

## CHAPTER 7

### RESEARCH METHODOLOGY

#### 7.1 Introduction

Before the results of the empirical tests are discussed in chapters nine and ten, two research methodologies are first discussed in this chapter. The aim of the first research methodology was arrived at establishing the extent of voluntary disclosure in the annual reports of listed industrial companies on the Johannesburg Stock Exchange in order to test the primary hypothesis (namely, extent of voluntary disclosure was associated with various company characteristics). The aim of the second research methodology was to examine how important each voluntary disclosure item was in order to test the hypothesis that there were no significant perceptual differences between users and compilers regarding the importance of voluntary disclosure practices. Finally, by analysing the results of the two research studies, recommendations are made as to how management can close the information gap between corporations and investors.

Two entirely different research methods were used in this study to capture the necessary data, the first being a disclosure index that was used to measure the extent of voluntary disclosure and the second being a questionnaire survey that was used to investigate the level of importance of voluntary disclosure as perceived by users and compilers. The research methodologies for each study are discussed.

#### 7.2 First empirical study on the extent of voluntary disclosure

The first empirical study concerned extent of disclosure and the following procedure was followed for:

- a disclosure index was developed and designed to measure the extent of voluntary disclosure in annual and interim reports with reference to methods

used in prior research studies in this field;

- the population and selection criteria for the companies used in the research were determined and the basis for deciding on these criteria and the actual selection are discussed in paragraph 7.2.2; and
- the time interval during which the extent of voluntary disclosure in annual and interim reports were to be measured, was selected and considerations for the choice are discussed in paragraph 7.2.3.

### 7.2.1 The development and design of a disclosure index

The disclosure index used to measure the extent of voluntary disclosure was originally initiated and conceptualised in 1964 by a panel of judges from the editorial staff of the *Financial Mail*. The purpose was to establish a set of objective measures that would enable them to select 20 companies listed on the Johannesburg Stock Exchange whose annual reports could be regarded as superior in quality and that provided extensive additional information beyond the required minimum. During the period 1964 to 1970, the disclosure index consisted of various information items considered informative at the time for making investment decisions.

A mark was attached to each item, based on how important each item was considered to be. Marks were awarded as follows:

Item	Marks awarded
Publication of the annual report within three months after the financial year end	1
A clear identification of the activities of the company	2
Disclosure of turnover figures	2
A breakdown of income or turnover by category of business	2
A discussion of future prospects	2
Publication of a source and application of funds statement	1

Although the disclosure index appears to be elementary and simplistic, it is interesting to note that the average mark awarded to the 335 annual reports of industrial and industrial-financial companies with financial year ends during 1966, that were analysed, was a very low 3.6 out of the possible 10 marks. In fact the average time taken after the financial year end, to publish the annual report, was four months (*Financial Mail*, 1967:12).

Apart from the disclosure index, additional marks were awarded for reports providing disclosures such as charts, diagrams, tables of comparative statistics for previous years, an analysis of the cost of production (perceived as the precursor of the value added statement), disclosure of capital expenditure for present and future years and a chairman's report containing disclosure of any developments, either favourable or unfavourable. Bonus points were also awarded for additional disclosure of key ratios such as net asset value per share, profit as a percentage of sales and capital employed, net earnings per share and normal earnings after adjusting for non-recurring and capital items. Factors such as design, lucidity, layout and the availability of the annual report in English and Afrikaans were also taken into account.

In 1971, the marking process was extensively refined by this researcher together with Prof. A P Zevenbergen (who was at the time head of the Bureau of Financial Analysis of the University of Pretoria) and financial experts on the staff of the *Financial Mail*. A more sophisticated scoresheet evolved together with comprehensive guidelines on the scoring system to be followed in the completion of the scoresheets. In addition, the data extracted from the scoresheet was computerised for the first time to validate the judging system. Since 1971, the evaluation criteria has been adjusted biannually, for example by eliminating voluntary disclosed items that had become mandatory in terms of the Companies Act. Also, if the majority of the companies were disclosing a certain item that formed part of the index, it was no longer a discretionary item and was dropped from the scoresheet. Over the years additional items were also added as they became increasingly important to the investors. As a result of the fact that the publication of half-yearly interim reports became compulsory for all listed companies, an evaluation of the interim report was subsequently included in the exercise in addition to the evaluation of

the annual report of the company.

