Messages from CEOs: a content analysis approach

Geraldine Clarke

The author

Geraldine Clarke is a Lecturer in the Department of Marketing at De Montfort University Business School, Leicester, UK.

Abstract

The message an investment company sends to shareholders in its annual report summarizes and explains the financial and economic performance which is presented. These companies are becoming aware that the annual report is an increasingly potent tool for marketing to potential clients as well as combining their statutory duty to report to shareholders. Uncovers the major themes of the Chairman's report from samples of companies in this sector. In particular, seeks to determine the differences in messages associated with the mission of the company; increasing share value, increasing dividends or both. Also aims to uncover differences in content resulting from positive and negative financial performance. Uses content analysis to uncover the major themes in these annual reports. Methods include word frequency counts, KWIK-Key Word in Context and concordances which list words by type into construct categories. The smaller the unit of examination the more difficult it is to analyse, but the more conclusive the results. Compares the results of this content analysis with previous research in this area and on this construct. Records and analyses them quantitatively using appropriate statistical analysis to determine the strength of association between the variables measured and the hypothetical constructs or categories considered.

Introduction

The aim of this paper is to analyse the communications content of chairmen's statements in annual reports from a sample of investment companies quoted on the London Stock Exchange. According to Weber (1985) some of the reasons for this analysis could be to identify the intentions of the communicator; audit the communication content against stated objectives; and reveal the focus of institutional intentions. The particular objective of this paper is to audit the communications content against stated mission objectives and against annual results compared with the previous year. Investment companies are at the high-risk end of the investment market but there has been increasing interest from savers for these types of funds in recent years. What criteria can private investors use to monitor the chairmen's statements both of companies in which they may hold shares and of companies in which they are interested in holding shares?

The research involved a proportionate random sample of the investment company population. The sample size of 32 companies compares favourably with other content analysis studies. The Heath and Phelps (1984) study looked at 20 randomly selected Fortune 500 companies and Haskins(1984) looked at 24 reports from a similar population. This study concentrates on UK investment companies because they seem to be adopting a more direct approach to recruiting investors through personal equity plans and other share issues. A recent report (Mintel, 1995) indicated a 15 per cent increase between 1992-93 in higher risk savings such as investment and unit trust.

The analysis categorized the content of the chairmen's statements according to predefined criteria. These were derived from a pilot study which asked respondents to list the most important words or phrases in a statement sample. The purpose of this was to originate semantic validity (Krippendorff 1980) in the context of the commercial environment of the annual report. Once the categories had been devised, two independent coders analysed the content of the sample following a pre-test analysed for coder reliability. The research has been validated against the major criteria as set out by Kassarjian (1977) Krippendorff (1980) and Kolbe and Burnett (1991).

The results of this study indicate that there are some clear inferences that can be made

about the relationship between the chairmen's annual statements; the mission of the investment companies and the relative financial results which are contained in the report.

Background

Over the last decade global environmental factors have created a shift in the annual report's focus. As stock markets have become more volatile as a result of deregulation and technological innovation, quoted companies and shareholders have become increasingly cautious in their share buying behaviour. The annual report now acts as a shop window for all quoted company stocks and shares and, perhaps more importantly, seeks to reassure investors that the company is surviving and prospering in the long term. Dealing with potential shareholder dissonance is vital for stable and long-term security in the stock market. French companies are already addressing the problem of maintaining stable stakeholder relations by offering other contact besides the annual report. This includes information lines, free telephone enquiry services, shareholder committees, copies of the company's press releases and, in some cases, even appointment to the board (*Financial Times*, 1995).

Restructuring in the banking and investment markets through mergers, buy-outs, bankruptcies and take-overs has made many public limited companies realize the importance of the annual report as a marketing device. The *Financial Times* annual report service was set up in 1992 to act as a central distribution network for the dissemination of quoted companies' annual reports. The growth in numbers of independent financial advisers (IFAs), who act as retailers in an increasingly dispersed and diverse private investment and pension sector, has created a more dynamic market with all share offerers in possible direct contact with all share buyers. Two-thirds to three-quarters of all shareholders are institutional investors who hold substantial shares in all types of publicly quoted companies. If individual shareholders increase, through recommendation by IFAs and through direct marketing, this will affect the importance of the institutional investor.

