

ASB Conference
Halifax, N.S.
October, 1999

Roberta MacDonald
David Adams
Tyler Dougan (Student)
John Paquet (Student)
University of P.E.I.

A PRELIMINARY STUDY OF UNIVERSITY DISCLOSURES

Disclosures, such as financial statements and annual reports, provide relevant and reliable information for decision-making and general interest. This study evaluates the disclosures by universities to the public using analysis based on general accounting theory and index items from previous studies. The objective is to determine the accountability of the eight universities sampled to their stakeholders through these disclosures. The findings indicate a need for much improvement and further research on the use of information disclosures.

Introduction

Voluntary disclosure of information is gaining more interest in accounting research as well as more potential to be a useful marketing tool to reach interested persons. Disclosures by management often provide accounting and other information to users through annual reports. In recent years, the trend is to encourage more disclosure in annual reports (Clarkson, Kao, and Richardson 1994). If poorly done, these reports might create disinterest and unjustifiable criticism from an ill informed public and create a defensive position from a misunderstood firm. High quality reports, on the other hand, help to provide positive public relations enhancing a firm's image and increasing interest in its operations. Disclosure is also important to universities to be accountable to the public. The purpose of this study is to analyze the information disclosed in the annual reports and financial statements of several Maritime universities for the 1997 fiscal year. Specifically, the paper's objective is to determine the accountability of the Maritime universities to stakeholders through disclosure materials.

Background

The primary basis for this study is from established accounting theory concepts for financial statements and annual reports and their various elements. Annual reports are regarded as very important information documents for a company and are legally required documents for publicly traded companies in Canada, USA, and much of the industrialized world. All other data is voluntary and provides an opportunity for companies to be creative when marketing themselves to stakeholders. Financial statements are also a primary means of communicating information to people who are not directly involved in the daily activities of a company. This helps the reader to make decisions about the company based on financial performance.

For this study, financial statements include the balance sheet, income statement, statement of changes, and statement of retained earnings. The statements provide information as an aid to financial decisions, to estimate future cash flows, and to indicate the resources available and claims and changes to these positions. Notes to the statements and aiding schedules are also considered. This information disclosure serves a stewardship role and is a basis for economic decisions. The information, therefore, must be complete and useful for decision makers, fulfilling the two constraints for financial statements of benefits and materiality. Benefits to the reader should be greater than costs of the resources needed to create the statements and materiality helps to ensure no disclosure errors to affect seriously the interpretation of information.

Creating financial statements can be subjective and intended users must always be considered. The most important use for these financial statements is in decision making so information must be

relevant, reliable, and easy to understand. Relevance occurs if financial data can make a difference in the user's decision process. This suggests that the data has predictive and feedback values and is timely. Reliability is important for users who lack knowledge or time to evaluate the contents of a disclosure. Independent auditors provide objective credibility to the reliability of information when an auditor's report is included. To further increase the usefulness of information, disclosure of financial and nonfinancial data is important. For example, incomplete wording and omission of information can create a poor impression although correct standards might have been followed. This general accounting theory, combined with findings from the literature, provides a framework for studying university accountability.

Framework

There appear to be many incentives for firms to provide voluntary disclosures to the public. Foster (1986) studied financial markets where companies compete in capital markets on the type of securities offered and returns promised. Investors wanted to be able to assess the situation in order to value a firm's offerings and conditions. In turn, firms helped to satisfy this need through disclosures of accounting information. Foster notes that employees, customers, and regulatory agencies also demanded information in addition to the investors. Chase and Coffman (1994) studied the choice of accounting method for colleges and institutions for investment decisions. Choi and Levich (1990) looked at international disclosure reporting and found that most executives balanced the costs of reporting with the potential benefits and effects on competitive status, similar to general accounting theory. It appears, however, that most empirical studies examined voluntary disclosure at a national level. This paper attempts to compare some of the findings across countries based on the literature results. Meek, Roberts, and Gray (1995) also divided disclosure information into strategic, nonfinancial and financial groups. Strategic and financial information are relevant to stakeholders (Tonkin, 1989). Nonfinancial information deals more with the firm's social accountability and is aimed at the broader market of interested persons. These groups were considered in the framework for this study although disclosure choices seemed to vary by type of company and its needs.