In 1977, a more sophisticated system based on 100 points was devised and the revised rules for the competition were published annually in the *Financial Mail* to encourage higher reporting standards. Table 7.1 contains a list of the index of voluntary disclosed items used to measure the extent of voluntary disclosure in annual and interim reports in 1977 and the maximum marks awarded for each item.

**Table 7.1 Index of common voluntary disclosed items used to measure the extent of voluntary disclosure in 1977**

Description of voluntary disclosed item	Maximum marks awarded
Publication of the annual report within three months after year end	8
A source and application of funds statement	7
Actual turnover figures	15
A detailed discussion of the main activities of the group and its subsidiaries	10
Analysis of profits from various activities	15
Chairman's or directors' comments on future prospects	15
Availability of the report in English and Afrikaans	3
Separate or combined chairman's and director's report	3
Qualifications and experience of top management	3
A comparative table of statistics for five years or more	7
A list of subsidiaries and relevant activities	7
Present value of fixed assets	7
<b>Total marks</b>	<b>100</b>

In order to avoid the problem of errors on the evaluation scoresheets, a copy of the completed scoresheet has been sent to the financial director of the relevant company for verification since 1984. Any disagreements or discrepancies were immediately rectified and the company notified of the amendment. To obtain copies of the annual and interim reports for evaluation purposes, the facilities of the Bureau of Financial Analysis (BFA) of the University of Pretoria was used. As the BFA is on the mailing list of all quoted companies, it consistently updates its library of annual reports directly from the quoted company as soon as the annual report is published, or it obtains reports from the Johannesburg Stock Exchange.

The disclosure index used in this research is based on the *Financial Mail's* 1998 index. As each disclosure item is not equally important, a weighted scoring approach was decided upon by the researcher based on a predetermined scale of importance. This weighted scoring system developed over the years was based on the relevant importance of the item with a higher weighting awarded to an item that was very important. Secondly, the extent and quality, that is, the completeness, accuracy and reliability of the disclosure was also graded. This approach is similar to the approach followed in research studies of Cerf (1961), Singvhi and Desai (1971), Benjamin and Stanga (1977), Buzby (1974 and 1975), McNally, Eng and Hasseldine (1982), Malone, Fries and Jones (1993) and Meek, Roberts and Gray (1996). Other surveys such as those of Cooke (1992) and Negash (1995) used a dichotomous approach in allocating scores to the disclosure items, that is an item scores one if disclosed and zero if not disclosed.

The voluntary disclosure items selected for this study includes items similar to those used in the research studies of Buzby (1974 and 1975), Firth (1979 and 1984) and Adams and Hossain (1998) (see chapter 6 for a full discussion). In cases where an item was considered to be inapplicable or irrelevant to the company being evaluated, the fact was recorded as such to prevent the company from being penalised for non-disclosure for that particular item.

Annexure 1 contains an example of the evaluation scoresheet used by the Bureau of Financial Analysis in 1998 and annexure 2 sets out the guidelines for completing the scoresheet. The disclosure index used for this study is set out in table 7.2 and shows the item code used on the scoresheet, the maximum score obtainable for each item, the percentage disclosure level for the sample in 1998, the mean scores and the standard deviation.

List of fixed property	Q16	6	77.2	1.638	0.437
List of fixed property	Q17	2	79.9	1.336	0.377
Segmental reporting	Q18	7	77.8	1.145	0.31
Illustrations and colour	Q19	1	75.2	1.752	0.432
Graphical presentation	Q20	2	63.8	1.275	0.495
Highlights	Q21	1	79.7	0.797	0.402

**Table 7.2 Index of common items used to measure the extent of voluntary disclosure in annual and interim reports for the period 1993 to 1998**

