary, conclusions, and recommendations were included in the chapter six.

The designed disclosure model was stockholder user group oriented. Stanga used financial analysts as advisors of the stockholder group to represent their needs in designing the disclosure model. The membership directory of the Chartered Financial Analysts of 1973 had 3,024 members. Eight hundred names were selected on random sample basis to mail the questionnaire. The prepared questionnaire consisted of 79 information items for respondents to evaluate. In compiling the list of items, numerous books and articles in the accounting and finance literature were used. According to Stanga "...the most valuable single source of information items was Cerf's pioneering study in this area." The author solicited suggestions from many informed parties to improve the questionnaire. After a reminding letter, the number of positive responses received was 275 and the response rate was 34.375 per cent. The questionnaire encompassed information dealing with the past, present, and future, which included audited accounting, unaudited accounting, and non-accounting information. The respondents were requested to judge the importance of each information item on a 5-step scale as being essential, very important, moderately important, slightly important, and unimportant. Values were allocated for five-step scales and importance means and standard deviations were calculated for each of the disclosure items, and the results were critically examined. On the basis of the calculated importance, numerical weighs were assigned to information items of the disclosure model as four, three,

\[\text{ibid., p.76.}\]
and two. These scales were used to evaluate the disclosure of information in annual reports.

The companies for the study were selected from a list of the 1973 Fortune 1,000 classified by industry list by using cluster-sampling technique. First, the author randomly selected eight industries from the 29 industries classified in the list. Then, 10 companies within each of the eight industries were selected at random, making the total number of companies in the sample 80. Annual reports of the companies covering the fiscal period from October 31, 1972 to September 30, 1973 were collected. In measuring disclosure of an annual report only the information applicable to the relevant company was considered. A company was not penalized for failing to disclose information items, which were not applicable to it. The 10-K reports and other available information were applied for the purpose of checking applicability of information items.

Stanga calculated (1) the number of companies that disclosed an item in its annual report, (2) the number of companies to which the item was considered applicable, and (3) the disclosure percentage.\(^8\) Information items were classified under (1) essential (weight = 4), (2) very important (weight = 3), and (3) moderately important (weight = 2). Each of the essential items was disclosed by more than 70% of applicable companies. There were 10 disclosure items under the essential category, and five of them had a 100% disclosure. The minimum disclosure was 71.43%. Under the very important category, 26 of the 46 items had a disclosure percentage of below 50. Only 3 items were at the 100% level, and 4 items were at the 0% level. Disclosure of moderately important information was not a popular practice among the sample companies. Twenty of the twenty-three

\(^8\) Percentage of the companies disclosing an item out of the number of companies to which the item was applicable.
moderately important information items had disclosure percentages below 50, and 14 of these items had disclosure percentages below 10. The maximum disclosure percentage was 93.75 and 8 information items had a 0 percentage. There was a positive relationship between the perceived importance of information by CFA and the frequency with which the information was disclosed.\textsuperscript{9}

Stanga examined the influence of two company characteristics, size as measured by net sales and the type of industry on the disclosure in annual reports. Disclosure scores for 80 companies were calculated by dividing (1) the sum of disclosure model weights received by a company for the information items presented in its annual report by (2) the sum of disclosure model weights corresponding to the information items considered as applicable to the company. The scores ranged from a high value of 58.51 to a low value of 21.79. The mean and the standard deviation were 45.32 and 7.2, respectively. The mean scores, and high and low range values were calculated for the eight types of industrial groups. The relationship between the dependent variable of disclosure and the two independent variables of company size measured by net sales and industry type was statistically tested.

In the results, coefficient of determination was 0.2883, and the sum of squares due to regression was significant at a level of 0.0018. Thus, the net sales and industry variables explained 28.83 per cent of the variation in disclosure scores. The results have shown that the industry variable accounts for most of the explained variation in disclosure scores.

Stanga tested two null hypotheses. "There are no significant differences in the mean disclosure scores of industries" was the first null

\textsuperscript{9}ibid., p.159.
hypothesis. The computed F value of 3.23753 was significant at the 0.0051 level. The null hypothesis was rejected, and the alternative hypothesis that, "There are significant differences in the mean disclosure scores of industries" was accepted. "There is no relationship between net sales and disclosure score" was the second hypothesis tested. In the solution, coefficient of the independent variable was computed as 0.000003. The t test for the significance of the regression coefficient yield a t value of 2.46086 which was significant at the 0.0159 level. The null hypothesis was rejected and the alternative hypothesis that "There is a positive relationship between net sales and disclosure" was accepted. The value of the intercept was 43.83. The t test for significance yielded a t value of 46.77506, which was significant at a level of 0.0001. The mean disclosure scores for each industry adjusted for the regression of disclosure score on net sales was calculated. They were not drastically different from the unadjusted means.

2.1.6 A STUDY OF THE CONSENSUS ON DISCLOSURE AMONG PUBLIC ACCOUNTANTS AND SECURITY ANALYSTS

According to the author of this study, Chandra\textsuperscript{10}, a corporate entity communicate with the external world by using disclosure as a mechanism. In an economy in which resources are allocated through price mechanism, lack of adequate disclosure can create ignorance in the capital market and can result in misallocation of resources in the economy.\textsuperscript{11} Investors and their counselors assume that accountants as preparers of accounting information have an understanding of users requirements. This situation may or may not exist. The consensus of the two groups had to be examined to understand the real situation. The objective of the study was to examine empirical evidence on adequate disclosure in published

\textsuperscript{10} Chandra, Gyan; "A Study of the Consensus on Disclosure Among Public Accountants and Security Analysts"; The Accounting Review; October 1974, pp. 733-742.

\textsuperscript{11} Ibid., p. 733.
corporate annual reports by examining views of the public accountants as preparers, and security analysts as users of published corporate annual reports.

Chandra selected three subject groups for the study. Groups 'A' and 'B' consisted of public accountants and group 'C' consisted of security analysts. The accountants of group 'A' perceived the value of information for equity investment decisions to security analysts. The accountants of the group 'B' rated the value of information for equity investment decisions. The security analysts rated the value of information for equity investment decisions. Three null hypotheses had been developed for testing the consensus between the users and preparers of information in annual reports.

HYPOTHESIS 1: There is no significant difference between the value of information to security analysts as perceived by accountants and the value of information to security analysts for equity investment decisions. (Groups 'A' and 'C' were used to test the hypothesis).

HYPOTHESIS 2: There is no significant difference between the accountants and the security analysts on the value of information for equity investment decisions. (Groups 'B' and 'C' were used for testing).

HYPOTHESIS 3: There is no significant difference between the value of information to security analysts as perceived by accountants and the value of information to accountants for equity investment decisions. (Groups 'A' and 'B' were used for testing).

For the purpose of developing a list of disclosure information items the author reviewed literature on corporate financial statements and security analysis. Reports of selected leading corporations were studied. A preliminary draft of the questionnaire was prepared and pilot-tested. The author had discussions with
the accountants and security analysts to improve the questionnaire. The items in
the questionnaire were selected on the basis of general significance, frequency of use,
availability, and recommendation from the users. The listed information items
consisted of 58 disclosure items relevant to areas of (1) balance sheet, (2) income
statement, (3) other statements, (4) derived information, (5) accounting method, and
(6) projection and budgetary disclosure. The respondents had to value the
importance of information items on a five point scale, i.e. very important = 5,
important = 4, neither important nor unimportant = 3, unimportant = 2, and very
unimportant = 1.

Six hundred public accountants working in ‘Big Eight’ CPA firms
in the USA were selected for the groups ‘A’ and ‘B’, and each group consisted of
300. Four hundred chartered financial analysts were selected for the group ‘C’.
Thousand questionnaires were mailed and 498 replies were received with a response
rate of 49.8%. The response rates of groups ‘A’, ‘B’, and ‘C’ were respectively
53%, 53%, and 45%.

For each of the information items three hypotheses were
individually tested. Pair-wise comparison of the mean of the ratings of the
information items by the subjects in each subject group was performed. A simple t
test at 5% critical probability was used to detect the significant difference.

The hypothesis 1 was rejected for 35 of the 58 information items
included in the questionnaire. There was a considerable difference between the
value of information to security analysts as perceived by accountants and the value
of information to security analysts for equity investment decisions. The second
hypothesis was rejected for 40 of the 58 information items. A difference had exist
between the accountants and security analysts on the value of information for equity
investment decisions. The third hypothesis was rejected for only two information items. Fifty-six information items were within 95% probability and the third hypothesis was confirmed. There was no difference between the value of information to security analysts as perceived by accountants and the value of information to accountants for equity investment decisions. According to Chandra\textsuperscript{12}, accountants did not differentiate their dual role in two groups as preparers and users of information in annual reports.

Lack of consensus prevailed between the accountants and security analysts relevant to many disclosure areas. Projected expenditure of capital, research and development, advertising, and cash flows; inventories, investments, minority interest and earning from subsidiaries, operating expenses, and depreciation are some of them.

The mean values of the rating of security analysts were higher than that of the accountants. Security analysts consider the corporate annual report information items as more important than the public accountants do.

Chandra had provided three explanations for the results discussed earlier. Firstly, the lack of consensus may prevail due to lack of communication between the users and preparers of corporate annual reports. Another possible reason was that a time lag may exist between the need of the user group and what is ready to be given by the preparer group. The tendency of the accountants to adhere to the established order rather than experimenting with new ideas was considered as the third factor.

\textsuperscript{12} ibid., p. 737.
2.1.7 SELECTED ITEMS OF INFORMATION AND THEIR DISCLOSURE IN ANNUAL REPORTS (1974)

According to Buzby\textsuperscript{13}, author of the article, the purpose of this study was to complement and expand on the studies of previous researchers on the measure of relative importance and the extent of disclosure of information items in annual reports. Buzby quoted researchers of Cerf, Copeland and Fredericks, Singhvi and Desai, Francia, and Strawser as previous researchers in this subject area. While they had, mainly covered large-scale companies, Buzby paid attention to small and medium scale companies. According to Buzby “Singhvi and Desai developed an index of disclosure which was primarily based on work done by Cerf, several years earlier. The index consisted of 34 items of information which were used as a basis for a composite measure of the extent of disclosure in annual reports for the items taken as a group.”\textsuperscript{14}

The extent of disclosure for each of the items, the relative relationship between the importance of an item and its extent of disclosure, and the average extent of disclosure of all the items were expected to be determined in this study.

The list of disclosure items used by Buzby consisted of 38 financial and non-financial information relevant to annual reports. An opinion survey of financial analysts was conducted to estimate relative importance of each item. The survey results and literature review were used to construct a detailed set of weighted disclosure criteria for the items. The weighted disclosure list was applied to a sample of 88 annual reports of small and medium size companies for the year ending between June 30, 1970 and June 30, 1971. In selecting the information

\textsuperscript{14} ibid., p. 423.
items, the review of literature and requirements of the financial analysts as a user group were taken into consideration. Two separate pilot study questionnaires were prepared by using the information items. Each of the two questionnaires was mailed to its own systematic sample of 75 financial analysts chosen from the 1972 national membership directory of the Financial Analysts Federation. The response rate was 21.3%. The final form of the questionnaire was modified and improved by using the data gathered from the pilot study. The final form of the questionnaire consisted of 39 information items. The receiver of the questionnaire had to rate each item on a '0' to '4' scale with '0' for not necessary, '4' for essential and '2' and '3' were in between them. The significance of an item had to be judged in relation to the other items of the list. Five hundred analysts who were engaged in the evaluation of common equities and using the information included in annual reports were selected from the 1972 National Membership Directory of the Financial Analysts' Federation. Out of 500 questionnaires sent to financial analysts, only 144 were completed and returned. However, only 131 (26.2%) were usable and 13 were excluded from the study. There were 131 responses for 25 of the 38 (65.8%) items of information. There was one nonresponse for each of the remaining 13 items with the exception of item 31 which was left blank by 5 respondents. In calculation of the weighted value of a disclosure item the integer values assigned to the item were aggregated, and resultant total was divided by the number of individuals who responded to the item. The blank responses were omitted in calculation of the weight. Out of the 500 financial analysts who were sent questionnaires, 356 did not respond, and the nonresponse rate (71.2%) was relatively high. Therefore in order to examine the bias for nonresponse a Student t test was used. Mean response scores were computed for each of the items of the
last 13 returned questionnaires and for a random sample of 13 returned questionnaires received within the first 3 days. A Student t test was calculated for each of the 38 item pairs in order to test for a significant difference between the means. Thirty-six of the tests failed to achieve a significance level of 0.15 or less. "...the foregoing test tends to indicate the lack of a material nonresponse bias"\textsuperscript{15} The annual report was a source of information to financial analysts. It was considered to be the most important source of information out of all the printed materials supplied by the companies to the Securities and Exchange Commission. Sufficient evidence was available to show that the annual reports continued to play a significant role in the work of the financial analysts. There were references by financial analysts with respect to the desirability of expanded disclosures in the annual reports. Therefore Buzby considered the utilization of annual reports by the professional financial analysts, in his study.