There have been a number of studies about annual reports in the USA. Many have questioned the readability of reports. The Heath and Phelps (1984) study considered

readability importance. Of the 30 million people in the USA who own shares, 65 per cent have not completed college. Haskins (1984) reports that they are mostly difficult to read on Flesch's Reading Ease Scale and that they are getting worse. A recent study by Abrahamson and Park (1994) was more concerned with disclosure and concealment of negative results. This UK study will determine whether the communication of the investment company chairman follows a pattern according to the categorization of the content by reference to marketing concepts such as environmental factors, competitors, shareholder focus and time and according to the company's financial results and mission objectives.

Literature review

Apart from the studies mentioned already, annual report credibility has also been analysed by surveys of individual and professional investors. *A Public Relations Journal* (1984) survey of 247 individual and 50 professional investors in the USA rated the annual report very low on a "usefulness" scale of seven sources of information for buying and selling stocks. Professional investors thought that the letter to shareholders was the least important section of the annual report. Complementing these findings, a more recent survey (Hutchins, 1994) of 96 large institutional investors and 112 chief financial officers found that a small majority (52 per cent) thought the annual report informative about the investment value of a particular company. Although evidence from Courtis (1982) indicates that the president's letter is the most widely read part of the document, the Hutchins survey concludes that the chairman's letter was considered by institutional investors and chief financial officers alike to be the least valuable section of the report. Yet Marino (1995) considers them the most important narrative element for analysts and shareholders, according to undisclosed readership surveys. He also outlines the current trend towards lengthening these statements. A more recent large scale survey of 1,000 presidents' letters was carried out by Abrahamson and Park (1994). Their content analysis was concerned with the hypothetical connection between negative words and performance with reference to the numbers of institutional shareholders and the shareholding status of the executive officers. They found some

correlation between outcome and negative words in presidents' letters.

There are then generally two types of research which have been carried out in this area:

(1) surveys of readers to ascertain their subjective opinions; and

(2) analysis of content to make inferences about the author's or institution's intentions.

Another purpose of content analysis, as an unobtrusive observational technique, is to evaluate systematically the symbolic content of these messages in the context of the commercial environment in which they are sent and received.

To be objective, replicable and valid, content analysis research is undertaken through a process of explicit and precise rules. Objectivity is achieved by eliminating bias in selecting the recording unit and the categories, recording the units of interest by category and analysing the results. Replicability across coders ensures reliability. Kassarjian (1977) is clear that the choice of categories and content units affects the likelihood of valid inferences.

Krippendorff (1980) talks about semantic validity and asks if the method is sensitive to the symbolic meaning relevant to the context. For example, who chooses the meaningful symbols, the reader or the analyst? In a public relations context the reader deciphers the chairman's encoded message; therefore an indigeneous derivation of category content and units of analysis is preferred over those imposed by the analyst. The analyst's task is to justify the categories derived from this content by conforming to popular distinctions. One example would be the semantic validity of marketing terms used in most marketing text books, referred to in this study. Reference to other content analysis studies also provides support for the use of commercial categories as relevant criteria (Spiggle, 1986).

Finally Kolbe and Burnett's (1991) research looked at the evidence for reliability, objectivity and validity in 128 studies. They asked: were rules and procedures reported?; was judge-training reported?; was pre-testing of measures reported?; were judges independent of the authors?; and did they work independently?

These considerations were all taken into account in this content analysis of UK investment company chairmen's letters.

Methodology

Of a population of 156 investment companies quoted on the London Stock Exchange in 1994 and who subscribed to the *Financial Times* annual report service a sample of 32 was taken at random, proportionate to mission and financial categories (see Table I). This sample size compares favourably with other studies of the Fortune 500 public corporations in America. The sample is larger than those of Haskins (1984) and Heath and Phelps (1984) and the focus of the study was on a segment of the markets, i.e. investment companies rather than the Fortune 500 corporations. The sample represents 20 per cent of the total population under investigation.

Mission objectives were defined as follows:

- *Capital growth*: changes in the asset value per share was taken as the performance indicator to determine positive or negative results.
- *Both*: an average of changes in assets per share and changes in dividend income were taken as financial indicators.
- *Dividend income*: changes in annual dividends per share were taken as the main indicator.