Voluntary disclosed item	Item code	Max. score	Dis-closure level %	Mean	Std. dev.
Profile of board of directors	Q1	4	62.9	2.517	1.672
Profile of top management	Q2	4	46.0	1.838	1.824
Individual share holdings of directors and top management	Q3	5	24.0	1.200	1.892
Distribution of share holding	Q4	5	76.8	3.840	2.057
Contents of director's and chairman's report: - detailed description of activities	Q5.1	4	83.9	3.354	1.151
- reasons for changes in results	Q5.2	5	86.4	4.318	1.256
- statement of corporate objectives, goals or mission statement	Q5.3	2	58.5	1.169	1.145
Long-term corporate planning	Q6	8	26.5	2.123	1.895
Statement of dividend policy	Q7	4	17.7	0.709	1.390
Period of publication after year end	Q8	4	69.3	2.773	1.492
Number of years of table of statistics	Q9	4	85.0	3.40	0.988
Contents of table: - turnover	Q10.1	1	88.2	0.882	0.323
- number of shares issued	Q10.2	1	73.1	0.731	0.444
- ratios: profitability, solvability, liquidity and productivity	Q10.4	8	47.8	3.789	2.838
- definitions of terms and ratios	Q10.5	1	49.9	0.499	2.838
- number of employees	Q10.6	2	55.1	1.101	0.500
Analysis of stock exchange performance, JSE index and share ratios	Q11	11	47.6	5.239	3.652
Activities of subsidiaries	Q13	4	94.1	3.764	0.733
Promotion of products and services	Q14	2	73.9	1.477	0.879
Valuation of fixed property	Q15	6	77.3	4.638	2.422
List of fixed property	Q17	2	79.8	1.596	0.804
Segmental reporting	Q18	7	77.8	5.448	2.042
Illustrations and colour	Q19	1	75.3	1.753	0.432
Graphical presentation	Q20	2	63.8	1.275	0.899
Highlights	Q21	1	79.7	0.797	0.402

Table 7.2 (continued)

Voluntary disclosed item	Item code	Max. score	Dis-closure level %	Mean	Std. dev.
Shareholders'/Lender's diary	Q22	1	79.9	0.799	0.401
Group structure	Q23	4	63.9	2.554	1.768
Value added statement	Q24	6	61.9	3.715	2.887
Inflation reporting	Q25	5	18.6	0.931	1.727
Employment reporting	Q26	6	38.7	2.320	2.446
Environmental protection and social responsibility	Q27	6	14.8	0.886	1.721
Research and development projects	Q28	3	22.9	0.688	1.041
Taxation	Q29	4	89.8	3.591	1.048
Money exchanges with government	Q30	4	34.7	1.389	1.884
Interim report:					
- presentation	Int1	9	42.5	3.826	2.148
- comments on results	Int2	3	77.5	2.326	0.933
- date of publication	Int3	2	38.3	0.766	0.973
- future prospects	Int4	4	22.2	0.889	1.437

n = 1 128 (The disclosure scores of 188 companies for the six-year period, 1993 to 1998)

Table 7.3 contains a list of the disclosure items eliminated from the final empirical analysis. These items did not feature on the scoresheets for the full six-year period as a result of the fact that the rules were reviewed biannually.

After eliminating some of the items listed in table 7.3, 34 voluntary disclosed items from the annual report and four voluntary disclosed items from the interim report remained which were deemed to be useful to users for decision making purposes. These are the items that made up the final index which was used in this study.

Table 7.3 Items eliminated because they had not been included for the full period

Voluntary disclosed item	Item code	Maximum score obtainable					
		1993	1994	1995	1996	1997	1998
Composition of audit committee	Q12	-	2	2	4	4	4
Valuation of other fixed assets excluding fixed property	Q16	-	-	-	4	4	4
Corporate governance	Q31	-	2	2	9	9	9
Operating and financial review	Q32	-	8	8	8	8	8
Cash flow statement	Q33	-	-	-	2	2	2
Current liabilities	Q34	-	-	-	2	2	2
Analysis of operating income	Q35	-	-	-	4	4	4
Depreciation of tangible assets	Q36	-	-	-	2	2	2
Compliance with IAS	Q37	-	-	-	2	2	2

### 7.2.2 Selection of the population and selection criteria

In order to establish the extent of voluntary disclosure in annual and interim reports over the period 1993 to 1998, a population was drawn from the Johannesburg Stock Exchange consisting of companies listed under the industrial section. The sample population was limited to industrial companies firstly because the reporting requirements and disclosure methods of mining companies and financial institutions differ from those of industrial companies and secondly because the industrial section represents a relatively homogeneous group with regard to industry characteristics. This sector is thus suitable for interindustry analysis and lends itself to an examination of the informativeness of voluntary disclosure across enterprises.

In order to eliminate any possible bias arising from changes in disclosure practices due to changes in listing status, companies had to satisfy the following criteria to be included in the sample:

- companies had to be listed under the industrial section of the Johannesburg Stock Exchange throughout the six-year period from 1993 to 1998;
- the company must have published annual and interim reports for each year from 1993 to 1998;
- the company must not have changed its financial year end during the six-year period;
- the company must not have been delisted or suspended at any time during the relevant period; and
- the company must not have been subjected to a liquidation process during the period 1993 to 1998.

