

SEGMENT REPORTING AND TRADE UNIONS IN SOUTH AFRICA

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A thesis submitted to the Faculty of Commerce, University of Natal, in fulfilment of the requirements for the degree of Master of Accountancy.

ABSTRACT

During the early 1970's two trends emerged in the South African business environment. The first trend was that the number of diversified enterprises started increasing, and the second trend was that there was a steady increase in the activities and power of trade unions. These two trends were considered during the evaluation of prior research on the topic of segment reporting.

Prior research on segment reporting focused on the usefulness of segment reporting, the problems associated with segment identification, the objections to providing segment information, and the extent to which diversified companies disclose segment information.

Using the trends identified and the prior research, the research problem developed was as follows: are the segment disclosures of South African listed companies sufficient to meet the information needs of trade unions in South Africa, and if not, what additional information do trade unions require?

The research problem was limited to listed companies as it was identified that trade unions may experience difficulty in obtaining information which is not available to the general public. *

In addressing the problem, the following three objectives were formulated:

- (i) to determine if trade unions use segment information,
- (ii) to determine what their requirements are in respect of segment information, and
- (iii) if trade unions do not use segment information, to determine why segment information is not used.

In order to achieve these three objectives, it was necessary to conduct a survey of trade unions on their use of segment information. This survey was undertaken as a series of replicative case

studies with the primary data being obtained by means of interviews. Generalisations were then made about the use that trade unions make of segment information.

The main conclusions to this research were:

- (i) trade unions use segment information unless they are part of a national bargaining forum,
- (ii) trade unions consider segment information to be at least as useful as consolidated information, and
- (iii) trade unions use segment information primarily to form the basis for wage negotiations and to assess overall company performance.

Once these conclusions had been drawn, the results were compared to results of a survey of investment analysts in South Africa, and evaluated against proposals contained in the International Exposure Draft (E51) on segment reporting. There were similarities between the segment information needs of trade unions and investment analysts, although the trade unions required more information regarding employees and the remuneration of management. Trade unions also indicated that the proposals contained in the exposure draft would be acceptable, although the unions would require more employee information on a segment basis to be disclosed.

Thus, the research project achieved its objectives. In addition, areas for further research within the area of segment reporting were identified.

DECLARATION

I declare that this thesis is my own work. It is being submitted in fulfilment of the requirements for the degree of Master of Accountancy in the University of Natal. It has not been submitted before for any degree or examination to any other University.

L.D. Peters

18 March 1997

PREFACE

My sincere thanks go to Rob Jackson for his guidance throughout the course of this research, and to Peter Cottrell for his support, encouragement and patience over the period of the research project. I would also like to thank the trade union representatives who participated in the survey for their time and the insights they provided into segment reporting.

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CHAPTER I: INTRODUCTION

1. BACKGROUND TO THE TOPIC

During the early 1970's two trends emerged in the South African business environment which provided the impetus for this topic. The first trend was that the number of diversified enterprises started increasing, and the second trend was a steady increase in the activities and power of trade unions. These trends continued to the present, impacting on the need for increased accounting disclosures: on the one hand, as companies diversify their operations, so users require information about that diversification, and on the other hand, as trade unions grow in power and influence, their need for accounting information increases.

The diversification trend led users to call for more information than was previously being reported in the annual financial statements of enterprises. The South African Institute of Chartered Accountants responded to this call by issuing a statement on segment reporting in 1986. The objective of this statement is to provide users of financial statements with information which would assist in assessing the relative size, contribution, and growth of the different industries and geographical areas in which the enterprise operates. The disclosures required in terms of the statement are intended to provide useful information to different financial statement user groups.

To date, one research project has been undertaken in South Africa to evaluate the statement on segment reporting from a user's perspective. The use made of segment disclosures has been well-researched internationally. The focus has been on testing the usefulness of segment disclosures in respect of:

- (i) earnings predictions,
- (ii) the effect on share price valuations, and
- (iii) the assessment of risk facing the company.

In addition, researchers have surveyed preparer and user groups to clarify the issues surrounding segment reporting. The user group surveyed has traditionally been the investment analyst. Conversely, there has, to date, been no research on the segment information needs of South African trade unions.

Arising from this background, it was evident that there was scope to extend the research on evaluating the statement on segment reporting to another user group, namely trade unions.

2. OBJECTIVES OF THE RESEARCH

Arising from this background, it was decided to survey trade unions as users of segment information.