The sample of 88 corporate annual reports consisted of two sub-samples of 44 companies each. Each company in the first sample was matched with a company in the second sample. Net value of total assets, three-digit Enterprise Standard Industrial Classification code, and fiscal year ending dates were considered as criteria for the matching purpose. The first sample of 44 companies was drawn from a list of 200 companies listed in the 1971 edition of Moody's OTC Industrial Manual, and every fourth company listed in the OTC quotation section of the March 13, 1972 issue of Wall Street Journal. The second sample of 44 companies was selected from the companies whose common stocks were traded on either the NYSE or AMEX. Annual reports for the fiscal years which ended between June 30, 1970 and June 30, 1971 were obtained for each of

\textsuperscript{15} ibid., p. 427.
the sample companies. The mean asset size for the combined sample of 88 companies was 37.2 million dollars with a range of asset values from 2.9 to 149.5 million dollars. The standard deviation was 32.2 million.

According to Buzby, there were different alternative methods of disclosure studies, and he explained two of them. One method was to find the difference between how much information was reported and how much information had to be reported according to the perception of the users. This would involve a weight disclosure index. Another method would be the development of unweighted disclosure criteria for each item of information to see the number of criteria met by each report. The measure of disclosure for a disclosure item would be the ratio of the number of criteria met to the total number of criteria. This is a simple unweighted method. In this study Buzby chose an approach similar to the one used by Singhvi and Desai with some modifications.

Buzby developed a ‘rating worksheet’ to measure the extent of disclosure of 38 items in 88 annual reports. For each annual report a separate worksheet was filled in examining the annual report. The worksheet contained a listing of the information items under three groups. Group 1 represented those items, which were self-contained. They represented single piece of information, which either were present or not present in the annual report. Group 2 consisted of those items, which could be disclosed, in varying degrees of specifications. Full credit or half credit or partial credit could be allocated according to the level of disclosure. The items in group three represented categories of information, which could be expressed in terms of sub-elements of information. Granting of full credit or partial credit depends on the disclosure of all sub-elements or some sub-elements. Full credit value of an item is allocated among sub-elements of that item.
Information available in different parts of the annual report and the 10-K reports filed with the SEC were used as a cross-reference to establish applicability of an item to a given company. The final form of the rating worksheet consisted of three pages of instructions and nine pages of listing of information items. Once the rating worksheet had been completed, the disclosure scores were transferred to a master tally sheet, which consisted of 38 columns, one for each item of information, and the sheet had 88 rows, one for each company. Each of the columns were added up and then divided by the number of companies to which the item was applicable. This process produced mean extent of disclosure score for each item of information.

Buzby had provided an Annual Report Rating Table. The item of information, financial analysts’ weight, rank of the financial analysts’ weight, number of firms required to report, average score, average score as a percentage of financial analysts’ weight, rank, largest score recorded, smallest score recorded, number of firms with zeros, number of firms with zeros as a percentage of number of firms required to report, number of firms with maximum, and number of firms with maximum as a percentage of number of firms required to report were the types of information provided in the Annual Report Rating Table.

The overall mean extent of disclosure was 51.2%, which indicated a relatively lower level of disclosure in annual reports. Many of the sample annual reports had presented a limited amount of information and disclosure was inadequate. The correlation between the relative importance of the items and the extent of their disclosure was small. According to Buzby's opinion there was an extensive opportunity for expanding the extent of disclosure in the annual reports of small and medium size companies.
In addition to the general observation on disclosure in annual reports, Buzby had discussed on a number of selected disclosure items. Even a large amount of literature had supported the segmental reporting, and financial analysts involved in the study had supported this, a relatively few number of companies had provided this information in annual reports. Forecasting of earning was another item specially discussed by Buzby. Since this was available to certain selected individuals and groups, it had to be available to the small investors through annual reports. Only one company in the study had given a specific forecast. Seventy-one companies (80.7%) did not even venture a general comment on the expected direction of change for the coming years earning.\textsuperscript{16} Financial analysts had considered a 5-10 year historical summary of selected data as quite important. However, 18 companies (20.5%) did not provide such a summary. Maintenance and repair expenditure was one of the items appeared in 10-K reports of all companies, but it was not reported in annual reports of any of the companies.

2.1.8 AN EXAMINATION OF DIFFERENCES IN FINANCIAL REPORTING BETWEEN CANADA AND UNITED STATES: AN EMPIRICAL ANALYSIS

The research study by Drury\textsuperscript{17} was an investigation of financial disclosure requirements and practices in two English speaking countries the United States of America and Canada.\textsuperscript{18} The disclosure requirements of the regulatory bodies and voluntary and prescribed disclosure practices of the companies were included in the comparative study.

\textsuperscript{16} ibid., p. 432.
\textsuperscript{17} Drury, Donald Hazen; \textit{An Examination of Differences in Financial Reporting between Canada and the United States: An Empirical Analysis}; Unpublished Ph.D. Dissertation Submitted to the North Western University, USA, 1976.
\textsuperscript{18} Except for the Province of Quebec, where the spoken language is French, in other provinces of Canada English is the spoken language.
Annual reports of national as well as international companies were involved in the examination. The actual data for the period from 1960 to 1972 were used for the study. Statistical analysis was provided from data gathered relevant to listed companies in Canada, USA, and interlisted companies. The overall study consisted of four phases. The first phase of the study examined the national and international problem areas relevant to the dimensions of accounting diversity between the two nations. The second phase of the study examined the differences in accounting practices between Canada and the USA. At the third phase of the study the impact of the differences on the summary earnings per share was examined. The effects of accounting differences between the USA and Canada were examined in the fourth phase. The comparisons consisted of nations, temporal, industry, and foreign ownership in relation to selected accounting differences of the two countries.

According to the results of the study, the financial reporting differences between the two countries, Canada and the USA were significant and extensive. The gap had been affecting the operation, regulation, and performance of financial markets.

2.1.9 A DESCRIPTIVE COMPARISON OF THE TRADITIONAL UNITED STATES FINANCIAL REPORTING MODEL WITH SELECTED FOREIGN FINANCIAL REPORTING MODELS (1978)

In this study, Madison\(^9\) had attempted to compare the financial reporting practice of the USA with the financial reporting practice of three European countries, i.e. France, Germany, and Sweden.

Initially, he described the double-entry accounting system upon

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which the whole structure of accounting framework had been developed. According to Madison, accounting principles, standards, and practices were built on this basic foundation. The whole accounting system in the USA were organized, maintained, and developed through the consensus of the accounting profession.

Madison described financial reporting systems of France, Germany, and Sweden. Their systems were compared with the system of the USA. In describing the systems, the author used the prevailing literature, statutory acts, rules, and regulations as primary sources.

He identified significantly divergent financial reporting practices in the three European countries in relation to the financial reporting practices prevailing in the USA. The creation of secret reserves was one of the items discussed. In contrast to the system prevailing in the USA, creation of secret reserves was encouraged, permitted, and sometimes required by the European countries. Overstatement of depreciation, and incorporation of various provisions at the discretion of the management without representing proper economic obligation were some of the examples given for creation of the secret reserves. In the USA, disclosure of items such as cost of sales, sales, extraordinary items, and accounting policies was used in preparation and presentation of accounting information in annual reports. Such practices were absent or limited in the preparation of annual reports of France, Germany, and Sweden. In the audit reports of these countries, the auditor only confirmed the compliance with the statutory regulations and by-laws. There was no reference to fairness of fair presentation as it prevails in the audit reports of the USA. Certain audit procedures, which were considered as significant in the USA, did not exist in the three countries. In the three countries, smoothing of income was permitted by applying certain accounting
procedures such as creation of secret reserves, reversals of write downs, and creation of accruals for the previous years. Several significant accounting disclosure practices prevailing in the USA did not generally exist in the annual reports of the three European countries. The disclosure of earning per share and tax allocation between financial periods was two of the examples. Certain accounting procedures and practices prevailing in the three European countries were considered as manipulation of accounts in the USA. In the USA the accounting profession of the private sector mainly decided accounting and reporting principles. However, in France, Germany, and Sweden such procedures and systems were decided through the involvement of the Government.

2.1.10 THE IMPACT OF SIZE, STOCK MARKET LISTING AND AUDITORS ON VOLUNTARY DISCLOSURE IN CORPORATE ANNUAL REPORTS (1979)

This study by Firth\(^\text{20}\) covers the relationship between the corporate disclosure and three corporate characteristics, i.e. corporate size, stock market listing, and audit firm. The prepared disclosure index consisted of 48 non-statutory disclosure items. A five-point scale was used to assign weight as very important (5), important (4), moderately important (3), slightly important (2), and unimportant (1). The sample of the study consisted of 40 unlisted companies; 40 listed companies, which were paired with the unlisted companies on the basis of size and industry; and 100 other stock exchange listed companies. Company annual reports were collected and evaluated. If an item was disclosed the weighted score was given. If an item was not disclosed zero score was given. The scores for the individual items of a company were aggregated and the maximum score the

company would have received if all the relevant items were disclosed divided the resultant. It was expressed as a percentage and called the disclosure index for that company. Statistical tests were conducted on the data of dependent and independent variables. The t test was applied to examine whether the differences of group means were statistically significant. The results have shown a significant difference of group means at 0.05 per cent level of significance. The Wilcoxon Matched-pairs Signed-rank test was applied to examine the significant difference in disclosure ranking between listed and unlisted companies. The companies with a stock market listing had more disclosure than those did not have a listing. The association between size and disclosure was measured by applying Kendall's rank correlation coefficient for each of three groups of companies. “The results showed that there is a positive association between size, whether measured in terms of sales turnover or capital employed and levels of disclosure for all three samples.”

To measure the relationship between auditors and disclosure, the t test and Wilcoxon’s Matched-pair Signed-ranks test were applied. There was no significant difference between ‘Big’ audit companies and small audit companies for any of the samples.

2.1.11 CORPORATE FINANCIAL REPORTING IN NEW ZEALAND: AN ANALYSIS OF USER PREFERENCES, CORPORATE CHARACTERISTICS, AND DISCLOSURE PRACTICES FOR DISCRETIONARY INFORMATION (1982)

This study by McNally et al. is an extension of previous studies on quality of disclosure of information in corporate financial reports and its

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21 Jawahar Lal; Corporate Annual Reports: Theory and Practice; Sterling Publishers (Pvt.) Ltd., New Delhi, 1985, p. 100.
relationship with selected corporate characteristics undertaken in the USA, Canada, and the UK. Many of the disclosure items of this study had been included in previous studies. This study concentrates on three aspects of discretionary disclosure: evaluation of the relative significance of selected disclosure items by surveying attitudes of the financial editors and stock exchange members; examination of the disclosure practices of manufacturing companies listed with the New Zealand Stock Exchange; and investigation of the possible association between disclosure practice of companies in annual reports and selected corporate characteristics and auditors.