Table 7.4 provides the sample population of the number of companies in the various sub-sectors of the industrial sector that complied with these requirements. In 1998, the industrial sector on the JSE consisted of 23 sub-sectors of which the largest was the electronics sector (consisting of 46 companies) while the smallest sector was the paper sector (consisting of only one company). All the annual and interim reports of these industrial companies were analysed for the period of six years and the information was recorded on standard evaluation sheets. A detailed list of the names of the companies included in the first empirical study is given in annexure 3.

The sample resulted in a total of 1 128 evaluation score-sheets as six score sheets were used for each of the 188 companies. The 188 companies represented 58,6% of all the industrial companies listed in 1998. The exclusion of certain companies was attributable to delistings, mergers or financial year end changes with the result that no annual report was published for one of the years between 1993 and 1998.

### 7.2.3 Selection of the time interval

Annual and interim reports published during the years 1993 to 1998 were selected to establish the extent of voluntary disclosure. A six-year period was deemed necessary to achieve maximum reliability, validity and quality of research data.

Table 7.4 Sample population categorised by industry type

Industrial sub sector	Number of companies included in the sample 1993 -1998	% of research sample
Industrial holding	28	14.9
Beverages, hotels and leisure	13	6.9
Building, construction and allied	12	6.4
Chemicals, oils and plastics	6	3.2
Clothing, footwear and textiles	14	7.5
Food	19	10.1
Electronics and electrical	23	12.2
Furniture, household and allied	4	2.1
Engineering	11	5.9
Motor	6	3.2
Printing and publishing	12	6.4
Pharmaceutical and medical	6	3.2
Media	4	2.1
Stores	19	10.1
Steel and allied	2	1.1
Transportation	5	2.7
Paper	1	0.5
Development capital	3	1.6
<b>TOTAL</b>	<b>188</b>	<b>100</b>

### 7.2.3 Selection of the time interval

Annual and interim reports published during the years 1993 to 1998 were examined to establish the extent of voluntary disclosure. A six-year period was deemed necessary to achieve maximum reliability, validity and quality of research data.

### 7.3 Second empirical study on the perceptions of compilers and users

The primary purpose of the second study was to identify the extent of perception consensus on the importance compilers and users attached to each voluntary disclosed item in annual reports. A direct research approach was decided upon and a questionnaire was sent to constituents of annual reports which contained questions pertaining to the voluntary information disclosure needs of these groups. Financial information in the financial statements that was mandatory and which had been proven historically to be of little value when analysing a company's performance was excluded. Rather, attention was focused on the additional voluntary disclosed information as was identified in chapter 5.

The research methodology used for the second research study was based on that of studies that had been identified in chapter 6. This method of research entailed the collection of data relating to facts, attitudes, opinions and beliefs in a planned manner. In order to gather the data on the perceptions of constituents, users and compilers of annual reports were requested to examine lists of voluntary disclosed items in financial reports and to evaluate each item on a designated scale of importance by means of a mail questionnaire.

The following procedure was followed for the second empirical study, namely the perceived importance users and compilers attach to voluntary disclosed items:

- examination of the advantages and disadvantages of mail questionnaires, in order to choose the most appropriate method;
- choosing the design and content of the questionnaires;
- questionnaires and refinement;
- pilot testing of questionnaires;
- selection of the population group and specification of the selection criteria ;
- selection of the time interval; and
- data preparation and processing.

### 7.3.1 Reasons for choosing mail questionnaires

A mail questionnaire for gathering data was deemed appropriate because it has the following advantages as opposed to personal interviews:

- users and compilers of annual reports are accessible through the mail over a widely dispersed geographical area whereas personal interviews can become costly and time consuming;
- a relatively low cost is attached to mailing as opposed to personal interviews which entail travelling and subsistence expenses of interviewers;
- respondents are not pressured with a dead line for remitting the completed questionnaire;
- the relative ease of administering, processing and analysing data from this type of research strategy; and
- the absence of an interviewer eliminates interviewer and participant bias.