The objectives of this study are therefore:

- (i) to determine if trade unions use segment information,
- (ii) to determine what their requirements are in this regard, and
- (iii) if trade unions do not use segment information, to determine why segment information is not used.

The formal development of the research problem and subproblems are set out in chapter III.

3. METHODOLOGY

In order to achieve the above objectives, a research methodology needed to be identified that would result in meaningful responses being obtained from trade unions. The methodology would also need to take into account the fact that trade unions have not been surveyed to date as a user group of segment information. Consequently, a survey of trade unions in South Africa was undertaken as a series of replicative case studies. The data was collected by means of interviews.

The results of this survey allowed theoretical generalisations to be drawn concerning the use that trade unions make of segment information, and what additional segment information is required by trade unions.

4. IMPORTANCE OF THE RESEARCH

There are two areas in which the research is considered important. First, the research represents a preliminary investigation into the financial reporting requirements of trade unions in South Africa. Second, trade unions represent a potential user group of segment information in South Africa. It is considered that the extension of research on segment information to another user group will allow more meaningful comment to be made on the South African statement on segment reporting (AC115).

5. LIMITATIONS OF THE RESEARCH

A possible limitation arising out of the research methodology is that it is not possible to statistically evaluate the results.

6. LAYOUT OF THE REPORT

The research report is set out in the following six chapters. The function of each of these chapters is briefly explained:

- (i) chapter II: a synopsis of the significant prior research and journal articles on segment reporting,
- (ii) chapter III: the issues arising from the literature survey are summarised, and the research problem is developed from these issues,
- (iii) chapter IV: the research methodology used to undertake the survey of trade unions is explained,
- (iv) chapter V: the results of the survey of trade unions are presented,
- (v) chapter VI: theoretical generalisations are drawn from the results, compared to the results of the survey of investment analysts, evaluated against possible future

changes to the accounting statement on segment reporting, and used to answer the research problem, and

- (vi) chapter VII: a summary of the research and a statement of the main findings are set out with recommendations and areas identified for further research.

The questionnaire used in the survey of trade unions is included as Appendix A, along with the responses to the close ended questions.

CHAPTER II: LITERATURE SURVEY

1. INTRODUCTION

The issue of segment reporting has been characterised by extensive empirical research. The primary issue addressed in this empirical research was whether segment information provided useful information. In addition, the opinions of users and preparers of segment information have been surveyed.

This chapter starts with a summary of core issues addressed by certain authoritative pronouncements. The chapter then reviews the initial research into segment information, followed by a review of other research and journal articles. The chapter concludes with a summary of the research conducted to date in South Africa.

2. AUTHORITATIVE PRONOUNCEMENTS

Five authoritative pronouncements were reviewed. Two International Accounting Standards Committee pronouncements were reviewed, namely International Accounting Standard 14 "Reporting Financial Information by Segment" (IAS14) which was issued in 1983, and the International Exposure Draft E51 "Reporting Financial Information by Segment" (E51) which was issued for comment in 1995. The pronouncements of three countries were also reviewed. The first pronouncement was the United States' Statement of Financial Accounting Standards No. 14 "Financial Reporting for Segments of a Business Enterprise" (SFAS14) which was issued in 1976. The second pronouncement was the United Kingdom's Statement of Standard Accounting Practice 25 (SSAP25), which was issued in 1990. The third pronouncement was the South African Statement of Generally Accepted Accounting Practice AC115 "Reporting Financial Information by Segment" (AC115) which was issued in 1986.

In this section, core issues identified in these pronouncements are summarised. These core issues are discussed by topic, namely the objectives of segment information, the requirements to present segment information, the definition of a segment, the disclosures required by the pronouncements, and the issue of a “seriously prejudicial” clause.

2.1 The objectives of segment information

Segment information is presented to enable users of financial statements to make informed decisions about diversified enterprises based on information that is useful and relevant. The five pronouncements state similar objectives for segment information. The objectives of segment information can be summarised as providing information to:

- (i) assess the relative size, profit contribution and growth trend of the different industries and geographic areas in which a diversified company operates (IAS14, AC115),
- (ii) assess the past performance of the enterprise (IAS14, E51, SFAS14),
- (iii) assess the future prospects of the enterprise (IAS14, SFAS14, SSAP25),
- (iv) assess the risks and returns of an enterprise (E51),
- (v) make more informed judgements about the enterprise as a whole (E51), and
- (vi) enable users to be aware of the impact which changes in significant components may have on the business as a whole (SSAP25).