Gray and Haslam (1990) did a study on accounting changes in external reporting by United Kingdom universities. They used some performance indicators and financial disclosures recommended by the Committee of Vice-Chancellors and Principals of Universities in 1984 and 1986 reports. Some of the items suggested in these studies, but omitted from this one, were stock and work in progress, pension arrangements, audit reports and endowments/gifts. Using similar items to study universities in New Zealand, Coy, Tower, and Dixon (1993) developed a disclosure index method, the Modified Accountability Disclosure (MAD) index. This helped to determine the level of accountability in university reporting. Table 2 provides the MAD index of 26 items in four categories of overview reporting, service performance, financial performance and physical and financial conditions. These groups are similar to those by Meek et al (1995). The MAD index was used to varying levels in other studies in Canada, United States and Britain. For example, Banks and Nelson (1994) applied it to disclosures by Ontario universities. Other studies by CVCP (1984), Engstrom (1988), Gray and Haslam (1990), Broadhurst (1993) and KPMG (1995) used the MAD index items except for the items of directory information, goals/targets, overhead allocations and employment equity information. Comparing these studies showed that seven items were in two of them and the other fifteen items were recommended by at least three of the studies. This seemed to imply a common expectation in each country for university disclosures and fits the findings by Choi and Levich (1990).

Methodology

The sample for this study included eight Maritime universities (Mt. Saint Vincent, St. Francis Xavier, Acadia, St. Mary's, Dalhousie, St. Thomas, University of PEI and University of NB). Sampling only universities, and not including colleges and other educational institutions, helped ensure more consistent comparisons of disclosure activities. Each university was contacted for its audited financial report of 1997 fiscal year, annual report, president's message, and similar information. Although some universities were very cooperative and quick to respond, there was difficulty to get this information from

other universities. Some persons contacted did not know what was being requested and others said they did not release their financial statements. Often the universities forwarded two separate documents, one the audited financial statements and one the annual report. This made analysis more difficult and time consuming. Table 1 outlines an example of the evaluation criteria used in this study.

Table 1
Example of Criteria: Objectives

<i>Score</i>	<i>Criteria</i>
5	Separate statement which must include the following items: mission, goals, and performance targets in specific, concise, understanding and realistic terminology. The items must have measurable/quantitative dimensions and a given time frame.
4	As per 5, but deficient in one significant item.
3	General and specific, some breadth, and including only some significant measurements.
2	Lacking any significant measurement
1	Brief (rhetorical), incomplete
0	Omitted

Analysis was completed using MAD index items. Items were scored for present (1) or absent (0) and for their perceived quality levels on an ordinal scale of 1 as poor to 5 as excellent. Weights used for the scoring are in Table 2.

Table 2

Modified Accountability Disclosure (MAD) Index Items and Importance Weights			
Groupings/Weights Assigned:			
Overview Reporting:		Service Performance	
Statement of Objectives	3	Students Numbers	3
Descriptive Report/General Review	3	Graduates	2
Summary Facts & Figures	1	Employment/Education	
		Destination of Students	I
Financial Review	I	Publications	3
Accounting Polices	2	Student-Faculty Ratio	3
Directory Information	I	Targets	2
Financial Performance:		Physical & Financial Condition:	
Operating Statement	3	Balance Sheet	3
Deprecation	I	Faculty/Staff	3
Budget Information	2	Library	2
Unit Cost per Student	2	Investments	I
Statement of Cash Flows	2	Commitments & Continenence	2
		Employment & Education	
		Equity information	2
Research Grants	2	Building Usage	I
Overhead Allocation	2		

The study by Coy et al (1993) provided a subjective weight for each item to recognize the importance of some items over others. The weight meanings were on a scale of 1 as low importance, 2 as medium importance and 3 as high importance, These weights were first considered for each item, per Table 2, and then the submitted materials were analyzed. Scores were aggregated with the weights and an overall score for each university was obtained. The number of index items found in the submitted materials varied and the methods and degrees of disclosure varied.

Although the MAD index was a reliable tool for determining the accountability of university annual reports, and other disclosures, there were some limitations. For example, the reports were considered for one year only and these might have varied over a longer time frame. The submission of two reports also made the analysis more tedious and errors of interpretation might have occurred. The weighting and qualitative analysis was subjectively based on the literature findings and the depth of the researchers knowledge; however, more than one person analyzed the data and compared findings and results to help reduce researcher error. In general, the MAD index proved to be a reliable measurement tool and had been applied effectively in previous studies.

Findings

Findings are divided into quantitative and qualitative. Quantitative findings indicate the presence, or lack, of an item and qualitative is the level and importance of information disclosed in the reports. For quantitative, an objective score of one for presence or zero for absence is recorded. Table 3 shows the summations out of a total possible score of 26.