No companies with dividend income as their objective reported negative changes in dividend payments at the end of their financial year in 1994.

An exploratory survey was carried out with six independent readers. They were asked to identify the words or phrases that they thought important in three chairmen's statements chosen at random from the three different mission groups. They considered their choices with reference to the context of the report. This formed the basis for the indigeneous generation of category content.

The words and phrases were then categorized by the analyst according to major themes relevant in a commercial marketing and public relations context. Weber (1985) says a category is valid if there is a relation between the category and the abstract concept it represents. Eleven categories emerged from the exploratory study (see the list of categories in the Appendix).

Semantic validity was trialled in a pre-test undertaken by two independent coders. Most of the categories can be considered reliable in terms of accuracy in that they do represent the major vocabulary used under these headings.

An illustrative example is the following list of words which were included in the first category: deflation; economic growth; improving economies; interest rate cycle; monetary conditions.

According to Kolbe and Burnett (1991): "Precise operational definitions and detailed rules and procedures for coding are needed to facilitate an accurate and reliable coding process". Coding instructions were written asking the coders to categorize as much of the statements as possible; only leaving out what was not relevant to any category.

This was to eliminate partial bias ... "in which only those elements in the content which fit the analyst's thesis are selected" (Kassarjian, 1977, p. 9).

Two pre-tests were conducted; the first was given to two coders without any coder training. The second was given to two different coders after a long and detailed training session. The reliability index results varied considerably (see Table AI in the Appendix).

All the pre-tests were analysed for reproducibility using Perreault and Leigh's index of reliability. This method was preferred over the simpler coefficient of agreement as it accounts for differences caused by the variation in categories and is sensitive to coding weaknesses (Kolbe and Burnett, 1991). The main sample was split into two by the major groupings in Table I and each coder independently analysed half of the statements. The raw scores were summed and subjected to association analysis. The major aspect of validity yet to be measured is that of the research results and whether they can generate predictive capability.

Results

The first pre-test A yielded a lower reliability index of 0.60 as only written coding instructions were given. The measure of 0.6 was achieved after leaving out categories 4 and 8. The reliability of these categories was nil as they were not used by the coders. After a detailed training session was conducted with the two independent coders, reliability improved to 0.92 between the two coders and similar results of 0.90 and 0.91 were achieved between the coders and the author. These results give a very satisfactory measure of cross-coder reliability (see Table AI in the Appendix).

The results of the main survey were very interesting. Table AII in the Appendix shows an analysis of category codings by financial results. The most frequently used categories for both samples were category 9: time-orientation (17.76 per cent and 17.68 per cent) and category 6: shareholders (17.1 per cent and 14.99 per cent), suggesting a common concern, regardless of results. The significant differences between the samples were in categories 2: political environment and 7: actions of the company. The significant difference of category 2, however, has to be dismissed in all the results as it occurred as an unusually high individual coding reference in one company's statement whose target market was in Latin America. It has been included in the results to illustrate how outliers can distort general results and because it shows that in some contexts it is a useful category. In all the samples extracted from the survey it was the least frequently coded. The most particular result of this section of the analysis demonstrates that companies with positive results

Table I Sample details

Group	Population	Percentage	Sample	Percentage
Mission: capital growth				
A+: positive results	44	28	9	28
B−: negative results	51	33	10	32
Total	96	61	19	60
Mission: both				
C+: positive results	26	16	5	16
D−: negative results	18	12	4	12
Total	44	28	9	28
Mission: dividend income				
E+: positive results	16	11	4	12
Total	156	100	32	100

write about their actions ($\chi^2 = 14.492$, $p < 0.001$, df = 1) significantly more than companies with negative results. χ^2 values were calculated including Yates correction for small samples which gives a more conservative estimate of the significant difference between samples.

Table AIII shows the results from the survey according to mission objective. The sample for "dividend income" was small, only four cases being examined. This was proportionate to the numbers in the population. Table AIII indicates that again the most frequent categories mentioned were category 6 (20.9 per cent for "dividend income" and 17.83 per cent for "both") and category 9 (19 per cent and 16.57 per cent respectively) the order of magnitude changing compared with Table AII. Significant differences were found in categories 4: target market ($\chi^2 = 15.965$, $p < 0.01$, df = 1) and 8: internal organization ($\chi^2 = 16.863$, $p < 0.001$, df = 1). In the latter case only 6.89 per cent and 2.23 per cent of codings were allocated to this category. Category 11: risk and security ($\chi^2 = 5.561$, $p < 0.05$, df = 1) was more frequently coded and was also somewhat significant. Overall the difference between the two samples was very significant ($\chi^2 = 41.753$, $p < 0.001$, df = 10).