Thus, segment information assists users in understanding past results and in predicting the future results of an enterprise.

2.2 Requirements to present segment information

The five pronouncements differ with regard to the enterprises which have to comply with their requirements. E51 is the least prescriptive of the five sources reviewed in

that it only applies to listed enterprises. SFAS14 is the most prescriptive as it applies to all enterprises which issue financial statements.

The other three pronouncements vary between these two extremes. AC115 and IAS14 are applicable to listed enterprises and other economically significant enterprises. SSAP25 requires all public limited companies, banking companies, insurance companies and medium sized companies as defined by the United Kingdom's Companies Act to comply with the provisions. In addition, all other entities are encouraged to apply the provisions of SSAP25 in their financial statements.

2.3 The definition of a segment

There are two aspects to the definition of a segment. The first relates to the terminology used by the authoritative pronouncements, and the second to the guidelines for the identification of segments.

2.3.1 Terminology

Four of the pronouncements (IAS14, SFAS14, SSAP25 and AC115) use the terms industry and geographic segments. These definitions are worded similarly, and for the purposes of this research and report, the definitions of AC115 are used. To achieve completeness, the AC115 definitions of a "segment", an "industry segment" and a "geographic segment" are included in this section.

AC115 defines a segment as "industry and geographical components whose activities, assets and results of operations are clearly distinguishable physically, operationally and for financial reporting purposes, from the other activities, assets and results of operations of the enterprise" (AC115: para .05).

AC115 defines an industry segment as “the distinguishable components of an enterprise each engaged in providing a different product or service, or a different group of related products or services, primarily to parties outside the enterprise” (AC115: para .06).

AC115 defines a geographic segment as “the distinguishable components of an enterprise each engaged in operations in individual countries or groups of countries within particular geographical areas as may be determined to be appropriate to the particular circumstances of an enterprise” (AC115: para .07).

The fifth pronouncement, E51, uses the term “business” segment in place of an industry segment. E51’s definition of a business segment is similar to the definition of an industry segment in AC115.

2.3.2 Segment identification

The pronouncements reviewed do not provide specific rules for the identification of segments. The reasons for this will be addressed under section 4 below. The pronouncements do offer the following guidelines for identifying industry segments:

- (i) segments can be identified based on the judgement of management (IAS14, SFAS14, SSAP25, AC115),
- (ii) segments can be identified based on the enterprise’s organisational structure (IAS14, E51, AC115), and
- (iii) segments can be identified based on the enterprise’s internal financial reporting system (E51, SFAS14).

Not all segments identified should be reported. IAS14 states that the number of segments should be limited “to a reasonable number so as to avoid unnecessary complexity” (IAS14:8 para14). All the pronouncements offer the following guidelines for identifying reportable segments:

- (i) 10% of consolidated revenue, or
- (ii) 10% of operating profit, or
- (iii) 10% of total assets.

Practically, this means that no company should be reporting more than ten segments in its annual financial statements.

2.4 The disclosures required by the pronouncements

The pronouncements are not harmonised in respect of the disclosures they require. Each statement requires the enterprises to disclose the same information for each industry and geographic segment identified, although across statements the information required for each industry and geographic segment differs (refer table 1).

The exposure draft, E51, does not require the same information to be disclosed for each industry and geographic segment. E51 distinguishes between primary and secondary reporting formats. Each enterprise is required to decide whether the primary reporting format will be industry or geographically based. The secondary reporting format will then be the other basis. The primary reporting format is determined by the “dominant source and nature of an enterprise’s risks and returns” (E51: para 22). This would usually be indicated by the internal reporting structure of the enterprise. The disclosure requirements for the secondary reporting format are less onerous than for the primary reporting format.

Table 1 summarises the disclosure requirements of the five pronouncements. The column E51(P) represents the disclosures required for primary segments in terms of E51, and the column E51(S) represents the disclosures required for secondary segments in terms of E51.