The researcher was aware of the drawbacks of mail questionnaires and endeavoured to eliminate them or at least minimise their impact:

- the poor response rate to mail questionnaires was improved by supplying stamped self-addressed return envelopes;
- because poor design may lead to ambiguous answers, care was taken to avoid biases in the wording of the descriptive labels assigned to the voluntary disclosure items and the use of the referent. For example, in this study the market price is dependent on the current economic situation;
- because this study limited the sources of financial information to only two, namely the annual report and the interim report of a company, alternative information sources - for example such as that provided by financial institutions and the press, general and business newspapers, financial magazines, prospectuses and quarterly releases by companies - which could have confused the issue, were eliminated.

Many of the following limitations were eliminated by pretesting the content and design of the questionnaires to avoid biases and this procedure will be discussed in detail in the next section:

- information could not be elaborated on as a result of limitations placed on the length of the questionnaires;
- the reliability of the information obtained was dependent on the willingness, sophistication and integrity of the respondents; and
- because there is a physical separation between the researcher and the recipient, as pointed out by Courtis (1992:32), interpretations, reactions and replies could not be observed and rectified if necessary.

### **7.3.2 Design and content of the questionnaires**

It was essential that careful consideration be given to the development, design and testing of the questionnaires in order to achieve maximum reliability, validity and quality of data captured by means of mail questionnaires. The questionnaires were designed to extract from internal and external users of annual and interim reports of the listed industrial companies the relative importance of voluntary disclosed items within the context of an evaluation of a company's shares as a potential investment. The questionnaires were designed to incorporate, where possible, similar voluntary disclosed items as those incorporated in the evaluation scoresheet which was used to measure the level of voluntary disclosure in annual reports. This was essential to ensure that the data provided a basis for meaningful comparison of perceptions on the extent of voluntary disclosure.

Based on a review of the literature on voluntary disclosed information (see chapter 6) two questionnaires were formulated with the objective of comparing the importance of voluntary disclosed information as perceived by users and compilers. Questionnaire A (annexure 7), was sent to the compilers of annual reports, namely the financial directors or chief accounting officers of industrial companies listed on the Johannesburg Stock Exchange during 1998. It was deemed necessary to obtain the personal perceptions

and opinions of these persons irrespective of the policy of the company in which they were employed, concerning the importance of voluntary disclosure in annual reports and its effect on share market prices.

Questionnaire B (annexure 9), was mailed to a random sample of corporate shareholders who privately owned shares on the Johannesburg Stock Exchange. The questionnaire was also sent to a random sample of financial analysts and stockbrokers, members of the Johannesburg Stock Exchange, financial editors, investment analysts employed by financial institutions such as banks, auditors and academics. The purpose of the questionnaire was to elicit the personal perceptions on the importance of voluntary disclosed items and the effect on share market prices of these persons.

In order to improve the response rate, respondents were advised in a covering letter (annexure 6 and 8) accompanying each questionnaire that their identity was not required and that their answers would be treated with strict confidentiality. However, for administrative and control purposes each questionnaire was assigned an individual code number. Individual respondents are therefore not identified in an annexure to protect their identities.

The length of the questionnaires were limited to eight A4 size pages in booklet form. In order to increase the response rate, respondents were assured that it would not take longer than ten minutes to complete the questionnaire. Attention was given to the way in which each question was compiled to make the completion of the questionnaire more interesting, so that some are multiple choice questions with single or multiple responses. Furthermore, open-ended questions were limited. In addition, respondents were motivated to respond by adding a request form in the covering letter for a copy of the results of the survey should they be interested.

For comparative purposes, both questionnaires were divided into three sections:

Section 1 dealt with the biographical profile of the respondent and was limited to five questions. The purpose of the questions was to gauge the level of sophistication of the

respondent. Four of the five questions on biographical profile of the respondents were exactly the same for both compilers and users:

- Question 1.1 the respondent's highest level of academic education;
- Question 1.2 the number of years' experience in the field of accounting or finance;
- Question 1.3 the respondent's primary reason for investing in shares of a company; and
- Question 1.4 how useful did the respondent find the annual and interim reports when making investment decisions.

Question 1.5 in questionnaire A, addressed to compilers, concerned their position or rank in the company while question 1.5 in questionnaire B (to users) concerned the size of the share portfolio held or managed by them. The descriptive statistics on the biographical profile of respondents will be discussed in paragraph 7.4.