Comparison between samples of "capital growth" and "both" (Table AIV) indicate that apart from category 9: time (17.98 per cent and 16.57 per cent) the most frequently coded categories in this table were category 6: shareholders (13.99 per cent and 17.83 per cent); category 7: actions of company (12.87 per cent and 14.63 per cent) with categories 4 : target market (10.56 per cent and 10.08 per cent) and 11: risk and security (10.77 per cent and 9.88 per cent) close behind. The significant difference in the results was in category 6: shareholders ($\chi^2 = 6.001$, $p < 0.05$, df = 1) with a significant difference in the marginally coded category 8: internal organization ($\chi^2 = 7.845$ $p < 0.01$, df = 1).

Finally Table AV confirms that time was a major theme in these messages: 17.98 per cent of the "capital growth" sample and 19 per cent of the "dividend income" sample. Shareholders (13.99 per cent and 20.9 per cent respectively) and actions of the company (12.87 per cent and 16.15 per cent) were also frequently mentioned. Where capital growth was the declared mission object; there were significantly more codings for target markets ($\chi^2 = 18.646$, $p < 0.001$, df = 1) and risk and security ($\chi^2 = 6.825$, $p < 0.01$, df = 1) and significantly less codings for shareholders ($\chi^2 = 10.183$, $p < 0.01$, df = 1) and internal organization ($\chi^2 = 3.899$, $p < 0.05$, df = 1). Overall, samples shown in Tables AIV and AV were significantly different (Table AIV: $\chi^2 = 31.719$, $p < 0.001$, df = 10) and (Table AV: $\chi^2 = 50.738$, $p < 0.001$, df = 10).

Discussion

Greater validity could be ensured by conducting a further pre-test at a different time to establish continuity in the coding instrument. The sample size for the dividend income category was particularly small as it only contained one category of cases by result. There were no examples of companies with negative results, i.e not paying a dividend equal to or greater than the previous year, in the population for the year 1994. An alternative sample could be taken, disproportionate to the population, and the results weighted afterwards. A further set of results could be obtained by omitting category 2 (political environment) from the analysis. As previously explained, this category was little used except in one case. However, as the results indicate, many of the significant differences appear in categories which do not have the highest frequencies.

The overall results support the suggestion that investment companies are becoming shareholder focused as this category was most frequently mentioned in all the sample tests. The analysis also revealed that time and company actions were also common threads. Further investigation would indicate if they were past or future oriented. The main differences between statements of chairmen from investment companies with positive and negative financial results were that companies with positive results attributed it overtly to the company's actions and mention the economic environment less ($\chi^2 = 8.738$, $p < 0.01$, df = 10). This evidence supports the view that companies with negative results try to shift the blame for the negative financial outcomes away from themselves (Abrahamson and Park, 1994). Companies with positive results more frequently mentioned performance indicators and less frequently mentioned target markets and emotive words (category 10: $\chi^2 = 6.726$, $p < 0.01$, df = 1).

The comparison between mission statements indicated a significant difference in a

number of categories. In particular "dividend income" mentioned risk and security and target markets the least; "capital growth" and "both" mentioning it the most. Another significant difference consistent across categories was reference to the internal organization of the company. Although this was not frequently referred to, there was more significant reference to these terms in "dividend income" companies than in "capital growth" and "both" companies. This survey indicates clear differentiations in the messages that chairmen are sending to their shareholders. The emphasis of their letters or reports demonstrates their objective differences and may be used to predict financial results. A further analysis to correlate all the variables including categories, missions and financial results could estimate the interdependence to improve the predictive capacity of the study.

Conclusion

The results of this study indicate that there are similarities and differences between investment company chairmen's statements based on their financial results and their mission objectives. This content analysis adopted rigorous procedures to validate the results and to indicate that the process is reliable. Improvements could be made in the research design to account for the small sample size of "dividend income" companies and to validate the procedure further by including another pre-test to identify coder reliability over time.