The data were collected for the study on the items for discretionary disclosure, the relative importance of items of disclosure, the extent of disclosure, and the selected corporate characteristics. In preparation of the list of disclosure items following procedure was followed. A list of disclosure items was compiled by reviewing previous literature in the USA and the UK. The list was improved by reference to financial reports of New Zealand companies with high standard of reporting. Finally, the improved list was subject to a pilot-test by using a group of stockbrokers for further improvement.

A questionnaire was prepared by incorporating the financial and nonfinancial items. The respondents of the questionnaire were required to score the relative importance of disclosing each of the 41 items on a scale of '1 – the item of no importance to 5 – the item of very important.' The prepared questionnaire was posted to 12 financial editors and 175 stock exchange members. Replies were received from 9 financial editors and 74 stock exchange members. The response rate of both groups was 44%. Ten sets of earliest and latest replies were used to test the biases, and a difference at 5% significant level was found only for 2 items.
Hundred and three companies from the ten manufacturing groups of companies listed with the New Zealand Stock Exchange were selected as the sample of the study. Annual reports for the financial year ended during 1979 of these companies were collected. They were examined to test the presence of disclosure items. To evaluate present or absent of a disclosure item in an annual report the score ‘1’ or ‘0’ was used.

Data on financial characteristics, industry groups, and auditors were obtained for each company. Data for the year 1979, and average values for the period from 1974 to 1979 of financial characteristics were collected. Size, rate of return, and growth were the financial characteristics selected.

Total assets, net income, and shareholders’ funds represented the size of the company. Net income/total assets, net income/shareholders funds represented the rate of return. Changes in total assets, net income, and two rates of return measures represented the growth. A rank order correlation was undertaken for all possible pairs of financial variables within each type of characteristics. There was no difference at 1% level of significance in the rank order for the variables of total assets, net income, and shareholders funds. It was decided to use total assets to represent the corporate size. A similar finding occurred for the rate of return variables. It was decided to use net income to total assets to represent rate of return. In the rank order for the four measures of growth no difference was identified at 5% level of significance. It was decided to use the growth in total assets as a measure of corporate growth.

Distribution of audit firms were classified as follows: eight major audit firms were responsible for auditing 89% of total assets; a further 8 firms audited another 8%; and the next sixteen firms audited only 3% of the total assets.
The 103 manufacturing companies had been classified into 10 industry groups as food and drinks, textile and clothing, forestry and wood products, printing and publishing, drugs and chemicals, non-metallic minerals, metals and machinery, electrical machinery and appliances, other manufacturing, and construction.

The average score of each disclosure item was calculated by using scores given by 83 respondents of financial editors and stockbrokers. Ten items had received scores below the mid point of the score range. The statement of future dividends, profit forecast for next year, historical summary of financial data, capital expenditure for the last year, and earnings per share were five disclosure items with the highest score. The number of employees, narrative history of company, personnel hiring and development, advertising and publicity data, and data on social responsibility were the items with the lowest score. Except for 13 items, the mean scores assigned by the stockbrokers were higher than those assigned by the financial editors. According to the result of a t test performed on mean scores of disclosure items between the financial editors and stockbrokers, only five items were found as different at 1% significant level. The researchers had compared the ranking of the items in their survey with that of Buzby and Firth and found that only in 7 items did ranking differ by more than four places. The forecast of next year’s profit per share, breakdown of sales revenue, breakdown of operating earnings, major factors influencing next year’s results, and information on research and development progress and expenditure were the items with the largest difference.

Three different but related measure of actual disclosure of company information were developed. The number of companies that disclosed each item, average score (item) for all companies, and consistency rating percentage were the
three measures. The number of companies that disclosed each item was calculated by reference to annual reports of all the companies. An average of an item for all companies was computed by multiplying the user determined score of an item by the number of companies that disclosed the item and dividing the resultant by 103, the total number of companies participated in the survey. The consistency rating percentage was calculated by dividing the average score for all companies by the user determined score and deriving the percentage of it. "When these three measures are considered together it is apparent that the level of actual disclosure by companies is lower than the professional external users perceive to be desirable and that there is a considerable variation across the 41 items in the degree of non-disclosure."23 More detail examination of data had shown that only 5 items were disclosed by more than 80% of the companies. Only 9 items were disclosed by 50% of the companies. Twenty items were disclosed by fewer than 10% of the companies. The disclosure of predictive items was very limited, and the average number of items actually disclosed by a company was 24% of the items of the survey. The level of company disclosure was lower than the disclosure level expected by the external users. Four items that were not disclosed by any of the companies were ranked by users as being in the 20 most important items to disclose. This disparity may be due to reluctance to disclose sensitive information, and the time lag between the rapidly changing needs of the users and the slower evolution of the company disclosure practice. A comparison was made of actual company disclosure of 18 items in the 3 surveys of McNally et al., Buzby, and Firth. "...a comparison of user ranking revealed only seven items for which ranking differed by more than four places, there are only two items for which

23 Ibid., p. 15.
relative ranking of actual company disclosure in the three surveys differed by four or fewer places.”

Spearman’s rank order correlation was applied to test the relationship between three financial characteristics: size, rate of return, and growth, and two measures: the number of items, and average score for each company. The relationship was found as significant at 1% level between the measure of company size and two disclosure measures. “Significantly different levels of voluntary disclosure were closely associated with differences in corporate size.” This finding was consistent with the previous studies of Cerf (1961), Singhvi and Desai (1971), Buzby (1975), and Firth (1979). Financial Characteristics of rate of return and growth were not significantly related to the measures of actual company disclosure. However, Singhvi and Desai had found a positive relationship between the rate of return and actual company disclosure.

The relationship was tested between the actual level of disclosure in terms of number of items and the average score with the different industrial groups by using “Kruskal-Wallis” one-way analysis variance. It did not exhibit any differences at 5% significant level. The same one-way analysis of variance was applied to the relationship between the size of audit firms and the disclosure. No significant difference was found at 5% significant level.

The stock brokers and financial editors had perceived the voluntary disclosure of a wide variety of items as important. The difference in importance given to the disclosure items by the two user groups was found in relation to a few number of items. A main finding of the study was that size of companies was a dominant factor in establishing voluntary corporate disclosure.

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24 ibid., p. 16.
25 ibid., p. 17.
2.1.12 FINANCIAL REPORTING BY STATE-OWNED ENTERPRISES (1982)

Menon\textsuperscript{26} carried out a study on reporting of financial information by the enterprises owned and carried out by the government. The investment of the government in possessing the ownership and administering and running of the system vary from country to country. While in some countries Government participation in state-owned enterprises is minimal and in others it could be at a higher level. Reporting of financial information by state-owned enterprises is one of the major problems which needs the attention of the society and researchers. The financial reporting systems of these enterprises were mainly based on the accounting and reporting practices developed for the private sector business enterprises. The accounting and reporting systems of private sector business enterprises were commercial profit oriented. However, the state owned enterprises were believed to pursue an objective of public profit. It has been frequently argued in literature on public sector enterprises that the existing system of financial reporting in these organizations were inappropriate.

In order to examine the financial reporting problem of state owned enterprises two different approaches were applied. Normative development of the valuation basis was the first approach. The second approach was a behavioral analysis. Under the first approach, normative development of a valuation basis for financial reporting by state owned enterprises, the users of financial statements of state owned enterprises were identified and their needs of financial information were normatively assessed. Historical cost basis and social cost basis were compared to test their ability to satisfy the needs of the users of financial statements.

\textsuperscript{26} Menon, Krishnagopal; Financial Reporting by State-Owned Enterprises; Unpublished Ph.D. Dissertation Submitted to the Pennsylvania State University in the USA; 1982.
of state-owned enterprises. The financial statements prepared on the basis of social cost were proved to be more useful in satisfying the information requirements of the users than the financial statements prepared on the basis of historical cost.

Behavioral analysis in financial reporting by state-owned enterprises was the other approach applied by Menon in his study. Since the financial statements prepared for external use affected the decisions of managers of state-owned enterprises, framework was developed to understand the affects. This was developed on the basis of the resource dependence theory of organizational behavior. According to this theory reporting enterprises depend on controllers of resources to obtain such resources and the prevailing financial reporting system exists due to this relationship between the controllers of resources and the enterprises using the resources. The study had shown that the nature of the financial reporting systems of state-owned enterprises as a function of the importance of different resource providers.

2.1.13 CORPORATE FINANCIAL REPORTING: THEORY AND PRACTICE (1985)

This study by Jawahar Lal\textsuperscript{27} was an attempt to discuss theoretical aspect of company financial reporting and to examine the empirical aspect of disclosure of information in annual reports by the Indian companies. The text consists of eight chapters. The first chapter was devoted for organization of subject matter. The overall objectives of financial reporting, significance of company annual reports as a source of information, and legal provisions affecting the disclosure of information in company annual reports were discussed in the chapter.

two. The chapter 3 covered the theoretical aspect of disclosure. The studies on measure of corporate disclosure in annual reports conducted by Allan R.Cerf (1961), Copeland and Frederick (1968), Surendra S. Singhvi and Harsh B. Desai (1971), Gyan Chandra (1974), K. Stanga (1974), Stephen L. Buzby (1975), and Michael Firth (1979) were reviewed in chapter 4. The disclosure practice in Indian annual reports was examined in the fifth chapter.

One hundred and eighty companies were selected from the Broad Sheet Information, which contained 775 companies with a paid up capital of Rs. 50 lakhs, and above. It had 673 manufacturing companies and the sample of 180 companies was selected from them. The sample size was 26.73%. The annual reports of these companies for the financial year ending 1965 and 1975 were collected for the study.

An index of disclosure items was compiled on the lines of the researchers' articles discussed in the literature review and using other sources such as books on security analysis, investment decision and accounting; committee reports on annual report disclosure; accounting and finance articles and monographs on financial reporting. The disclosure items were grouped as liquidity, earning power, net worth, managerial efficiency, management and labor relations, and other items of information and statements relevant for users.

Each item of the disclosure index had been assigned a score of 1 or 0. If an item was disclosed in the annual report the item was assigned score ‘1’ and in the case of non-disclosure the item was assigned score ‘0’. If an item was not applicable to a particular company, no score was allocated. A score was allocated to a company, only if the relevant disclosure item was applicable to the company. In relation to each annual report disclosure item, applicable scores and actual scores
were allocated and by aggregating individual values maximum applicable score and actual score attained were calculated. The disclosure percentage for each company annual report was computed by dividing the actual score attained by maximum applicable score and multiplying the quotient by hundred.

The index of disclosure was applied to evaluate the disclosure practice of published annual reports of 180 companies for the year 1965 and 1975, respectively. While 38 items had 100% disclosure in 1965, 50 items had similar disclosure in 1975. Thirteen items had 0% disclosure in 1965, and it was reduced to 5 in 1975. The number of companies in the disclosure percentage of items between 0 to 25 in 1965 was 60, and it was reduced to 47 in 1975. The number of items within the disclosure percentage 75-100 in 1965 was 40. It was increased to 50 in 1975. In 1975, 51 of the total 104 items had a disclosure percentage of below 50, and the figure was 62 in 1965. In 1965, 113 companies had a disclosure percentage of above 30, and this was increased to 173 in 1975. In 1964, there were 4 companies below the disclosure percentage of 20, and it was reduced to zero in 1975. While 178 companies had a disclosure percentage of less than 50 in 1965, it was reduced only to 167 in 1975. According to the author, even the disclosure of financial information had increased during the period from 1965 to 1975, the companies covered in the study were not disclosing a large number of items of information contained in the index of disclosure.28

The chapter six was devoted to determine the extent of influence of selected company characteristics, i.e. asset size, earnings margin, nature of industry, and association with a large industrial house on the extent of disclosure in company annual reports. Simple and multiple regression analysis had been used to study the

28 ibid., p. 130.
influence of independent variables of company characteristics on the dependent variable of extent of disclosure.