Table 1: Disclosure requirements of authoritative pronouncements

	IAS14	E51(P)	E51(S)	SFAS14	SSAP25	AC115
A description of the activities of each reported industry segment	r	r	r	r	r	r
The composition of each geographic segment	r	r	r	r	r	r
Sales or other revenue	r	r	r	r	r	r
Revenue derived from other segments	r	r		r	r	r
Segment result	r	r		r	r	r
Segment assets employed	r	r	r	r		r
Segment liabilities		r				
The basis of inter-segment pricing	r	r		r		r
A reconciliation between the segment information and the aggregated information in the annual financial statements	r	r		r	r	r
Depreciation, depletion and amortisation expense	s	r		r		s
Other significant non-cash expenses		r				
Research and development costs	s					s
Capital expenditures	s	r	r	r		s
Segment net assets					r	
Major customer information				r		
Contingencies and commitments		r				
Investment income	s	r		r	r	
Changes in identification of segments	r			r	r	r
Changes in accounting practices used in reporting segment information	r	r		r		r
Number of employees	s					s
Abnormal items and extraordinary items	s	r		r		
Extraordinary items		r				
r = required disclosure						
s = suggested disclosure						

Of all the disclosures listed in table 1, only six disclosures are required by all five of the pronouncements. E51 is the most onerous of all the pronouncements in respect of the primary reporting format, although it requires the least information in respect of the secondary reporting format.

This diversity of practices has been noted before. Ahadiat and Stewart (1992) found considerable diversity of practices and disclosure requirements for geographic segment reporting among the international standards-setting organisations (Ahadiat and Stewart: p 56). They called for the harmonisation of accounting standards to improve comparability, provide better communication, lower costs and contribute to more efficient management.

The South African Institute of Chartered Accountants, through the Accounting Practices Board, embarked on a harmonisation strategy in 1993. The objective of this strategy is to bring the South African statements of generally accepted accounting practice in line with the statements issued by the International Accounting Standards Committee. Everingham and Hopkins (1982) stated that the reason for this strategy was as a result of “a greater awareness of the need to achieve standards which are internationally acceptable” (Everingham and Hopkins: p 4).

2.5 The “seriously prejudicial” clause

The final core issue to be addressed relates to the “seriously prejudicial” clauses contained in SSAP25 and AC115. AC115 para .02 states that where “in the opinion of management, the disclosure of any information required by this statement would be seriously prejudicial to the interests of the enterprise, that information need not be disclosed, but the fact that any such information has not been disclosed must be disclosed”. The seriously prejudicial clause of SSAP25 (para 43) is worded similarly to that of AC115.

This clause enables enterprises not to disclose segment information. In light of the objectives of the pronouncements discussed in section 2.1 above, this would limit the information that is available to users of financial statements.

2.6 Summary

Five core issues have been addressed through a review of the authoritative pronouncements. The pronouncements all offer similar objectives for segment reporting and definitions of terms. The pronouncements differ with regard to the enterprises which are required to comply with their provisions, and in respect of the segment disclosures that should be made. In addition, only two of the pronouncements contain a seriously prejudicial clause. These core issues will be further investigated in sections 3 to 5 below.

3. INITIAL RESEARCH

Two initial research projects were undertaken to evaluate segment reporting. Both focused on the preparers and users of segment information, and tried to reconcile the two viewpoints. Both these projects were conducted in the absence of any statement on segment reporting, although some companies were making voluntary segment disclosures in their financial statements.

This section will discuss the reasons for the research projects, the research methodologies employed, the problems identified with providing segment information, the reasons for opposition to reporting segment information, and the need for segment information.

3.1 Reasons for initial research

In 1968 Mautz attempted to answer the question “whether diversified companies should be expected to report financial operating information on a less than total

company basis in their published financial statements” (Mautz: p 7). The area of focus was the investors’ need for financial information that would enable them to make intelligent investment decisions.

Backer and McFarland (1968) were concerned with the “controversy over how much segment information can be disclosed without serious damage to stockholders, creditors, and others” (Backer and McFarland: pp 2-3).

3.2 Research methodologies of initial research

Mautz’s research methodology was to conduct two surveys, one of company executives, in their capacity as preparers of segment information, and the other of financial analysts, in their capacity as users of segment information, on various segment reporting issues. The results of these surveys were evaluated empirically.

Backer and McFarland proceeded with a qualitative approach. They held “depth interviews with carefully chosen groups of financial analysts and commercial bankers” (Backer and McFarland: p 1) to identify the information these users needed. The executives of large industrial corporations were also interviewed to ascertain reasons for their company’s reporting practices. The executives were also asked to respond to the results of the survey of financial analysts and commercial bankers.