The results indicate that for this group of companies, chairmen's letters do frequently refer to shareholders and their perceived interests. Another common theme throughout the study was reference to time, whether past, present or future. Where the emphasis lay for each group could be undertaken in a future study. Significant differences in five categories were found between companies with positive and negative financial results. These provide evidence that companies with negative results do divert attention away from themselves by referring to the environment, target markets and emotive words rather than company action and performance indicators.

There were also significant differences overall between samples drawn according to mission statement. Comparison by category revealed a marked tendency for "capital growth" and "both" companies to mention target markets more than "dividend income"

categories. Shareholders were most mentioned by "dividend income" and "both" companies compared with "capital growth" companies who mentioned them the least. Finally, risk and security were the pre-occupation of chairmen's communications with their shareholders in companies whose mission objectives were either capital income or both. Shareholders and analysts alike can consequently dissect the chairman's statement to gain a more accurate picture of the company for investment decision purposes. If investment companies and others intend to attract the individual shareholder through the annual report, consideration of the communications content and its interpretation is likely to improve this medium of information exchange.

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Appendix

(1) *Economic environment*. Keywords or phrases which emphasize the economic environmental influences on the company's operation in the last year. Examples: uncontrolled deflation, economic growth/recovery, world financial (bond, equity and stock) markets, inflation, improving/emerging economies; monetary conditions, economic cycle, interest rate cycle, falling/rising interest rates (general statements).

(2) *Political environment*. Keywords or phrases which focus on the political environmental influences on the company's operations outside the company's control. Examples: government/politics, authorities, regulation, commentators, newspaper/reporting.

(3) *Competitors*. Keywords or phrases which focus on the investment company's performance in its competitive market and on its competitors. Examples: share indices (FTSE All Share Index), prizes, awards, other companies by name.

(4) *Target market*. Keywords or phrases which focus on the investment company's target market. Examples: deflation (in target market), deregulation, economic pressure, growth, valuation levels (in target market), industrial recovery rates, target market stock exchange indices, weakness in currency, exchange rates, export sector, peak levels, USA, Japan UK, etc. (i.e. target market).

(5) *Performance indicators*. Keywords or phrases which constitute the company's performance indicators. Examples: corporate profits, gearing, valuation levels (of company's shares/stocks), net sales, overvalued, investment performance; ordinary share price.

(6) *Shareholders*. Keywords or phrases focusing on shareholders. Examples: (welcoming) new shareholders, number of shareholders, age of company, dividends/per share, share price, revenue, yields, assets of company, total assets, net asset value/per share, investors.

(7) *Actions of company*. Keywords or phrases which emphasize the company's activity. Examples: share flotation, new share issue, buying, added to investments, options, identify companies with good growth prospects, investments(annual increase), conversion share issue, cost of financing, new borrowing.

(8) *Internal organization*. Keywords or phrases which focus on the internal arrangements the company has or is making. Examples: retirement, service, contribution, experience, commerce, proxy, mergers, investment manager, buffet, invitation, annual general meeting.

(9) *Time oriented*. Keywords or phrases which emphasize time. Examples: last year/next year, long-term, short-term, expectations, forecasts, projections, changes.

(10) *Emotive elements*. Keywords or phrases which flavour the report by using emotive and colourful language to describe technical analysis. Examples: unforeseen circumstances, serious shock, speculative positions, bullish, sentiment, pace, confidence, prospects, frustrating, patient, opportunities, turbulence.

(11) *Risk and security*. Keywords or phrases which emphasize the security of the environment, markets, assets and shares. Examples: uncertainty, sure, positive/negative, protect, fears, behaviour, cautious, risky, safe.