For the year 1965, the mean disclosure had varied between 13.90 and 25.10 for the mean asset size between 44.77 lakhs and 18,072.01 lakhs. For the year 1975 the mean disclosure score changed between 18.12 and 25.65 and the minimum and maximum mean asset sizes were 81.36 lakhs and 18,891.01 lakhs, respectively. The regression analysis was used to test the relationship between the disclosure and the company characteristics for the two years, and the change in the values of variables between the two years. The t values, F values, and coefficients of determination were calculated for the testing of the significance in variation of disclosure. It was proved that the relationship between the asset size and the disclosure was positive and statistically significant, but the disclosure had not increased at the same rate as the assets over the period 1965 to 1975.29

In 1965, the earning margins of the sample companies were between 1.32 and 18.43 and the mean disclosure scores were in between 14.15 and 15.65. For the year 1965 a significant positive relationship was established at 0.001 level. For the year 1975 the t value was significant only at 0.10 level. A positive relationship between earnings margin and disclosure was established for both years 1965 and 1975. The t value and F value were not significant for the relationship between the change in disclosure and earning margin during the period from 1965 to 1975.

In the regression, in order to determine the relationship between the type of industry and disclosure, assets measured in lakhs of rupees had been used. Therefore, the differences among the means of disclosure may be in part due to

29 ibid., p. 139.
differences in the nature of industry and in part due to differences in mean size of industries. Therefore, in order to eliminate the effect of asset size of different industries, the mean disclosure scores of each industry were adjusted for the regression of disclosure scores on total assets. There were 10 industry groups. While mean asset size varied from 687.22 to 2357.87 lakhs, the mean disclosure scores varied between 14.57 and 16.83 in 1965. In 1975, mean asset size varied between 893.16 and 2950.42 lakhs, the mean disclosure scores varied between 17.60 and 20.45. The regression model was applied to analyze the differences among the industries on disclosure scores for the year 1965 and 1975. The constant, coefficient, t value, and coefficient of determination were calculated for the ten types of industries, separately, for the years 1965, 1975, and 1975 over 1965. The analysis of the finding established that differences in disclosure scores of companies were due to the fact that they belonged to different industries. The conclusion was that the nature of industry influences the extent of disclosure in annual reports of companies.\textsuperscript{30}

The fourth and the last independent variable tested against the dependent variable disclosure was the belonging to an industrial house. The values of the assets of two groups, belonging to an industrial house or not belonging to an industrial house, were used to apply the regression model. In order to control the affect of difference in asset size of two types of companies the mean disclosure scores were adjusted for the regression of disclosure scores on total assets. The mean disclosure score of companies associated with a large industrial house was greater than that of companies not belonging to such a house, in both years of 1965 and 1975. The maximum and minimum mean disclosure scores in the group of large

\textsuperscript{30} ibid., p. 152.
industrial house for the years 1965 and 1975 were 20.00 and 14.60, and 24.00 and 16.65, respectively. The computed statistical values such as t value, F value, coefficient of determination of companies belonging to a large industrial house were relatively higher than that of companies not belonging to an industrial house. The large industrial house independent variable had a certain degree of influence on the amount of information disclosed in company annual reports.

In addition to the simple regression analysis, the multiple regression analysis was applied to determine the combine affect of the 4 variables on the disclosure variable. In this analysis, 13 independent variables were used. Assets and earnings margins were two explanatory variables. The industries consisted of 10 dummy variables for the 10 industrial groups. Belonging or not belonging to a large industrial house was the 13th independent variable. This was a dummy variable. The relationship between size of the company and disclosure score was positive and statistically significant in 1965 and 1975. The relationship between the disclosure and association with an industrial house was positive and statistically significant. The association between earnings margin and disclosure score was positive and statistically significant only in 1965, but for the year 1975 it was positive and not statistically significant.

When all independent variables were incorporated in the model, the coefficient of determination was 0.4096 for the year 1965, which indicated that 40.96% of the variation in disclosure was explained by the independent variables. The computed F value was 6.241, which was significant at 0.001 level. The computed value of r was 0.676, which showed a high degree of positive relationship between the dependent variable and the independent variables. For the year 1975, the coefficient of determination was 0.3615, which showed that 36.15% of the
loan application. The end-points were: (1) "of no importance at all" and (7) "of utmost importance."

The means, medians, and standard deviations of the voluntary disclosure items' importance ratings were calculated. The mean value varied between 6.194 and 3.194. The median varied between seven and three, and the standard deviation between 1.86 and 1.28.

The consensus among the respondent ratings was tested. For all possible pairs among the respondents, the Pearson correlation was computed between the two respondents' 89 ratings. The mean of these correlation was 0.24. Both the t test and the nonparametric Wilcoxon rank-sum test indicated that the mean of these pair-wise correlation was significantly greater than zero. Thus, on the whole, there was evidence of weak to moderate consensus among the respondents ratings.

A weighted score (WTDScore) and an unweighted score (UNWTSCORE) were developed to examine the financial statements of firms. The WTDScore was the sum of the items (out of 24) that a firm had voluntarily disclosed with each item being weighted by its mean importance rating. The UNWTSCORE was the number of items voluntarily disclosed. Two Mexican CPAs were used to determine the items disclosed. The Pearson correlation between their ratings was 0.92 (P < 0.0001). The number of firms disclosing each item ranges from 0 to 46 with a mean of 16.87. Names of the company directors, inventory costing method, amount of past pension liability, depreciation method, breakdown of borrowings were the five items disclosed by at least 75% of the firms. Cash projection for the next one to five years, responsibilities and experience of key executives and personnel, principal business or professional affiliations of outside
directors, and breakdown of earnings by major product lines, customer classes, and geographical location were items not shown by any of the firms.

A considerable divergence had exist in the extent of voluntary disclosure. The UNWTSCORE had a range of 0 to 17 with a mean of 7.86. The WTDSCORE had a range of 0 to 79.37 with a mean of 38.25. The correlation between the UNWTSCORE and the WTDSCORE was positive and significant ($r = 0.99, P < 0.0001$).

Chow and Wong-Boren used firm size, financial leverage, and proportion of assets in place (ASSETPLC) as independent variables to test their relationships with the disclosure. The firm size (SIZE) was measured by using the market value of equity plus the book value of debts. Financial leverage (LEVG) was measured by the book value of debt divided by SIZE. The proportion of assets in place was computed by dividing the book value of net fixed assets by total assets. A considerable cross-sectional variation in the three independent variables was indicated by the test results. Bivariate correlations of them shows that it is statistically significant between SIZE and LEVG; both WTDSCORE and UNWTSCORE were significantly correlated with SIZE; and both correlation with LEVG were marginally significant. The correlation between ASSETPLC and disclosure was not statistically significant. The regression results using WTDSCORE and UNWTSCORE indicated that only SIZE had a statistically significant coefficient.

2.1.15 CORPORATE FINANCIAL REPORTING IN NIGERIA (1988)

The objective of this study by Wallace$^{33}$ was to examine the extent of financial disclosure of public quoted companies in Nigeria and to compare the

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actual disclosure with the regulatory requirements and pooled views of users of corporate annual reports. He had applied the 'special analysis' developed for the study, which involved disclosure indexes. In this method, emphasis was not given to the study of selected items of information. By examining different parts contained in the annual report quality of financial reporting was evaluated. If an item was covered in previous studies or required by the law to disclose it or accounting standards required it or recommended in accounting literature to be disclosed or related to a controversial issue in the country, such an item was included in the preparation of the list of disclosure items. A perception survey of six user groups of financial statements, i.e. accountants, financial analysts, top civil servants, other professionals, managers, and investors was conducted. He used a scoring sheet in grading the different financial statements of company annual reports of the survey years from 1982 to 1986. The scoring sheet consisted of two parts. Part 1 was used to collect information about the preceding events on which presence of a disclosure item was decided. This information was collected by using annual reports, interviews with heads of accounting divisions, documents such as prospectuses, statements of management, press releases, and reports filed with regulatory authorities. The part 2 related to actual disclosure. Both parts of the scoring sheet were completed by reference to the annual reports of the sample companies and other relevant documents. The disclosure was assessed by using a dichotomous variable, whether an item was disclosed or not disclosed. Each annual report was evaluated on the basis of the relationship between what it disclosed and what it was expected to be disclosed. If the disclosure of an item depended on the occurrence of a preceding event and the reporting company did not experience such
an event, such an item was excluded in the evaluation of the annual report information.

The index of disclosure was the measure by which the level of financial reporting of one company was compared with another. It was the ratio of actual scores awarded and the scores expected to have earned. Two types of disclosure indexes were constructed. The first was an unweighted index, which was the ratio of the number of items a company disclosed divided by the total that it could have disclosed. The second type consisted of six weighted disclosure indexes reflecting the preferences of the 6 user groups. Each of these indexes was the sum of all items a company disclosed weighted by the mean importance rating of a particular user group divided by the total of the weighted score for all the items the company could have disclosed.

A sample of 47 companies was selected from the 94 listed companies of the NSE, after excluding banking and finance companies. According to the findings, out of 185 disclosure items 12 were disclosed in all annual reports, and 26 were not disclosed in any of the annual reports. The remaining 147 items revealed varying levels of disclosure. The 185 items consisted of 120 statutorily required and 65 voluntarily required items of information. According to the observations, the pattern of disclosure had fluctuated on the basis of change of the political system. There was no consistent pattern of corporate disclosure behavior. The year 1984 was the best of the 5 years with a disclosure level of 43.11%. The indexes of the years 1982, 1983, 1985, and 1986 were 39.75%, 38.23%, 40.64%, and 37.55%, respectively. Even the best year of disclosure, 1984, had a weak level of disclosure. Only, 4 companies had a disclosure level of more than 50%; 10 companies had less than 40%; 33 companies had between 40% and 50%. The
disclosure sub-indexes were developed as (1) balance sheet, (2) income statement, (3) other financial statements, (4) projections, (5) statistical data, (6) notes to accounts, (7) social information, (8) historical survey and audit report. There was a relatively higher level of disclosure in the balance sheet, historical survey, and notes to accounts. The disclosure in relation to projections, statistical data, social reporting, and income statement was weak. A growing interest in the publication of fund flow and value added statements noted up to 1984, and it had declined during the subsequent years. The requirements of the Companies Act and the Nigerian Stock Exchange would have affected the higher level of disclosure in the balance sheet. The lack of sufficient requirements under the Companies Act and NSE for disclosure; fear for reactions from competitors, trade unions, and government; and lack of auditors' interest would have affected less disclosure in other parts of the annual reports.

An item by item comparison between the contents of the annual reports and requirements under the Companies Act and NSE on disclosure was carried out. The disclosure in many annual reports did not adequately comply with the disclosure requirements. The mechanism used in Nigeria for disclosure was inadequate. According to Wallace, "...it [accounting disclosure] probably needs to depend more on the positive reaction of the role of NASB, NSE, NSEC and the accounting profession."\(^{34}\)

All user groups had rated the audit report highly. The balance sheet, income statement, and notes to accounts had shown a remarkable consistency for all user groups. The civil servants had rated projections, social data, historical summary, and other financial statements more highly than any other user group. A

\(^{34}\) ibid., p. 359.
comparison between the actual disclosure and the perception of disclosure by the 6 user groups was made. The degree of disclosure was calculated as a percentage for the disclosure item groups of annual reports. This had varied from 14.7% (projection) to 100% (audit reports). The overall degree of agreement was calculated by dividing the degree of disclosure percentage by the importance to the average user percentage and by calculating the difference as a percentage. In the case of historical summary, and audit report the overall degree of agreement had exceeded 100 %. In the case of income statement and projections it had been less than 34%. "On the basis of the degrees of agreement chartered accountants seem better served than other user groups...Civil servants and investors are the least well served in the country."35

According to the findings, that more desired types of information were overshadowed by the not so relevant to the needs of the users, but preferred by the accounting profession and the companies. The compliance with regulatory requirement was poor. Low importance was attached to the users. Wallace had produced a valuable piece of research relevant to the extent of financial disclosure, obligatory and users’ required financial disclosure relevant to a developing country.