3.3 Problems with providing segment information

Mautz, through the survey of preparers, identified four main difficulties in providing segment information. The first difficulty related to the allocation of common costs to two or more segments. He concluded that common costs were often significant in relation to the net income of the company, and could not be ignored for segment reporting. He also concluded that as companies used a variety of bases for allocating common costs, the choice of basis could have a significant effect on the results of

each segment. The problem therefore lay in the method of allocating common costs among the different segments of a company.

Mautz also sought the financial analysts' opinions on the difficulty related to common costs. The majority of the analysts indicated that they did attempt to allocate common costs to segments to obtain segment profit figures. Some of the bases used by analysts for this allocation include sales, estimated assets invested in each segment, and gross profit on sales. Where companies did allocate common costs, the financial analysts' preferred bases for this allocation by companies, were firstly assets employed and secondly sales or other gross revenue.

The second difficulty, both for preparers of segment information and for the users thereof, related to the issue of intersegment transactions. A number of pricing methods were found to be used, including cost, market price, negotiated price, and cost plus a fixed fee or rate of mark up. Mautz made the point that unless a segment had substantial transactions outside the company, the segment should not be separately reported. The survey of financial analysts identified that "intra-company transactions which are equal to more than 10% of the reported transactions of a segment of a company reduce the objectivity of the reported data to a point where they would have real reservations about relying on them" (Mautz: p 39). Thus, where a segment had substantial intersegment transactions, this could affect the use made of segment information by financial analysts.

In relation to users views on intersegment transactions, Mautz found that when such sales reached between ten and twenty percent of segment sales, the resulting net profit figures were seen as less objective than desirable for analytical purposes. In response to this, a large majority of the financial analysts indicated that where intersegment transactions were material, a "deemed profit" figure (segment sales less direct expenses) would be useful as it would be more objective.

The third difficulty related to the identification of segments for reporting purposes. This issue was seen as problematic by both financial analysts and company executives. The most preferred method selected by analysts (43.2%) was for the method of segmentation to be established uniformly for all companies on some product basis such as the United States' Standard Industrial Classification system. However, the desirability of this method was questioned. Relatively few people were familiar with the Standard Industrial Classification, and it would be difficult to apply due to the substantial number of industry classes identified. The substantial number of classes was problematic for the analysts. When analysts were asked how many segments a company should report, the majority of analysts indicated that they would prefer to deal with no more than twelve segments. The second most preferred method of segment identification (28.5% of the analysts) was to allow each reporting company to define its own segments as it finds most useful.

The majority of the preparers, on the other hand, wanted to use organisational units or products, product lines or services as the basis for identifying segments.

Mautz concluded that using an industrial classification system was inappropriate due to the diversity within companies. In addition, he concluded that no other authoritative system of industry classifications existed which would be applicable to all companies. He argued that for some companies market classification based on geographic or customer distinction could be useful, whereas for other companies, the legal structure might provide a satisfactory means of segmentation. His overall recommendation was that a flexible approach to segment identification should be allowed, even to the extent of allowing "those reporting to select a basis appropriate for the specific company" (Mautz: p 43).

The fourth difficulty related to differing points of view between company executives and financial analysts on the extent, nature and reliability of information disclosed. Company executives were concerned that the data disclosed should be informative without being misleading. Mautz identified reluctance on the part of company

executives to “issue and assume responsibility for figures until they are confident that the figures are reliable, their limitations recognised, and steps taken to assure their appropriate use” (Mautz: p 22). On the other hand, financial analysts were concerned about obtaining information for making and evaluating investment opportunities. Financial analysts were not as concerned as company executives with the nature and reliability of the information.

The financial analysts were further asked by Mautz whether an independent audit of segment reports was desirable. 56.2% of the analysts indicated that an audit of segment reports would be desirable, with 27.2% considering it to be essential. As a further point, analysts were asked whether an audit would add satisfactory objectivity to segment reports in relation to common cost allocations, use of intra-company pricing and definition of segments. Over 70% of the respondents to each issue answered positively.

Backer and McFarland also identified the issues of common costs and segment identification as difficulties. Their findings were similar to the discussion above and are not summarised further. In addition, through their survey of preparers, they identified a number of reasons why company executives were opposed to providing segment information.