Table AI Index of reliability

Perreault index[a] Category	Pre-test A Coder 1/4	Author/1	Pre-test B Author/2	Coder 1 and 2
1	0.80	0.96	0.80	0.95
2	0.80	1.00	1.00	1.00
3	0.80	0.97	0.88	0.83
4	0[a]	1.00	0.85	1.00
5	0.71	0.88	1.00	0.90
6	0.80	0.73	0.96	0.93
7	0.38	0.92	0.92	0.96
8	0[a]	1.00	0.80	0.80
9	0.60	0.94	0.87	0.93
10	0.26	0.82	0.97	0.94
11	0.29	0.75	0.80	0.90
Main index	0.60	0.91	0.90	0.92

Note: [a]Perrault Leigh Reliability Test = $[Fo/n - 1/k] [k/k - 1]$ where Fo are number of agreements; n is total number of coding decisions and k is the number of categories. Pre-test A mean index is over 9 useful categories excluding categories 4 and 8

Source: Clarke (1996)

Table AII Frequencies and association by financial result

χ^2 (Df = 1)	Significance p	Categories	Financial positive $n = 18$	%	Results negative $n = 14$	%	Total
8.738	< 0.01	1	131	7.25	147	10.40	278
17.064	< 0.001	2	16	0.89	41	2.90	57
0.280		3	46	2.55	31	2.19	77
3.911	< 0.05	4	154	8.52	152	10.75	306
6.270	< 0.05	5	161	8.91	90	6.36	251
2.049		6	309	17.10	212	14.99	521
14.492	< 0.001	7	290	16.05	155	10.96	445
2.294		8	82	4.54	48	3.39	130
0.000		9	321	17.76	250	17.68	571
6.726	< 0.01	10	134	7.42	144	10.18	278
1.008		11	163	9.02	144	10.18	307
62.832 Df = 10	< 0.001	Total	1,807	100.00	1,414	100.00	3,221

Source: Clarke (1996)

Table AIII Frequencies, percentages and significance by mission objective

χ^2 (Df = 1)	Significance p	Categories	Mission Dividend income $n = 4$	%	Objectives Both $n = 9$	%	Total
0.531		1	29	6.89	85	8.24	114
0.043		2	4	0.95	7	0.68	11
0.000		3	12	2.85	31	3.00	43
15.965	< 0.001	4	14	3.33	104	10.08	118
0.170		5	40	9.50	89	8.62	129
1.349		6	88	20.90	184	17.83	272
0.363		7	68	16.15	151	14.63	219
16.863	< 0.001	8	29	6.89	23	2.23	52
0.888		9	80	19.00	171	16.57	251
0.020		10	33	7.84	85	8.24	118
5.561	< 0.05	11	24	5.70	102	9.88	126
41.753 Df = 10	< 0.001	Total	421	100.00	1,032	100.00	1,453

Source: Clarke (1996)

Table AIV Frequencies, percentages and significance by mission objective

χ^2 (Df = 1)	Significance p	Categories	Mission Capital growth $n = 19$	%	Objectives Both $n = 9$	%	Total
0.598		1	164	9.21	85	8.24	249
11.600	< 0.001	2	46	2.58	7	0.68	53
0.650		3	43	2.42	31	3.00	74
0.105		4	188	10.56	104	10.08	292
2.497		5	122	6.85	89	8.62	211
6.011	< 0.05	6	249	13.99	184	17.83	433
1.381		7	229	12.87	151	14.63	380
7.845	< 0.01	8	78	4.38	23	2.23	101
0.663		9	320	17.98	171	16.57	491
0.342		10	160	8.99	85	8.24	245
0.028		11	181	10.17	102	9.88	283
31.719 Df = 10	< 0.001	Total	1,780	100.00	1,032	100.00	2,812

Source: Clarke (1996)

Table AV Frequencies, percentages and significance by mission objective

χ^2 (Df = 1)	Significance p	Categories	Mission Capital growth $n = 19$	%	Objectives Dividend income $n = 4$	%	Total
1.842		1	164	9.21	29	6.89	193
3.315		2	46	2.58	4	0.95	50
0.113		3	43	2.42	12	2.85	55
18.646	< 0.001	4	188	10.56	14	3.33	202
2.892		5	122	6.85	40	9.50	162
10.183	< 0.01	6	249	13.99	88	20.90	337
2.488		7	229	12.87	68	16.15	297
3.899	< 0.05	8	78	4.38	29	6.89	107
0.144		9	320	17.98	80	19.00	400
0.391		10	160	8.99	33	7.84	193
6.825	< 0.01	11	181	10.17	24	5.70	205
50.738 Df = 10	< 0.001	Total	1,780	100.00	421	100.00	2,201

Source: Clarke (1996)