2.1.16 DISCLOSURE IN THE CORPORATE ANNUAL REPORTS OF SWEDISH COMPANIES (1989)

The objectives of this study by Cooke36 were to extent the knowledge of the overall corporate annual report disclosure in Sweden, assessment of the relationship between quotation status and the extent of disclosure, and assessment of the extent to which disclosure was determined by a number of company characteristics. The quotation statuses, asset size, annual sales, number of

35 ibid., p. 361.
shareholders and parent company relationship were the characteristics selected for the study.

The companies subject to the reporting requirement of the Companies Act 1975 and Accounting Act 1976 were the focus of the study. Their annual reports during the year ended 31 December 1985 were selected. A stratified random sample of 250 companies was selected out of the 2000 companies of the 1984 edition of ‘Financial Information from the 4000 Largest Companies in Sweden’. The companies were chosen using random number tables within 4 selected groups. Letters were posted to the 250 companies requesting for annual reports. The response rate was 61% and it was increased to 81% after a reminder letter. Companies of Bank, insurance, cooperatives, associations, subsidiaries with Swedish operating companies, and over the counter companies were eliminated. The finally selected 90 companies were categorized as unlisted (38), listed only on the SSE (33), and listed on the SSE with at least one foreign quotation (19). The annual reports consisted of 26% only in Swedish language, 14% in Swedish language with an abridged English version, and 60% with accounts completely translated into English. A scoring sheet was developed in order to analyze disclosure practices and the extent of reporting in annual reports.

A list of disclosure items was prepared to cover entire contents of the annual report and to suit all user groups. Previous similar studies, recommendations by the International Accounting Standards Committee, recommendations by the Föreningen Auktoriserade Revisorer (FAR), Bokföringsnämnden, requirement by law, selection as desirable disclosures by 2 out of 3 Swedish practicing accountants in a pilot study were the sources used in selecting the information items. The selected 224 disclosure items were distributed
as (1) financial statement of balance sheet (29%), profit and loss account (15%), and other (10%), (2) measurement and valuation methods (17%), (3) ratios, statistics, and segmental information (7%), (4) projections and budgetary disclosure (4%), (5) financial history (4%), and (6) social responsibility accounting (14%).

A dichotomous procedure was used in scoring the items. An item scores 1 if it was disclosed and 0 if it was not disclosed. The total disclosure score (TD) was calculated. A company was not penalized for non-disclosure of information that was not relevant to it. If a non-disclosed item had to be disclosed according to the available information in the annual report, such an item was allocated a zero point. The whole annual report was carefully read to check the applicability of items to the annual report. The maximum score a company could earn was calculated on the basis of applicable items. An index was created to measure the relative level of disclosure of a company. The index was the ratio of the actual score awarded to a company to the score which the company was expected to earn. In addition to the study of disclosure in annual reports the relationship between certain selected company characteristics and the company disclosure was examined by using multiple regression. The quotation status, parent company relationship, annual sales, total asset size, and number of shareholders were the independent variables used.

The study incorporates three size variables, viz. total assets, sales, and number of shareholders. Three regression routines were run using each of the three variables alternatively, because of the problem of multicollinearity.

The results of the study had shown that the range of aggregate disclosure indexes varied between 24% and 78%. Over 73% of the listed companies had a disclosure index of 50% or above, and only 16% of unlisted companies had
50% or above. Of the multiple listed companies, 58% had a disclosure index of 65% and above, while only 12% companies in the SSE category. The means of the three groups were significantly different; 42% for unlisted; 54% for only on the SSE quoted; and 65% for multiple listed companies. The tests of chi-square, Cramer's V, the contingency coefficient and lambda on the analysis of data confirmed that there was a high degree of association between quotation status and the disclosure indexes. It was proved that data of each of the three groups were normally distributed and standard deviation of each group was approximately equal to that of other groups. In terms of the adjusted coefficient of determination, incorporating total assets explained 60% of the variability in disclosure indexes; incorporating sales explained 58%; and incorporating number of shareholders explained 59%. The degree of explanation by the independent variables selected was extremely close.

In the step-wise regression routines all 3 models selected the unlisted category at the stage one. This dummy variable on its own explained nearly 44% of the variability in disclosure indexes. Each model also incorporated the SSE category. The multiple listed category which was left out of the equation was the yardstick against which the others were measured. Since the differential intercept coefficient for both the unlisted and SSE categories was negative it could be concluded that there was a significantly lower disclosure in both those categories in compared with the listed group. Disclosure by unlisted companies was lower than companies that were listed only on the SSE, and disclosure by companies listed only on the SSE was lower than that of companies with multiple quotations. According to the findings of Cooke the number of subsidiaries and the fact that a company was a subsidiary of a foreign parent company was of no significance in explaining the disclosure index.
2.1.17 NON-COMPLIANCE WITH DISCLOSURE REQUIREMENTS IN FINANCIAL STATEMENTS: THE CASE OF HONG KONG COMPANIES (1990)

This study by Tai et al.\textsuperscript{37} examined the quality of disclosure in the annual reports issued by Hong Kong listed companies. Examination of the departure of disclosure from obligatory requirements, review of the causes of deviations, study of the relationship between the non-compliance and selected three independent variables, and suggested possible approaches to remedy the situation were the objectives of the study.

The disclosure in financial statements of listed companies of the Hong Kong Stock Exchange was governed by the Companies Ordinance, Statements of the Standard Accounting Practices issued by the Hong Kong Society of Accountants (HKSA), and Securities Rules of 1986 stipulated by the Stock Exchange in Hong Kong. Under the Companies Ordinance and Professional Accountants Ordinance, financial statements of every company had to be audited by a professionally qualified auditor. Accounting Standards Committee of the HKSA reviewed selected financial statements to see non-compliance with disclosure requirements.

In order to identify significant problem areas in the financial statements, ‘Review Progress Reports’ published in the Society’s News Letters from 1984 to 1986 were reviewed. Accounting policies, extraordinary items, changes in financial position, depreciation, group accounts, post-balance sheet events, contingencies, earning per share, directors’ report, audit report, and

disclosure required by Companies Ordinance were the problem areas identified in reporting.

According to the Securities Bulletin of August 1987, there were 260 listed companies. By writing to these companies, followed by a reminder letter, 217 annual reports for the financial year ended during the period from July 1, 1986 to June 30, 1987 were collected. A sample of 76 (35%) annual reports was selected from the 217 annual reports. The finance, utilities, property, consolidated enterprises, industries, and hotels were the sectors represented in the sample. Financial statements of the sample companies were reviewed to identify the areas of non-compliance with the Companies Ordinance, the Securities Ordinance, and the SSAP. An internal checklist provided by the local office of a ‘Big-Eight’ CPA firm was used in the review. Errors and irregularities were summarized and their affects on the financial statements were considered in terms of the extent to which the financial position and the results of the operation were distorted. The relationship between the non-compliance in the annual reports and three independent variables viz. size of the company, sector of the business, and audit firm. Interviewing 5 company executives and 7 audit managers of CPA firms identified the causes for the non-compliance. Recommendations to remedy the situation of departure from disclosure requirement were made on the basis of research findings. The number of departure areas were identified as 11. The analysis of the annual reports had revealed departures from disclosure requirements of the HKSA, Companies Ordinance, and the Securities Ordinance.

The overall non-compliance rate was 22%, which ranged from a high of 49% non-compliance for depreciation accounting for fixed assets to a low of 4% for extraordinary items and adjustments.
The stockholders’ equity was used in the study to measure the size of the companies, and it was classified into six groups ranging between negative value and over HK$ 1,000 million. The number of non-disclosure companies and their percentages were arranged under these six groups. The Friedman two-way analysis of variance by ranks was employed to test the relationship between the size of the company and departure from disclosure requirements. At both the 90% and 95% levels, a significant difference was found. The results indicated that smaller and larger companies had significantly less non-compliance than medium-size companies. Business sectors were classified according to the Sectarian Indices of the Hong Kong Index as described earlier. The results of the study revealed that 44% of departures occurred in the property sector, 26% in industrial sector, and 13% in finance sector. The results of the Friedman two-way analysis of variance by rank test indicated that at both the 90% and 95% confidence levels no significant difference was found among the business sectors. In this study audit firms were classified into 3 groups, viz. international ‘Big-Eight’ firms, local major firms, and other local firms. The results of the Friedman two-way analysis of the variance by ranks indicated that, at both the 90% and 95% levels, there was no significant difference in the disclosure departures among audit firms.

Five company executives and seven audit managers were interviewed to investigate the causes for deviation of the disclosure practice from the disclosure requirements. They had expressed many reasons for the deviations. Finally, Tai et al. had made a number of recommendations to reduce the non-compliance with the disclosure requirements.
2.1.18 AN ASSESSMENT OF VOLUNTARY DISCLOSURE IN THE ANNUAL REPORTS OF JAPANESE CORPORATIONS (1991)

This study was an attempt by Cooke\textsuperscript{38} to examine the voluntary disclosure in financial reporting of listed and unlisted companies in Japan, and to investigate the relationship between voluntary disclosure and a number of firm-specific characteristics, viz. size, listing status, and industry type.

The external financial reporting in Japan based on the Commercial Code (CC) of 1890 and its amendment in 1899. All corporations in Japan were required to prepare a set of accounts, which complies with the CC. All corporations that had raised capital from the public were subject to disclosure requirements of the Securities and Exchange Law (SEL). The SEL was applicable to about 3,000 corporations of a total of approximately 1,100,000 stock companies. Accounts prepared in accordance with the SEL were considered to be more detailed than the CC accounts. It was rare for the SEL accounts to be sent to shareholders, their copies may be consulted at the company's head office, at the appropriate stock exchange or may be purchased from designated bookshops. Some companies prepared a set of accounts in English, which were not translations of CC or SEL accounts. The corporate report information of Japanese companies had varied from company to company on the number of sets of accounts produced. In Japan, 'Financial Accounting Standards for Business Enterprises' were considered to be voluntary and the requirements under the CC and SEL were considered mandatory. 'There is an association between a number of firm-specific characteristics and the extent of voluntary disclosure in Japanese corporate annual reports' was the hypothesis tested in the study.

Two hundred companies were selected on random sample basis from the ‘Japan Company Handbook’. The population consisted of listed and major unlisted companies. Those companies were contacted in June 1988 to obtain latest available annual reports. The response rate was 24%, which was considered as good by the professional accountants of Japan. There was no significant group bias. The selected 48 companies, on the basis of corporate reports received, consisted of 13 unlisted, 25 listed only at the Tokyo Stock Exchange, and 10 multiple listed. Unlisted companies prepared accounts under the CC. Two companies listed only at the Tokyo Stock Exchange and seven multiple listed companies had English versions of corporate reports. Other companies had sets of accounts prepared on CC basis and SEL basis. The disclosure items were selected on the basis of previous research studies, and recommendations of the IASC and the Japanese Institute of Certified Public Accountants. The total of 106 items consisted of 23 balance sheet, 10 income statement, 12 other financial statement, 27 measurement and valuation, 16 ratio statistics and segmental information, 7 projection and budgetary, and 11 social responsibility items.

A dichotomous procedure was used in scoring the disclosure items. An item scored 1 if it was disclosed and 0 if it was not disclosed. Where an item was not relevant to a company the company was not penalized for non-disclosure. Applicability of an item was decided by reading its annual report. The scores were unweighted. The voluntary disclosure index for a company was calculated by dividing the voluntary disclosure by the maximum score, which the company could have earned.

According to the results of the study the mean of the unlisted group (0.077) was lower than that of the TSE group (0.166), which in turn was lower
than the multiple listed group (0.286). The mean of the TSE group (0.166) was very close to the mean of the whole sample (0.167). The standard deviation of the unlisted group (0.061) was similar to that of the TSE group (0.068), however the standard deviation of the multiple group (0.101) was higher than that of other two groups and virtually same as the standard deviation of the whole sample (0.103).

A one-way analysis of variance was undertaken to test whether the means of 3 groups were significantly different from each other. The Scheffe multiple range test was used. Each of the 3 groups was significantly different from the others at the 0.05 level. It was apparent from the t test for normality based on skewness and kurtosis that there were aspects of non-normality in the unlisted and TSE groups and the overall population.