3.4 Reasons for opposition to reporting segment information

Backer and McFarland attempted to determine the reasons why preparers were opposed to reporting segment information. The four most common reasons given by preparers, in order of frequency, were as follows:

- (i) belief that data will not be properly understood (Backer and McFarland: p 79),
- (ii) fear that segment information would be used to a company’s disadvantage by competitors and customers (Backer and McFarland: p 82),
- (iii) the organisational structure was not amenable to segment reporting (Backer and McFarland: p 80), and

- (iv) segments of different companies are not comparable with each other (Backer and McFarland: p 80).

3.5 Need for segment information

Mautz's research indicated a strong desire by financial analysts for segment information. Financial analysts were asked if they attempted to determine operating results by segments from available information. 90.8% of the respondents answered positively. However, they indicated that the financial statements did not provide sufficient information to perform this task adequately. Despite this response, the most important sources of segment information to the analysts, in order of importance, were financial statements, other material in annual reports, industry trade journals, other trade sources and interviews with management. Mautz concluded that as financial analysts were attempting to segment diversified companies on the basis of inadequate information, the "possibility that the resulting investment recommendations and decisions may be less sound than they ought to be appears an unavoidable conclusion" (Mautz: p 115).

Mautz concluded that the information which financial analysts most wanted companies to disclose on a segment basis were gross revenue, net income, operating profit, gross profit margin and total assets committed. The purposes of this information were listed as:

- (i) determining sources and trends of earning power (Mautz: p 115),
- (ii) determining a proper price to earning ratio for the company (Mautz: p 115), and
- (iii) evaluating the ability of management to achieve internal and external growth (Mautz: p 118).

Backer and McFarland found that "investors and creditors have an important need for operating results of major segments of diversified companies" (Backer and McFarland: p 99). Their survey focused primarily on the use of information concerning revenue and contributions for each segment. They concluded that

“carefully designed reporting techniques can meet major needs which investors and bankers have for information about segment profitability without serious damage to the reporting companies” (Backer and McFarland: p 77).

3.6 Evaluation and conclusion on initial research

As a result of his research, Mautz concluded that “ [d]iversified companies do present special problems to investment analysts, problems both in understanding the extent and nature of their operations and of predicting the future growth and success of the such companies” (Mautz: p 126). The following recommendations were made in respect of segment reporting:

- (i) diversified companies should meet extended disclosure requirements such as providing segment information (Mautz: p 157),
- (ii) management would best be able to separate the company into realistic segments for reporting purposes (Mautz: p 158), and
- (iii) for each segment identified by management, the management should, in the annual financial statements identify and describe each segment, disclose significant changes in the composition of segments from the prior year, disclose sales or other gross revenue for each segment, disclose the relative contribution of each segment to the income of the diversified company, describe the method of intra-company pricing or allocating common costs, and indicate the limitations of the usefulness of segment information (Mautz: p 158).

Backer and McFarland concluded that investors and creditors had a need for segment information in order to make investments and credit decisions. They also found that management could best identify segments, but offered as a guideline that each segment should be relatively homogenous in its response to economic conditions.

4. OTHER RESEARCH AND JOURNAL ARTICLES

Other research and journal articles extended the issues raised by Mautz and Backer and McFarland. The discussion focuses on six areas, namely, the use of segment information to predict future revenue and earnings, the use of segment information to assess the risk of a company, the effect of segment information on the share price of listed companies, the issue of industry and geographic segment identification, the objections to providing segment information and the extent of disclosure of segment information.

4.1 Use of segment information to predict future revenue and earnings

One of the objectives of segment information identified in section 2.1 above, is to provide information which is useful to assess the future prospects of a diversified company. Comprehensive research has been done to determine what effect industry segment information has on revenue and earnings predictions. This section summarises the conclusions of the significant research projects in this area.

These projects can be divided into five groupings based on their conclusions, namely that segment information improves revenue and earnings predictions, segment information improves revenue predictions but not earnings predictions, segment information affects earnings predictions, segment information does not improve revenue or earnings predictions, and other findings.

4.1.1 Segment information improves revenue and earnings predictions

Kinney undertook empirical research in 1971 to test the hypothesis that segment information provided a better basis for earnings predictions than consolidated information. The premiss for this hypothesis was that segment disclosures provide information on the different rates of growth, profitability, and degrees of risk faced by the different segments of a business. His research methodology used relatively simple

predictive models, and acknowledged that “better predictions could be made by skilled financial analysts using subjective judgements and more sophisticated models” (Kinney: p127-128). The predictive models devised and used were two consolidated-based models and two segment-based models. Kinney found that “even on the diverse basis reported, however, predictions based on segment sales and earnings data and industry predictions were on the average more accurate than predictions based on models using consolidated data alone” (Kinney: p136). This research was the first to use models to assess the predictive ability of segment information. The results indicated that better predictions of revenue and earnings for a diversified company were made when segment information was incorporated into the models.