Section 2 of both questionnaires contained general questions on perceptions of the usefulness and importance of corporate reports for investment decisions. Questions 2.1 to 2.7 were the same for both population groups:

- Question 2.1 Do you believe that the share prices on the Johannesburg Stock Exchange react immediately to information made public?
- Question 2.2 Which *five* most important sources of information are used by you when making an investment decision?
- Question 2.3 Do you use corporate reports for investment decisions?
- Question 2.4 What do you normally do upon receipt of a corporate report?
- Question 2.5 Who do you regard as the most important users of corporate reports?
- Question 2.6 How important are the characteristics of corporate reports that enhance the usefulness of information obtained from corporate reports?
- Question 2.7 Which sections of a corporate report are the most important?

Question 2.8 was worded differently to accommodate the opinions of the respective groups. In questionnaire A it was worded as follows: Has your company appointed the following committees in accordance with the requirements of the King Report on corporate governance? In questionnaire B it was worded as follows: Is it important to you as a user of corporate reports for a company to appoint the following committees in accordance with the requirements of the King Report on corporate governance?

Questionnaire A contained a further question, namely: Do competitions for best reporting practices affect your company's voluntary disclosure policy? The descriptive statistics of section 2 are discussed in chapter 2 and chapter 3.

Section 3 consisted of questions on perceptions of importance of a list of voluntary information items aligned with those incorporated in the evaluation scoresheet used to measure the extent of voluntary disclosure in annual and interim reports. The ten questions of this section were the same for both groups. (See Chapter 9) In both questionnaires, the compilers and users were required to rate or rank each disclosure item according to a designated importance scale. The scale was based on the level of importance they personally attached to voluntary disclosed items with regard to its price informativeness when making investment decisions. Similar scales were used by Firth (1984), McNally, Eng and Hasseldine (1982), Firer and Meth (1985) and Curtis (1992). A summary of which is available in chapter 6, table 6.3.

A five-point scale was used in this survey with 5 being very important, 4 being fairly important, 3 being moderately important, 2 being slightly important and 1 being unimportant. On a Likert scale such as this one, a score of 4 or 5 indicates that the item is perceived to be essential within its task framework. A score of between 3 or 2 indicates that the item is perceived as fairly important but not essential, while a score of 1 indicates that the item could be disregarded for disclosure purposes.

### 7.3.3 Pilot testing the questionnaires

In order to test the validity and clarity of the content and format of the questionnaires, a concept questionnaire with a covering letter was drafted and presented to a pilot group of academics, the promoter of the study and a selected group of share portfolio holders. The cover letter (annexure 4) emphasised the importance of the research, the nature of the subject being investigated and the reason why they were chosen for the pilot test. The names of the person who participated in the pilot group and their fields of expertise is provided in Annexure 5. Recommendations and criticisms made by the pilot group were taken into account in the final layout and content of the questionnaires. The questionnaires were also discussed in depth with statisticians at the University of Pretoria to guarantee that statistically usable information would be obtained.

### 7.3.4 Selection of the population and the selection criteria

The main objective of a corporate annual report, namely to be a communication tool between the management of the company and the owners of the company, formed the basis for the identification of the population groups for this study. It resulted in two population groups being chosen for this survey, namely:

- compilers of corporate reports, that is financial directors of industrial companies quoted on the Johannesburg Stock Exchange, because of their expertise and responsibility in preparing annual and interim reports; and
- users of corporate reports - consisting of shareholders, portfolio managers, stockbrokers, financial analysts, academics, financial advisors of financial institutions and public accountants - because of their interest in annual and interim reports.

#### 7.3.4.1 Selection of compilers of annual reports

Financial directors and financial managers are not only responsible for the preparation and contents of the annual report but represent a financially sophisticated and knowledgeable group. In addition, they are constantly exposed to new developments in reporting practices and are held accountable to shareholders and future shareholders as far as corporate governance is concerned.

Financial directors or chief accountants of industrial companies were selected for the following reasons:

- they are responsible for verifying the correctness of the *Financial Mail* evaluation sheet for that particular company;
- directors have over the years become familiar with the voluntary disclosure items that have been introduced into the *Financial Mail* competition; and
- these persons are responsible for the planning, design and contents of the annual report of their respective companies.