A linear regression analysis was undertaken on SPSS to test the determination of the extent of voluntary disclosure, by size, quotation status, and industry type. Turnover, numbers of shareholders, and total assets were the proxies used to present the size of the company variable. To avoid the multicollinearity problem among the 3 proxies, 3 size variables were incorporated into 3 models of regression routines, thereby permitting a comparison of the adjusted $R^2$ figures.

In applying the regression to three models a stepwise procedure which added variables to the model to maximize $R^2$ was used. Since $R^2$ may increase with the addition of variables, and adjusted $R^2$ may decrease because of the affect on the number of degrees of freedom, model specification was assessed on the basis of the adjusted $R^2$, measure of goodness of fit. Three models were used in the process.

Model 1 incorporated the size variable turnover at the step 1, and steps 2 and 3 incorporated two dummy variables, the unlisted category, and
manufacturing industry type. The adjusted $R^2$ of turnover was 0.3939 and it was increased to 0.6021 at the step 3. In the final output the summary statistics were $R^2=0.62750$, Adjusted $R^2=0.60210$, and $F=24.70651$.

The number of shareholders was the first variable to be included in the model 2. The variables multiple, unlisted, and manufacturing were added in the stepwise process of 2 to 4, subsequently. Adjusted $R^2$ of the number of shareholders was 0.3799, and it was increased to 0.6461 at the step 4. The summary statistics of model 2 were, $R^2=0.67618$, Adjusted $R^2=0.64606$ and $F=22.44775$.

The proxy of the size variable of total assets was introduced to the regression calculation of model 3 at the step 1 and the variables unlisted, manufacturing, and TSE in the steps 2 to 4 consequently. The adjusted $R^2$ of total assets was 0.3954 and it was increased to 0.6328 at the step 4. The summary statistics were given as $R^2=0.66404$, Adjusted $R^2=0.63279$, and $F=21.24824$.

According to the final results, size was the most important independent variable that helped to explain variation in voluntary disclosure in Japanese annual reports. Total assets produced the highest F-ratio of the three size variables. The number of shareholders was found to be significant but with a lower F-ratio than the other two size variables. Out of the industry type companies, manufacturing companies had more voluntary disclosed information than other types. Listing status was also found to be a significant explanatory variable in all three models. The unlisted group disclosed the lowest level of information than that of the other two groups. Disclosure level of multiple listed group was more than that of the TSE group.
2.1.19 THE RELIABILITY OF PERCEPTION-BASED ANNUAL REPORT DISCLOSURE STUDIES (1992)

This is a study by Courtis\textsuperscript{39} on annual report disclosure studies. The objective of the study was to investigate the presence of perception consensus on disclosure items found to be common to at least 3 of the 11 studies examined. Perception consensus was to be examined on items classified according to their expected, present, and historical information orientation, as well as between preparer and user groups. His examination had involved 11 studies during the period of 16 years from 1973 to 1979 relevant to countries of Australia, Canada, Mexico, New Zealand, the United Kingdom, and the USA.

In accounting and financial information studies, for the purpose of measuring quality of the information, disclosure indices had been used. While in some studies unweighted scales had been used in others weighted scales had been used for the measurement of disclosure items. A number of annual report disclosure studies had gathered perceptions from preparers and users of accounting and financial information about the relative importance of information items for their decision making. In these studies, private investors, financial analysts, public accountants, shareholders, bank loan officers, financial directors, auditors, business administration professors, financial editors, stock exchange members, and etc. had been used as the users and preparers of information. The researchers compiled and refined the lists of information items from review of literature sources, discussions with user and preparer groups, and from reactions encountered through pilot testing. The lists varied from 24 to 79 items. The respondents were randomly selected and they were required to rate importance of each item for disclosure.

'Likert' rating scales of 5 – 1, 4 – 0, and 7 – 1 had been used. In computation of item means per item frequency responses were used. Per item means were used as the basis for ranking items by relative importance in measuring the quality of annual report disclosure or to establish consensus between different groups of users and preparers of information.

The 11 studies selected had applied their list of items to 18 preparer and user groups and the lists consisted of 955 perception item mean observations. Each item was traced across all lists to identify which were common to at least 3 independent studies and 63 common disclosure items were traced. Since means of disclosure items of 11 studies were calculated on 3 measurement scales, 4 – 0, 5 – 1, and 7 – 1, they were converted to a single scale, 5 – 1 to develop comparability. These mean scores were converted to Importance Equivalents (I-E) for grading purposes.

Courtis had applied 'Meta Theory' methodology in the study. It is a statistical approach which takes into account various sample sizes and regression coefficients. Averaging of results across studies was done. For each of the 63 items in common a weight mean score was calculated. Items were also classified by using the time dimension. Per item mean perception scores for each user group and preparer group were also calculated.

This study was involved in testing 5 hypotheses; (H1) per item perception consensus is not present across the board, (H2) there is no difference in the set of perception means between informational items grouped by the time dimension, (H3) there is no difference in overall perception consensus between groups, (H4) there is no difference in overall perception means between groups,
and (H5) there is no difference in per item perception means between user – user, and user – preparer groups.

For testing of the first hypothesis, likelihood ratios were calculated on the basis of the likelihood occurrence of the Importance Equivalent configuration, for each item of information. Likelihood ratios were classified as ‘good’, ‘reasonable’, and ‘poor’. Thirteen items demonstrated ‘good’ consistency. Six demonstrated ‘reasonable’ consistency. The remaining 44 items showed ‘poor’ consistency. For 30% of the items perception consistency was prevailing, and not for the others. The Mann-Whitney U test was applied on item means weighted across all relevant studies to test the second hypothesis. It was proved that information of expected orientation was perceived to be more important than historical and current information. To examine the third hypothesis, each group’s per item Importance Equivalent profile was converted to a raw consistency score, and adjusted to reflect the number of studies comprising the group and the probability of attaining perfect consistency. These adjusted consistency scores were averaged across all items in common to produce overall group measures. Eighty per cent of the Mann-Whitney U tests comprising these group means revealed a significant difference, especially between financial analysts and other groups. The six overall group mean perception scores, calculated across the 63 items were used in 15 t tests to examine the fourth hypothesis. The mean of each of the financial analysts’ group, public accountants’ group, and bank loan officers’ group were significantly different from the mean of the private shareholders’ group. There was also a difference in the average mean score between the financial analysts' and the financial information preparers’ group, and between that of the private shareholders and preparers. There was no ground to accept the fourth
hypothesis. The item means were compared for user-user and user-preparer groups to test the fifth hypothesis. Pair-wise comparisons were undertaken on 170 means calculated from two independent studies to produce 184 t tests. Pair-wise comparisons were conducted on 52 items. No statistical significance was found on 95.1% of the pair-wise per item group perception mean comparisons. Because of the apparent per item consensus between groups the fifth hypothesis was accepted.

2.1.20 THE IMPACT OF SIZE, STOCK MARKET LISTING AND INDUSTRY TYPE ON DISCLOSURE IN THE ANNUAL REPORTS OF JAPANESE LISTED COMPANIES (1992)

The purpose of this study by Cooke\textsuperscript{40} was to examine the extent of voluntary and mandatory financial disclosure in Japanese corporate annual reports and to investigate the influence of size, stock market listing, and industry type on the extent of disclosure in the annual reports of listed Japanese corporations. If an item of information was required to be disclosed in either the CC or SEL accounts, it was considered as mandatory disclosure, and all other items were considered as voluntary. In this study, eight size variables, viz. capital stock, turnover, number of shareholders, total assets, current assets, fixed assets, shareholders’ funds, and bank borrowings were used. In order to identify the internal structure of the variables factor analysis was used.

One hundred corporations were selected by simple random sampling without replacement from the entire population of listed companies, which were published in the ‘Japanese Company Handbook’. These companies were contacted to obtain 1988 annual reports. Twenty-five sets of annual reports

were received from the Tokyo Stock Exchange Group (TSE), and ten sets of annual reports were received from the multiple group.

One hundred and sixty-five items of disclosure were selected on the basis of a wide range of users. An scoring sheet was prepared by incorporating both voluntary and mandatory disclosure items. The selection of items was influenced by previous research studies, recommended disclosure by IASE, accounting standards issued by the Business Accounting Deliberation Council (BADC), Ordinances of the Ministry of Finance, statements and opinions issued by the JICPA and the law. The disclosure-scoring sheet was pre-tested on 3 Japanese corporate annual reports. After consultation with Japanese accounting professionals the research instrument was modified. The 165 disclosure items consisted of 107 (65%) voluntary items and 58 (35%) mandatory items under the CC, and 76 (46%) voluntary items and 89 (54%) mandatory items under the SEL.

A dichotomous system was used for scoring the items of disclosure. An item scored one if disclosed and zero if it was not disclosed. If an item of disclosure was not relevant to a particular company, the company was not penalized for non-disclosure. Entire contents of both the CC and SEL annual reports were read prior to make a judgement in the dichotomous procedure. The means of the voluntary, mandatory, and aggregate disclosures were 0.200, 0.950, and 0.558, respectively. While the mean score of mandatory disclosure was very high that of voluntary disclosure was very low. The standard deviations of voluntary, mandatory, and aggregate disclosures were 0.095, 0.027, and 0.060, respectively. The ranges of the voluntary disclosure, and mandatory disclosure were in between 0.070 – 0.410 and 0.880 – 1.000, respectively. The standard test of the data set on the skewness and kurtosis for the values 0 and 3 respectively
indicated that the data was normally distributed. Regression analysis was used for the study. Manufacturing companies disclosed significantly more information than non-manufacturing type, regardless of quotation status. There was no significant difference in levels of mandatory disclosure between manufacturing and non-manufacturing companies. The difference in level of disclosure between manufacturing and non-manufacturing companies resulted from voluntary disclosure. Multiple listed companies disclosed more information in their Japanese accounts than those companies with a domestic listing only. Manufacturing companies in the TSE group disclosed more information than non-manufacturing companies in that group, and manufacturing companies in the multiple listed group disclosed more information than non-manufacturing companies in the same group. It seems that overseas quotations had an effect on the extent of information disclosed in the domestic annual reports of Japanese companies rather than on reports prepared for the international reader or for a foreign stock exchange. The size was found to be an affective variable on disclosure. Total assets, shareholders funds, and fixed assets were highly correlated with disclosure.

2.1.21 THE IMPACT OF NON-FINANCIAL COMPANY CHARACTERISTICS ON MANDATORY DISCLOSURE COMPLIANCE IN DEVELOPING COUNTRIES: THE CASE OF BANGLADESH (1994)

Ahmed and Nicholls had embarked on a study of mandatory disclosure compliance in Bangladesh as a case study of disclosure in developing countries. The study was undertaken with three objectives. The empirical assessment of the level of disclosure of statutory information was the first objective. Testing of the relationship between the mandatory disclosure and

41 ibid., p. 236.
selected certain company characteristics was the second objective. Development of a model to estimate the degree of compliance based on significant company characteristics was the third.

The stock market, legislation, and the accounting profession were the forces influencing accounting practices in Bangladesh. Since the number of companies listed at Dhaka Stock Exchange (DSE) was small and lacked disclosure regulations, its influence on disclosure was negligible. The legal control was affected by the Companies Act 1913,\footnote{Nothing had been mentioned in the article about the subsequent amendments to the Companies Act} and SER of 1987. According to the requirements of the Companies Act, every registered joint stock company should publish the balance sheet and the profit and loss account certified by the auditors. The SER requires a listed company to submit to the government and shareholders an annual report containing a balance sheet and profit and loss account, and half yearly balance sheet and profit and loss account. The Institute of Chartered Accountants of Bangladesh was responsible for setting accounting standards for the country.

The size, total debt, whether the company was a subsidiary of a multinational company, qualification of the principal accounting officer, and size of the audit firm were the corporate attributes which were expected to affect the level of disclosure.