Collins (1976), who extended the work undertaken by Kinney, was able to perform extended statistical tests as a result of the increased availability of segment information. The Securities and Exchange Commission (SEC) had increased their disclosure requirements in the period between Kinney and Collins’ research. He used several time-series models for consolidated predictions, and adjusted the segment-based models used by Kinney. Similarly, he concluded that segment information provided “significantly more accurate estimates of future total-entity sales and earnings” (Collins: p 175).

Other studies which concluded that industry segment information resulted in reduced forecast errors for revenue and earnings predictions were conducted by Baldwin (1984), Sayers (1985), and Silhan and McKeown (1985), although the latter research indicated that there was very little difference between the forecast errors for earnings predictions using segment and consolidated information.

4.1.2 Segment information improves revenue predictions but not earnings predictions

In a study of United Kingdom companies, Emmanuel and Pick (1980) tested the null hypothesis that there was no difference in predicting levels of sales and earnings between using segment based prediction models and consolidated prediction models.

They adapted the segment-based models used by Kinney (1971) and Collins (1976). The results indicated that for earnings prediction, forecast errors were lower using the consolidated prediction models.

The reasons suggested by Emmanuel and Pick for this finding were threefold. First, a company has as an objective to maintain a certain profit to revenue ratio over time for the company as a whole and not for individual segments. Second, the profit margins for segments are distorted through the allocation of common costs and distortions caused by intersegment transactions. Third the segment profit margins “may fluctuate wildly” (Emmanuel and Pick: p 211), whereas company profit margins remain more constant. Emmanuel and Pick stated that this would enforce the wisdom of diversifying. For revenue predictions, they found that the segment-based models yielded more accurate forecasts.

4.1.3 Segment information affects earnings predictions

In a study assessing the effect of segment information on share prices, Kochanek (1974) assessed the effect of segment information on earnings prediction. He identified thirty-seven diversified firms for his research. He statistically measured the effect that segment information had on earnings predictions by measuring the correlation between the change in annual reported earnings per share and the change in the share price. Based on the research conducted, Kochanek concluded that “segmental results aided investors in anticipating future earnings changes” (Kochanek: p 256).

Barefield and Comiskey (1975) continued the research in the area of using segment information for earnings predictions. They used the earnings forecasts of brokerage houses, and other Wall Street researchers and analysts. The forecasting error of these forecasts was statistically computed. In addition, Barefield and Comiskey incorporated the number of segments reported by companies into their analysis. Their results supported the conclusion drawn by Kochanek that there was a relationship

segment disclosures and the ability to forecast earnings for diversified companies. Their results were not as conclusive as Kochanek's as a result of incorporating the number of segments reported by companies into their analysis. Furthermore, they acknowledged possible statistical bias in their research because they did not "control industry membership" or other factors that could influence the volatility of earnings.

Silhan (1983) compared quarterly and annual forecasts of earnings. He forecast earnings using revenue and earnings for combinations of consolidated and segmented data. His results indicated that annual forecasts using segment revenue and margins did not outperform annual forecasts using segments sales and consolidated margins. However, for quarterly forecasts, using segment revenue and margins did improve the forecasts. He concluded that segment margins were useful for making "short term extrapolative forecasts of conglomerate earnings" (Silhan: p 347).

4.1.4 Segment information does not improve revenue or earnings predictions

Silhan (1982) wanted to isolate the effect of using segment earnings to forecast consolidated earnings. In order to eliminate the problems inherent in the study of diversified companies, namely transfer pricing and the allocation of common costs, Silhan used simulated mergers of existing, non-diversified companies. The conclusion was that segment earnings were of limited usefulness in predicting consolidated earnings.

Similarly, Hopwood, Newbold and Silhan (1982) attempted to determine the conditions under which disaggregated information could result in improved predictions of annual earnings. This study also employed an approach of simulating mergers of existing companies. They concluded that "gains in predictive ability through disaggregation would be unlikely in the case of annual earnings data reported by pure conglomerate firms" (Hopwood, Newbold and Silhan: p 731). They acknowledged that this result may not be applicable to other types of firms.