<u>Universities/Items:</u>	<u>Overview</u>	<u>SerPer</u>	<u>FinPer</u>	<u>Phy/FinCon</u>	<u>Total</u>
Mount St. Vincent University	4	2	3	3	12
St. Francis Xavier University	2	1	3	6	12
Acadia University	4	0	4	3	11
Saint Mary's University	4	1	3	5	13
Dalhousie University	6	3	6	5	20
St. Thomas University	3	3	5	3	14
University of New Brunswick	5	0	5	3	13
University of Prince Edward Island	5	2	4	4	15
Possible Score	6	6	7	7	26
Average Score	4.13	1.50	4.13	4	13.75
Highest Score	6	3	6	6	20
Lowest Score	2	0	3	3	11
SerPer- Service Performance					
FinPer- Financial Performance					
Phy/FinCon- Physical and Financial Conditions					

These scores are in four parts (overview, service performance, financial performance and physical and financial conditions) and the sums for each part indicate variances among the universities. The service performance section scored the lowest means value and, of the eight universities sampled, Dalhousie outperformed the others with a score of 20 out of 26. The other universities scored between 11 to 15 with UPEI as second at 15 and Acadia as last at 11.

To compare these findings, Table 4 indicates results from other studies, such as Banks, Nelson and Fisher (1997), Banks and Nelson (1994) and Coy, Dixon and Tower (1993). It appears that these Maritime universities scored much better than the findings in Ontario in 1994 and marginally better than in the UK but much worse than in New Zealand (1993) where universities disclosed much more data than here. Results show that index items disclosed in all eight Maritime universities included descriptive information on the university, a review of its general performance, its accounting policies, operating statements, depreciation, cash flow statement, balance sheet, investments, and commitments and contingencies. Items omitted by all the universities included the student to faculty ratio and employment and education equity information. Their overview report sections provided the most information with an

Physical & Financial Conditions	43	40	36	40	47	26	36	43	39
Overall	37	30	30	37	61	33	39	42	38

The information disclosed appeared to be poor quality and lacked significant measurement or sufficient data. Dalhousie was the only university to attempt full disclosure in this part. It was noted that the universities disclosed information on accounting policies as legally required in Canada but unless a report was provided with the audited statements, there were significant gaps in the information disclosed. The universities that did include annual reports also used a president's message, comments on sports, alumni, other activities, and the university in general. These universities scored better than those which failed to provide the additional information.

Conclusions and Recommendations

Table 5 indicates Dalhousie University has the best overall quality score with 61 points and UPEI is next with 42 points. A driving force for Dalhousie to provide fuller disclosure for accountability might be based on the large size of its student body, of its administrative numbers, and of the amount of research money from public and private sources. The remaining universities' overall scores range between 30 to 39. This suggests poor disclosure policies and procedures. Each of the universities, however, does provide financial information that is relevant, reliable, and comparable to similar institutions. This assists the readers and users to make decisions on the information provided although, in this study, the findings show the service performance part was poorly disclosed. The usefulness of the service performance information such as grads destinations should be studied in more depth. The value of nonfinancial information has been shown to be highly relevant by itself and in combination with financial data (Shevlin 1996; Amir and Lev 1996). Considering universities do receive significant amounts of public funding, service performance information becomes important for providing full information to the various stakeholders. Service performance information can also be used by students when deciding to attend a specific university; therefore, this type of disclosure can become a worthwhile and objective marketing tool for a university to use.

Research of financial reporting in educational institutions is not a new phenomena. Studies of various aspects of financial reporting for colleges and universities have been conducted in the USA since the early 1900's. In 1988, for example, Flesher and Rezaee discuss the historical development from 1912 to 1986 of USA colleges and universities' accounting practices and the procedures for auditing these institutions. In 1992, Falk studied Canadian and US not-for-profits, such as universities, to establish a framework for accounting procedures. In Canada, the annual audited statements for these non-profits are not required to adhere to GAAP or CICA Handbook so they can choose their own systems. For universities which are so dependent on government funding, accountability has become a major issue and a driving force for fuller disclosure. This is highlighted by the province of PEI doing an audit on the University of PEI, the first of its kind in the country. In 1965, Bevis states that disclosure is "the overriding tenet of the communication aspect of the accounting function". This appears to be even more relevant today as governments and taxpayers as well as other stakeholders demand clear accountability.

Universities are able to develop their own policies and procedures for disclosure but often seem to overlook whom the potential user of the information might be. Readers and users of the information are not only financial and government people, but can also be donors, research investors, students, and the general public. It is important, therefore, to present a clear understanding of the institution's activities. The annual reports and other disclosures offer an opportunity for the general public and governments to learn and to respond in a positive manner to a university. The university can show its ability to serve and be accountable and to offer a quality service to the public. Yet, this study suggests this opportunity is overlooked by most of the Maritime universities since these reports and statements are difficult to

obtain, often poorly structured, and lack important elements to fully provide information from a public institution. These omissions would offer value to stakeholders and could provide a strong marketing tool to attract new funding, more students, and increased goodwill.