The DSE had 110 listed companies as on November 30, 1989 out of which 95 were non-financial companies. An attempt was made to collect annual reports for the financial year 1987/88 from the 95 companies, but only 65 annual reports were collected. Due to nonavailability of full year financial results annual reports of two companies were excluded. Data from 63 annual reports were
used for the study. Information relating to the qualification of the principal accounting officers was obtained by reference to the members’ lists as on July 1, 1989 published by the ICAB and ICMAB. In the case of confusions, relevant companies were contacted to obtain additional information. The number of companies in the sample audited by a firm, number of partners in a firm, reputation of the firm in the financial community, and views of the current and past president of the ICAB were considered to decide whether an audit firm was large or small. Five audit firms were identified as large.

The disclosure of information in an annual report of a company was measured by calculation of the total disclosure index (TDI) derived by dividing the total disclosure (TD) score for a company by the maximum (M) score that the company could obtain. The TD score was calculated by using a dichotomous procedure in which an item scores ‘1’ if it was disclosed and ‘0’ if it was not disclosed. If a particular item was not related to the annual report, it was treated as not applicable, and the whole annual report was read and prospectuses, relevant and available documents were examined prior to making a judgment. The correlation and multiple regression techniques were applied to test the impact of company characteristics on mandatory disclosure.

According to the results of the examination, none of the companies had disclosed all mandatory items; only 4 companies disclosed more than 90%; 58.7% of the companies were between 60% and 80%. The skewness coefficient (0.961) of the Total Statutory Disclosure Index was significant at the 0.05 level, the value of kurtosis (1.870) was not significant at the same level of confidence. A high level of correlation (0.869) existed between the two size variables, assets, and sales. The multivariate correlation of assets, 0.904, and sales, 0.874 confirmed a
high level of association between these two variables. In the regression test to
control the effect of multicollinearity, two separate regression models, omitting
one variable at each time, were used. A stepwise procedure was used by adding
one variable at each time to the model to determine whether the explanatory power
($R^2$) of the regression equation had increased significantly at 0.05 level. F ratio
determined the joint contribution of explanatory variables to the variations of the
dependent variable of disclosure index. A variable was not included in the model if
its inclusion did not increase $R^2$ significantly. According to the results of the
stepwise procedure assets and sales, two measures of size were not significant at
the 0.10 level. While qualification of the principal accounting officer was
significant at the 0.10 level in model one, it was not significant at 0.10 level in
model two. Even though the assets variable in model one was non-significant it
had a negative coefficient indicating that disclosure compliance decreases with the
increase in assets. In the final model assets, sales, and total debt were omitted since
they did not increase the explanatory power of the models significantly. Other four
explanatory variables were included in the multiple regression of the final model.
According to the results of the final model subsidiary of a multinational company
and size of the audit firm were significant at the 0.05 level and the qualification of
the principal accounting officer was significant at the 0.10 level. This implies that
disclosure compliance was higher for a company which was a subsidiary of a
multinational company and whose accounts were audited by a large audit firm, and
the accounts were prepared and supervised by a professionally qualified
accountant.

The authors, on the basis of the regression results, predicted the
probability of disclosure. Based on the regression model, the estimated value of
transformed statutory disclosure index was 2.042. This was an estimate of the logarithm of the odd ratio. The converted resultant figure was 0.885. Thus, if the company is a subsidiary of a multinational company, its accounts department is headed by a professionally qualified accountant, and its accounts are audited by a large audit firm, then the estimated probability of compliance would be 0.885, with associated 95% confidence level. This estimate indicates that there is a 88.5% estimated probability of disclosing all statutory items.

2.1.22 VOLUNTARY DISCLOSURE IN AN EMERGING CAPITAL MARKET: SOME EMPIRICAL EVIDENCE FROM COMPANIES LISTED ON THE KUALA LUMPUR STOCK EXCHANGE

The objective of this study by Hossain et al.44 was to examine the factors that influence the general level of information voluntarily disclosed by companies listed on the Kuala Lumpur Stock Exchange (KLSE). The disclosure was tested with regard to six company characteristics viz. firm size, ownership structure, leverage, assets-in-place, size of audit firm, and listing status. Following hypotheses had been developed to study the relationship between the disclosure and the independent variables.

(H1) Large firms are more likely to provide financial information voluntarily than small firms are. (H2) The extent of voluntary disclosure is higher for firms with a low concentration of share ownership than those with a high concentration of share ownership. (H3) The extent of voluntary disclosure is higher for firms with a greater proportion of debt in the capital structure than for those with a lower proportion of debt. (H4) The extent of voluntary disclosure is greater for firms with a relatively low proportion of assets-in-place than for firms with a

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relatively high proportion of assets-in-place. (H5) The extent of voluntary
disclosure is higher for firms that employ a larger (Big-Six) auditor than those that
employ a smaller auditor. (H6) The extent of voluntary disclosure is higher for
firms listed internationally than for firms listed on the domestic exchange only.

The population of the study consisted of 279 non-financial
companies listed on the KLSE on December, 31, 1991 and in the Annual
Companies Hand Book. The sample of the study consisted of 67 companies, which
represented, approximately, 24% of the population. Twelve of the 67 companies
were also listed on the London Stock Exchange (LSE). Annual reports for the year
1991 were collected from the sample companies.

A preliminary list of 110 discretionary disclosure items was
compiled by reference to previous studies on disclosure. Mandatory items were
eliminated by reference to the Accounting Standards of Malaysia, the Companies
Act, and KLSE listing requirements. The list was refined by reference to 3
Malaysian practicing accountants and 3 bank managers. The list was examined to
ensure that none of the items were required by the regulatory agencies of other
major countries. The final list consisted of 78 discretionary items.

A scoring sheet was used for the analysis. A disclosure item scored
'1' if it was disclosed, and '0' if it was not disclosed. The derived scores were
unweighted. The disclosure in an annual report was measured as the ratio of the
actual score awarded to the maximum possible score applicable for that company.
Entire annual report of a company was read in order to determine disclosure items.
A company was not penalized for not disclosing an item if it was not relevant to
the company. Two independent accounting professionals were engaged to evaluate
annual reports, and their scores were averaged to derive the disclosure indices used in the study.

The independent variables were measured by using the data available in the Annual Companies Handbook of 1991. The firm size was measured by natural log of market capitalization. The ownership structure was measured as a number of shares held by the top 10 shareholders as a proportion of the total number of shares issued. The leverage was the ratio between the long-term debt and owner's equity. The proportion of assets-in-place was represented by the ratio of fixed assets to total assets. The auditor was represented by a dummy variable of '1' for the 'Big-Six' audit firms, and '0' otherwise. The foreign listing status was represented by a dummy variable of '1' for companies listed on the KLSE plus at least one foreign exchange listing, and '0' for companies listed only on the KLSE.

Both univariate and multivariate statistical methods were applied to the collected data to test the six hypotheses. The Pearson product-moment correlation coefficients (r) were computed to examine the correlation between the dependent variable of disclosure and independent variables of firm size, ownership structure, leverage, and assets-in-place. The bivariate statistical analysis had shown that disclosure scores were significantly correlated with firm size (0.439 P<0.001) and ownership structure (-0.366 P<0.01), while the correlation between disclosure and leverage was marginally significant (0.276 P<0.10). The Student t test and Mann-Whitney U test were performed to assess whether the audit firm size had an impact on the overall level of voluntary disclosure. The results of the t test had shown that there was a significant difference in the disclosure scores (P<0.01) between companies audited by big six audit firms and those audited by non Big Six
audit firms. This implies that companies audited by larger audit firms were likely to disclose more information than firms audited by smaller audit firms. The Mann-Whitney U test had given a Z statistic of −2.955 (P<0.01), which supported the results of the Student’s t test. The same two tests were also employed to examine the differences in mean disclosure scores between domestic listed and foreign listed companies. The Student t test results had shown that there was a statistically significant difference (P<0.05) in disclosure scores of two groups. The companies quoted on an overseas as well as on a domestic stock exchange had a greater propensity to voluntarily disclose information than companies with a single domestic stock market quotation. The Mann-Whitney U test had yield a Z statistic of −2.695 (P<0.05) which confirmed the t test results.

In order to determine the correlation between the independent variables Pearson product-moment correlation coefficients (r) were computed. The r statistics between the independent variables firm size and leverage (0.304 P<0.05), firm size and auditor (0.426 P<0.001), and auditor and foreign listing (0.232 P<0.10) were found to be statistically significant.

In addition to the univariate analysis a multivariate statistical analysis was carried out with data. The multi-regression model was highly significant (P<0.001). The adjusted coefficient of determination was 28%. The coefficient representing firm size (P<0.05), ownership structure (P<0.10), and foreign listing status (P<0.10) were statistically significant. The coefficients for leverage, assets-in-place, and auditor were not statistically significant. To test the data normality assumption, a histogram of the distribution of the residuals was plotted. The distribution approximated a normal curve, suggesting that the data conformed to the normality assumption. In addition, residuals from the regression
model were plotted against the predicted values of disclosure and against each explanatory variable to determine whether the error terms of the model had constant variances. A visual inspection of the distribution of residuals suggested an absence of heteroscedasticity. Both univariate and multivariate analysis had indicated that firm size, ownership structure, and foreign listing status were statistically related to the level of voluntary disclosure. It seems that voluntary disclosure helped to overcome agency costs as the firm grew in size, and shareholding became more dispersed. Companies quoted overseas were likely to disclose more information than other listed firms were. In the univariate tests leverage was found to be marginally significant with disclosure, but the multivariate results revealed otherwise. The univariate statistics for auditor was statistically significant, whereas the multivariate model revealed otherwise.

2.1.23 THE RELATIONSHIP BETWEEN THE COMPREHENSIVENESS OF CORPORATE ANNUAL REPORTS AND FIRM CHARACTERISTICS IN SPAIN (1994)

This study by Wallace et al. had two main objectives. The first was to see whether the differences in the level of disclosure had mirror the differences in firm characteristics. The second was to examine whether the firm characteristics found to be relevant in previous country disclosure studies were also implicated in Spain.

The population of this study consisted of 250 non financial firms listed on the Madrid and Valencia stock exchanges, and unlisted non-financial firms contained in the Register of Spanish firms. The authors requested 1991 annual reports from the randomly selected 100 listed companies, and 100 unlisted

companies of the population. Annual reports and accounts were collected from 30 listed companies and 20 unlisted companies.

An index of comprehensive disclosure of selected mandatory items was constructed to measure the disclosure quality of annual reports. Under the comprehensiveness the depth of an information item was measured and credit was given to the density of information on each item. Depth of a disclosure item was considered as follows: First, a firm could disclose an item as a single line just to present the minimum required disclosure. Second, disaggregated information on the required item to reveal segmental detail that is not mandated could be provided. Third, additional information could provide explanation to enhance understanding.

The list of items consisted of 16 mandatory ones upon which all sample firms reported. A score card was designed to reflect the details expected on each information item. The details were constructed after studying all annual reports of sample companies and incorporating different sub-items. The total score received by a company was translated into an index by dividing the score by the total available points of 79. The indexes varied from 29% to 80%.

The authors had classified independent variables into 3 non-mutually exclusive categories, i.e. structure related, performance related, and market related. Corporate size variables and solvency variables were structure related. In this study, total assets and total sales were the corporate size variables, and debt/equity was the solvency variable. Liquidity ratio, earnings returns, and profit margin were performance-related ratios. The market related variables were the industry type, listing status, and audit type.

The authors had used rank (OLS) regression to test the relations between dependent and independent variables. Before the rank (OLS) regression
was estimated, a rank transformation of the dependent variable and all the independent variables were made.

The calculated correlation coefficient between all variables suggested that collinearity was a potential statistical problem in the multivariate models, which may result in inflated standard errors for the coefficients of the explanatory variables. The potential effect of collinearity on each regression was evaluated using the variance inflation factor (VIF). If VIF exceeded 10 collinearity problem was present. Since highest VIF reported in the calculation was 2.42 collinearity did not appear to be a serious problem in interpreting the regression results.

Because of the potential for collinearity, two models were used to estimate the coefficients of the explanatory variables. In the first model, one structure related variable (assets), one performance related variable, and three market related variables were included. In the second model, except for sales all the other variables were included.