The target group chosen regarding the compilers of annual reports was the financial directors of all the quoted industrial companies on the Johannesburg Stock Exchange, as identified in the JSE handbook of 1998 (annexure 3 contains an alphabetical list of the names of these companies). The questionnaire and covering letter were sent to each of these persons. In an attempt to encourage a higher response rate, the questionnaire was accompanied by the *Financial Mail* Annual Report Award evaluation sheet (annexure 1) together with the criteria governing the allocation of marks for various voluntary disclosed items (annexure 2). Annual mailing of the evaluation sheet to the respective companies is a standard procedure for the Bureau of Financial Analysis of the University of Pretoria and the purpose is to give financial directors an opportunity to verify the evaluation sheet, comment on any discrepancies and offer suggestions.

A total of 357 questionnaires were mailed and 129 were returned and utilised in the study. The response rate of 36% was deemed adequate.

#### **7.3.4.2 Selection of users of annual reports**

The second target group, namely the users of annual reports, is a highly diversified group consisting of stockbrokers, share portfolio holders, accounting academics, accounting conference delegates, members of professional accounting bodies and individual investors from the general public. The group was selected on the basis that they are all primary users of corporate reports, are financially literate and are actively engaged in evaluating investments. Questionnaire B, a letter explaining the nature and purpose of the research project and a self-addressed stamped envelope to encourage response was mailed to the selected users. Users were randomly selected from lists of brokers, lists of clients obtained from brokers and lists of financial analysts. Of the 500 questionnaires mailed to users of corporate reports, 102 (20,4%) were returned and included in the sample.

#### **7.3.5 Selection of the time interval**

The period of the survey was selected to meet the following criteria:

- The questionnaires addressed to compilers were mailed towards the end of 1998 and early in 1999 together with the *Financial Mail* evaluation sheets which were completed as the 1998 annual reports were received and evaluated.
- The questionnaires addressed to users were mailed during June and July of 1998.

#### **7.3.6 Data preparation and processing**

The data collected on the questionnaires was edited for relevance, completeness and accuracy and incomplete questionnaires were discarded. The data was then coded by

the researcher and sent to the Department of Statistics of the University of Pretoria for processing. The captured data was then loaded onto the Statistical Analysis System (SAS) of the Bureau of Financial Analysis.

An analysis of variance (ANOVA) test, in which the mean scores of two or more groups are compared was used to determine whether there are statistically significant differences between the perceptions of the two sample groups. The most common level of statistical significance used in practice, that is 1% was used in this study. The tables in chapter 9 provide the F-values or the degrees of freedom, and probability values which indicates whether the results between the two groups are statistically significantly different or not.

#### 7.4 Descriptive statistics of the biographical profile of the respondents

The information obtained from question 1.1 of the questionnaires on the level of academic education of the respondents is presented in table 7.5.

**Table 7.5 Level of academic education of respondents**

Highest level of academic education	Compilers		Users	
	No. of respondents	% of total	No. of respondents	% of total
Matric	1	0,8	1	1,0
Diploma or technical qualification	4	3,1	3	2,9
Bachelors degree	8	6,2	14	13,7
Honours degree	6	4,7	3	2,9
Chartered accountant	93	72,1	57	55,9
Masters degree	17	13,2	16	15,7
Doctorate or PhD	0	0,0	8	7,8
<b>TOTAL</b>	129	100	102	100

The above statistics show that the majority of the respondents are highly qualified in the field of accounting with 93 (72,1%) of the compilers and 57 ( 55,9%) of the users being qualified chartered accountants. In a similar study conducted by Anderson and Epstein (1996:32) 63% of their respondents in the United States, 44% in Australia and 44% in New Zealand were university graduates.

Question 1.2 dealt with the number of years of experience in the field of investment analysis (users) or finance (compilers) and the statistics are combined in table 7.6.

**Table 7.6 Experience in the field of investment analysis**

Number of years experience	Compilers		Users	
	No. of respondents	% of total	No. of respondents	% of total
Less than 10 years	32	25.0	40	39.2
10 - 20 years	45	35.2	42	41.2
More than 20 years	51	39.8	20	19.6
<b>Total</b>	<b>128</b>	<b>100.0</b>	<b>102</b>	<b>100.0</b>

In view of the fact that no less than 96 (70,0%) compilers and 62 (60,8%) users had more than ten years of experience proves that the respondents were highly knowledgeable, financially sophisticated and experts in their field.