In addition to continuing to research the topic of university disclosure in more depth, some specific recommendations for university annual reporting suggested from this study include the following points. There should be one report to include audited financial statements and the annual report so it is easily accessible by users. In general, annual reports are often difficult to analyze because information is not in the body of the report but in small print at the bottom of a page. Information often is referred to vaguely, not interpreted for the reader, nor used to illustrate points. The MAD index is a useful tool of reference to ensure inclusion of many applicable items of interest to decision makers such as including clear objectives, mission statement, and performance targets in the annual report with a time frame and measurable goals. This helps users to understand the financial and nonfinancial statements more clearly. For universities releasing presidents reports every two or three years, this hinders the value of the information timeliness, consistency and comparability on a yearly basis. In general, universities have to improve their voluntary disclosure methods and use the materials more effectively given the amount of time and resources required to prepare the materials.

References

Amir, E. and B. Lev (1996). "Value-relevance of Nonfinancial Information: The Wireless Communications Industry", *Journal of Accounting and Economics*, Vol. 22, Issue 1-3, Dec., pp.3-30.

Banks, W., J. Fisher, and M. Nelson (1997). "University Accountability in England, Wales, and Northern Ireland: 1992-1994", *Journal of International Accounting, Auditing and Taxation*, 6: 211-226.

Banks, W. and M. Nelson (1994). "Financial Disclosure by Ontario Universities: 1998-1993", *Journal of International Accounting, Auditing and Taxation*, 3:287-305.

Bevis, H.W. (1965). *Corporate Financial Reporting in a Competitive Economy*, The Macmillan Company, New York.

Broadhurst, W.H. (1993). "University Accountability: A Strengthened Framework. The Task Force on University Accountability", *Ministry of Education and Training*, Toronto, Ontario.

Chase, B.W. and E.N. Coffman (1994). "Choice of Accounting Method by Not-for-profit Institutions; Accounting for Investments by Colleges and Universities", *Journal of Accounting and Economics*, Vol 18, Issue 2, Sept., pp.233-243.

Choi, F.D.S. and R.M. Levich (1990). *The Capital Market Effects of International Accounting Diversity*, Homewood, Dow Jones Irwin.

Clarkson, P.M., J.L. Kao, and G.D. Richardson (1994). "The Voluntary Inclusion of Forecasts in the MD&A Section of Annual Reports", *Journal of Contemporary Accounting Research*, Vol.11, No. 1-11, pp.423-450.

Committee of Vice Chancellors and Principals (1984). *Guidance on Recommended Accounting Practice in UK Universities*. London, CVCP.

Coy, D., K. Dixon, and G. Tower (1993a). *The Annual Reports of Tertiary Education Institutions: Quality, Timeliness, and Distribution*, University of Waikato, New Zealand Working Paper 18 (December).

Coy, D., G. Tower, and K. Dixon (1993b). "Quantifying the Quality of Tertiary Education Annual

Reports”, *Accounting and Finance*, 33 (November), pp.121-129.

Engstrom, J. (1988). “Information Needs of College and University Financial Decision Makers”, *Research Report*, Stamford, Government Accounting Standards Board.

Falk, H. (1992). “Towards a Framework for Not-for-Profit Accounting”, *Journal of Contemporary Accounting Research*, Vol. 8, No. 2, pp. 468-499.

Flesher, D.L. and Z. Rezaee (1989). “History of College and University Accounting and Auditing” in R.H. Tondkar and E.D. Coffman, (eds.), *Working Paper Series 4*, 61-80, The American Academy of Historians.

Foster, G. (1986). *Financial Statement Analysis*. Prentice-Hall, N.J.

Gray, R. and J. Haslam (1990). “External Reporting by UK Universities: An Exploratory Study of Accounting Change”, *Financial Accountability and Management*, 6, Spring:51 -72

Keiso, D., J. Weygandt, V.B. Irvine, W.H. Silvester, and N. Young (1998). *Intermediate Accounting, Fifth Canadian Edition*, McGraw-Hill Inc.

KPMG, Peat Marwick LLP and Frager, McCarthy and Sealy (1995). *Ratio Analysis in Higher Education: Measuring Past Performance to Chart Future Direction*, Third Edition, USA.

Meek, G.K., C.B. Roberts and S.J. Gray (1995). “Factors Influencing Voluntary Annual Report Disclosures by U.S.,U.K. and Continental European Multinational Corporations”, *Journal of International Business Studies*, 3rd Quarter, pp. 555-572.

Pany, K., O.R. Whittington, and W. Lam (1996). *Auditing: Revised Canadian Edition*, Irwin.

Shevlin, T. (1996). “The Value-relevant of Nonfinancial Information: A Discussion”, *Journal of Accounting and Economics*, Vol.22, pp.31-42.

Tonkin, D.J. edr. (1989). *World Survey of Published Accounts*. Lafferty Publications, London.