The coefficient of the asset variable was significantly positive (P<0.003) suggesting that mandatory disclosure had increased with firm size. The coefficient of liquidity was significantly negative (P=0.044) suggesting that sample firms with higher liquidity ratios had provided less detailed information in their annual reports. The relationship between the listed variable and the disclosure was significantly negative suggesting that the sample-listed firms disclosed more information than the unlisted sample firms did.

The results of the second regression model had indicated that the relationship between the assets size and the comprehensive disclosure was significantly positive. The results also had shown that the comprehensive
disclosure increased with listing status. The relationship between the disclosure and the liquidity had been insignificant. The remaining firm characteristics were found not to be associated significantly with the index of comprehensive disclosure.

2.1.24 THE IMPACT OF CORPORATE ATTRIBUTES ON THE EXTENT OF MANDATORY DISCLOSURE AND REPORTING BY LISTED COMPANIES IN ZIMBABWE (1998)

In this study, Owusu-Ansah\(^\text{46}\) investigated the impact of 8 corporate attributes on mandatory disclosure in annual reports, by employing alternative specifications of a multiple linear regression. The company size, quality of external audit, ownership structure of issued equity shares, type of industry, company age, multinational corporation affiliation, profitability, and liquidity were the corporate attributes used in the study.

The Stock Exchange of Zimbabwe had 64 listed companies of equity shares as at 31 December 1994. Forty-nine (49) companies, which was 86% of the population, had been selected as the sample companies of the study. The sample contained 43 from the industrial sector and 6 from the mining sector. A regression model was used for the study. The relative disclosure scores, concentration ratio, proportion of outstanding equity shares held by corporate insiders, principal economic activities, half-yearly since flotation date to December 1994, either ownership of more than half of the share capital or presence of significant influence, and acid-test ratio were the proxies used for the variables of mandatory disclosure, audit quality, ownership structure, industry type, company age, multinational company affiliation, and liquidity, respectively. The log of

capitalized equity values and log of total assets were the two proxies used for the independent variable of company size. The independent variable of profitability had two proxies, return on turnover and return on capital employed. Since the study was concerned with the partial affect of each of the corporate attributes on the extent of mandatory disclosure and reporting, inflation factors were computed to test the presence and nature of collinearity pair-wise correlation, tolerances, and variance. The adequate disclosure in a corporate financial report was considered as consisted of three segments: the quantity and quality of information, the form in which they were presented, and how frequently and timely they were reported. Owusu-Ansah’s study had focused on the quantity and quality of financial information disclosed. He operationalized the adequate disclosure as “the number of mandated applicable information items that a listed company discloses, and the degree of intensity by which it discloses those items in its annual report.”

A disclosure measuring instrument was developed for the quantification of the adequacy of mandatory disclosure practices of the sample companies. It consisted of 32 disclosure items compiled from the regulatory sources of the Companies Act, standards of the ICAZ, and rules of the ZSE. The 32 disclosure items were disaggregated into 214 sub-items to capture the intensity of disclosure items. The content validity of the instrument was tested with the help of two senior partners of two Big-Five international audit firms operating in Zimbabwe. The measuring instrument was used as a relative index. “The relative index is the ratio of what the reporting company actually discloses to what the company is expected to disclose.” Under this system, companies were not penalized for non disclosure of non-relevant items. An equal weighting system

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47 ibid., p. 609.
48 ibid., p. 609.
was used for items of the measuring instrument, and disclosure items were allocated with values on a dichotomous basis. Owusu-Ansah selected the attribute only if following conditions were satisfied.

It was associated with mandatory disclosure on a prior assumption or on a theoretical consideration. It should be easily measurable. It should facilitate classification of companies into sub-samples. Data should be available. It should be relevant to the socio-economic environment of Zimbabwe.

"The results of the regression analysis indicate that each corporate attribute has a differing impact on mandatory disclosure." The intercept, company size, ownership structure, company age, multinational company affiliation, and profitability had statistically significant effect on the extent of mandatory disclosure. The intercept was very significant at the 0.01 level. The company age, multinational company affiliation, and profitability were significant at the 0.05 level. The company size, and ownership structure were significant at 0.10 level. The findings of positive relationship between the company size and mandatory disclosure were consistent with the findings of Wallace and Nasar (1995), and Ahmed and Nicholls (1994). Finding of a significant positive relationship between the mandatory disclosure and profitability was consistent with the findings of Singhvi and Desai (1971), and Wallace et al. (1994). The finding that audit quality was not a significant predictor had agreed with those of Singhvi (1968), Tai et al. (1990), Cooke (1992), and Wallace et al. (1994). The finding that industry type was not a significant discriminator agreed with those of Patton and Zelenka (1997). The irrelevance of liquidity as an explanatory variable agreed with the finding of Wallace and Nasar (1994).

49 ibid., p. 626.
2.1.25 ASSOCIATION BETWEEN CORPORATE CHARACTERISTICS
AND DISCLOSURE LEVEL IN ANNUAL REPORTS (1999)

In this research article, Kamran and Courtis\textsuperscript{50} had tried to make a
study of analysis on selected research findings of disclosure in annual reports
between the period from 1968 to 1997, inclusive of both years. The objective of
the paper was to investigate the underlying courses for variations in the disclosure
studies.

A considerable number of research studies have been carried out
mainly since 1961 to investigate the relationship between the disclosure of
accounting information in annual reports and selected company characteristics.
These studies have used corporate size, stock exchange listing status, leverage,
profitability, audit firm size, liquidity, industry type, nationality of managers,
relationship with parent company, qualifications of the accounting officers, annual
report timeliness, cost of preparation of annual reports, dividend rates, security
price fluctuations, company age, dividend payout ratio, issue of securities,
stock market performance, proportion of outside directors, presence of foreign
operations, and etc. as explanatory variables. The findings of these studies have
shown positive associations, negative associations, and non-associations between
these variables and disclosure.

In this study, the authors have used meta-analysis techniques. Meta-
analysis can be defined as the analysis of analysis.\textsuperscript{51} A common measure of ‘Effect
Size’ was used for comparison and integration of the relationships between the

\textsuperscript{50} Kamran, Ahmed and Courtis, John K.; “Associations Between Corporate Characteristics and
Disclosure Levels in Annual Reports: A Meta-Analysis”; \textit{British Accounting Review}; Vol. 31 No. 1

\textsuperscript{51} The statistical analysis of a collection of results from individual studies for the purpose of
cumulating and integrating the findings. If results of the studies are inconsistent with each other, the
causes for the differences could be determined to see whether the differences are primarily due to
differences in economic variables, research setting, measurement scale, or sampling error.
disclosure variable and the independent variables of the company characteristics. In this study, the $r$ static was computed to determine the ‘Effect Size’ for each pair of variables from each study. Whenever a study reported the $r$ static, that was coefficient of correlation between the disclosure index and the explanatory variable, $r$ static was used as a measure of ‘Effect Size’. When a test statistics such as $t$ test, $Z$ test, Mann-Whitney, Superman rank correlation coefficient were used they were transformed into $r$ statistic by using formulas given by Rosenthal.

The authors had selected 29 disclosure studies. In selecting the research articles the company characteristics had been limited to the corporate size, listing status, leverage, profitability, and size of the reporting entity’s audit firm. The most widely used proxies for the corporate size were book value of total assets, sales, number of shareholders, and market value of the firm. Unlisted versus listed, and listed versus multiple listed were the proxies used for listing status. The proxies of the leverage were debt to equity, debt to total assets, and total amount of debt. Net profit to equity, and net profit to total assets were the proxies for profitability. Twenty-nine research studies between the period from 1968 to 1997 from the USA, New Zealand, Hong Kong, Japan, India, Sweden, Malaysia, Bangladesh, Spain, Canada, Australia, the UK, Mexico, Switzerland, and Check Republic were included in the meta-analysis.

In most of the studies reporting year was one, in seven studies it had varied from 2 to 8. The number of information items of the disclosure index consisted of between 11 – 224. Voluntary, statutory, and aggregate were the three types of disclosure indices used across the studies. A total of 2,473 corporate annual reports had been examined by the 29 research studies.
The results of the meta-analysis had shown a significant association between the disclosure level and the corporate size. The mean correlation was 0.334 with 95% confidence interval between 0.127 and 0.559. The calculated observed variance had shown a high degree of variation across studies. The study indicated the existence of possible moderator variables effecting the results. Therefore an independent meta-analysis was undertaken for three moderator variables: (1) index construction, (2) measurement of the explanatory variables, and (3) UK-group versus non-UK group. In index construction, studies employing a voluntary disclosure index had shown a positive mean correlation of 0.358 with an interval between 0.129 and 0.588. The studies using a statutory index and an aggregate index had shown mean correlation of 0.373 and 0.309, respectively. The measurement of the explanatory variables had shown that studies employing total assets and total sales had significant positive mean correlation of 0.325 and 0.358, respectively. The third moderator variable, UK-group versus non-UK group had shown mean correlation of 0.321 and 0.382, respectively. In summary, the overall and moderator variable test results confirmed a significant association between the corporate size and disclosure.

The listing status explanatory variable had shown a mean correlation of 0.372, with a 95% confidence interval between 0.059 – 0.693. Five studies, which employed a voluntary disclosure index had shown a mean correlation of 0.349 with a residual variance of about 45% of the total variance. Nine studies, which employed an aggregate index had shown the mean correlation as 0.385. The mean correlation of listed/unlisted was 0.369 and that of the listed/multiple listed firms was 0.328. The relationship between the listing status and disclosure had been significant.
There were 12 studies concentrating on the relationship between the disclosure and leverage, and the mean correlation of them, 0.207 suggests a significant positive relationship. Voluntary and aggregate disclosure indices were respectively, 0.176 and 0.271, which suggested a significant relationship. However, the mean correlation of statutory disclosure was 0.080, which indicated an insignificant relationship. The leverage was significantly associated with disclosure levels when it was proxies by debt to equity (mean correlation = 0.233), and debt to total assets (mean correlation = 0.146). With regard to the UK group, the mean correlation was 0.224, which was higher than that of the non-UK group. In summary, test for moderator variables supported a significant positive association between leverage and disclosure levels. The association between a firms profitability and annual report information disclosure was indicated by 0.1067 of mean correlation, which means not significantly associated.

The mean correlation of 0.152 with a 95% confidence interval that included a negative value had shown a non-significant relationship between the disclosure and the size of a reporting company’s audit firm. The relationship was not significant when a voluntary or an aggregate index or the UK group assessed the disclosure levels. However, the statutory disclosure was significantly associated with larger audit firms. The relationship was significant for the non-UK group. As an overall result, it was possible to conclude that the audit firm size had no significant association with disclosure levels.

2.2.0 CONCLUSION

The literatures reviewed have covered 24 research studies on disclosure of accounting and financial information. Some studies have incorporated non-accounting information available in the annual report, in addition
to the accounting and financial information. They have been published in English language during the period from 1948 to 1999. Some studies are relevant to English speaking developed countries such as the USA, the UK, Canada, and New Zealand. There are studies from developing countries such as India, Nigeria, Hong Kong, Bangladesh, Malaysia, and Zimbabwe where the business language is English. France, Germany, Sweden, Japan, Switzerland, and Spain are the non-English speaking developed countries, and Mexico is the only non-English speaking country included in the study. However, a considerable number of studies are involved in examination of annual reports of the USA companies. All selected studies are subject specific. While some studies have examined annual reports of one year others have examined annual reports of many years. There is a wide variation in the number of disclosure items selected to develop disclosure indexes. Weighted as well as unweighted indexes have been used. The numbers of independent variables have been varied. The application of methodology has been improving with time. In recent studies multiple regression procedures involving dummy variables, step-wise procedures were applied. Constructs such as adequacy, comprehensiveness, informativeness, and timeliness have been used in measuring the quality of disclosure. The disclosure of mandatory items in annual reports has been at a relatively higher level than that of the voluntary disclosure items.