In order to determine the reliability of the data, it was necessary to obtain some idea of the compilers position in the company. This information was elicited by means of question 1.5, in questionnaire A. This question was aimed at establishing whether the respondent was actively engaged in the preparation of a corporate report and whether he or she was familiar with voluntary disclosure. Table 7.7 sets out the managerial positions held by the respondents of questionnaire A: 2,3% acted as managing directors, 48,1% held the position of financial director, 13,2% operated as chief accountants, 14,7% were financial controllers and 7,0% were company secretaries. The fact that 48,1% of the respondents held the position of financial director of the company implies that they were financially sophisticated and therefore could be held accountable.

Other positions held were group financial manager, financial manager, project accountant, senior manager of group finance, group tax advisor, planning and public relations executive, technical accounting manager, general manager of finance, corporate accountant and commercial director.

**Table 7.7 Managerial position held by compilers of corporate reports**

Position or rank held in the company	No. of respondents	% of total
Managing director	3	2,3
Financial director	62	48,1
Chief accountant	17	13,2
Financial controller	19	14,7
Company secretary	9	7,0
Other	18	14,0
Position not specified	1	0,8
<b>Total sample</b>	<b>129</b>	<b>100,0</b>

Question 1.5 in questionnaire B addressed the size of the respondents' share portfolio. The question was included in the questionnaire in order to determine the relative distribution of respondents in relation to the size of their share portfolios held or managed. Table 7.8 shows that 52 (51%) of the users held or managed share portfolios in excess of R100 000 with 9 (8,8%) holding or managing portfolios in excess of R50 million. The distribution of the users can therefore be regarded as being representative of the investor group as a whole.

**Table 7.8** Size of share portfolio/s held or managed by users of corporate reports

Size of share portfolio/s held or managed	No. of respondents	% of total
Not applicable as no share portfolio held	18	17,6
Less than R100 000	32	31,4
R100 000 to R999 999	31	30,4
R1 million to R50 million	12	11,8
Over R50 million	9	8,8
<b>TOTAL</b>	<b>102</b>	<b>100</b>

Respondents were next asked whether they used corporate reports for investment decisions. Respondents who answered positively were asked to complete the rest of the questionnaire while those whose response was “No” were asked to give a reason for not using annual reports. They were asked to return the questionnaire without answering the rest of the questions.

Of the user respondents, 71 (70,3%) answered “Yes” and completed the questionnaire, while 28 (27,7%) answered “No”. Seven (6,9%) of the latter group nevertheless completed the rest of the questions. As far as compilers were concerned, 101 (78,9%) answered “Yes” to the question and completed the rest of the questionnaire. The remaining 27 (21,1%) answered “No” and returned the questionnaire without completing it further.

In the next question, users and compilers were asked to describe how they treated a corporate report. From their response, which is illustrated in table 7.9, it would appear that only about a quarter 21,2% of the total respondents read a corporate report in depth for analysis purposes, while most 77,2% simply browsed through it for specific information.

**Table 7.9** Users' and compilers' responses to the question: What do you normally do upon receipt of a corporate report?

Action taken on receipt of a corporate report	Users		Compilers		Weighted average %
	No. of respondents	% of total	No. of respondents	% of total	
Read it in depth for analysis purposes	25	31,6	16	14,0	21,2
Browsed through it for specific information	53	67,1	96	84,2	77,2
Discarded it without reading it	1	1,3	1	0,9	1,0
No opinion	0	0,0	1	0,9	0,5
<b>Total</b>	<b>79</b>	<b>100,0</b>	<b>114</b>	<b>100,0</b>	<b>100,0</b>

## 7.5 Conclusion

The different research methodologies and research instruments that were used in this study, were explained in this chapter. The first step was to design and implement a disclosure index in order to measure the extent of voluntary disclosure in corporate reports of listed South African companies. Secondly, the perceptions of compilers and users on the relative importance of the voluntary disclosed items were surveyed by means of questionnaires.

As the research instruments are cardinal to the success of this study, emphasis was placed on the following aspects:

- development, design, content and layout of the disclosure index and questionnaires;
- verification of the score sheets and pilot testing of the questionnaires;
- selection of the population and selection criteria;
- preparation of the covering letters to accompany the questionnaires; and
- determination of the time interval.

The size of the sample companies complying with the selection criteria were tabulated according to industry type and the biographical profile of the respondents were summarised in tabular form in order to measure their level of financial sophistication.

In the next two chapters, the findings of the two research studies are presented, discussed and assessed.