4.1.5 Other findings

Garrod and Emmanuel (1985) tested whether revenue forecasts were affected by the degree and nature of diversification. They concluded the “the information content of disaggregated data varies with the diversification profile of the companies” (Garrod and Emmanuel: p 143). In other words, this meant that the more a company diversified, the less revenue predictive information was contained in segment information. In addition to this conclusion, their results indicated that revenue predictions using a segment-based model provided the same level of accuracy as the consolidated-based model. Their conclusion was that segment information was not useful for revenue predictions.

These researchers identified the following reasons why their results differed to those of other researchers, namely that:

- (i) they made use of subjective judgements to match reported segments with an industry. They did not consult the Chairman’s and Director’s reports, and therefore insights which may have improved the quality of matching segments with an industry were not used (Garrod and Emmanuel: p 144).
- (ii) the number of industries for which forecasts are available in the United Kingdom is significantly less than the number available in the United States (Garrod and Emmanuel: p 144).

Garrod and Emmanuel acknowledged that these two factors may have affected the predictions of revenue by the segment-based model.

Balakrishnan, Harris and Sen (1990) tested whether geographical segment information potentially provided information that would improve revenue and earnings predictions. Using parametric and nonparametric test statistics, they found that the use of geographic segment information resulted in “statistically significant increases in predictive accuracy” of earnings (Balakrishnan, Harris and Sen: p 313). The results for revenue predictions were not as conclusive as the earnings predictions,

although it was found that geographic segment information did enhance the ability to predict revenue.

Sentenev and Bazaz (1992) conducted a similar study to Balakrishnan, Harris and Sen. They also concluded that geographic segment disclosures improved investors' predictions for earnings.

4.1.6 Summary

The research indicated that the majority of the researchers had concluded that segment information improved revenue predictions. The researchers who reached a contrary conclusion, gave possible reasons for their different results.

The research did not, however, indicate consensus amongst researchers on the effect of segment information on earnings predictions. The early research indicated that the forecast error was reduced when segment margins were used. However, later research concluded that segment information did not affect the forecast error. It was noted that this later research was performed using simulated mergers and not actual results of diversified companies.

4.2 Use of segment information to assess the risk of a company

The following section summarises the research undertaken on the use of segment information to assess the market risk faced by a diversified company.

Kinney (1972) used portfolio theory to first present an accounting measure of diversification for large, multi-segment companies. Second, Kinney related this measure of diversification to the market determined risk. The purpose of this research was to "provide some empirical evidence as to the market evaluation of diversification at the company level" (Kinney: p 339). He found that diversified companies had a lower level of market risk than companies which were not diversified. He noted that

lower level of market risk than companies which were not diversified. He noted that due to the small number of companies and time periods evaluated, the interpretation of his results may have been limited, and encouraged further research.

In contrast to Kinney's approach, Horwitz and Kolodny (1977) used the capital asset pricing model to assess the effect of the disclosure of industry segment information on the share price of multi-segment firms. They analysed two sets of fifty firms over a nine year period. The first set (control group) had disclosed certain segment information prior to the SEC's regulatory requirements to disclose segment information. The second set (test group) had not disclosed segment information prior to the SEC's requirements. Thus, Horwitz and Kolodny were able to use the control group to judge whether the disclosure of segment information resulted in a change in the risk characteristics of the test group. They found that the perceived risk characteristics of the firms did not change with the disclosure of segment information, and that the added disclosures did not contain other information which would lead investors to revalue shares at the time of disclosure.

Horwitz and Kolodny recognised the following qualifications to their results. First, important distributional effects of required disclosure, such as costs to obtain the disclosures, had not been evaluated. Second, the market may have acquired the segment information through means other than the SEC disclosures prior to these disclosures becoming mandatory. Third, the segment disclosures may have had value which was not discerned by the tests.

Collins and Simonds (1979) retested the research undertaken by Horwitz and Kolodny using a larger sample and different empirical techniques. Collins and Simonds found that "firms with nominal or no prior segmental disclosure did experience substantive changes in relative risk" (Collins and Simonds: p 380). They also concluded that there was no change in the risk profile of diversified companies that had previously disclosed segment information.

Prodhan's (1986) objective was to examine the association between systematic risk and geographical segment disclosures and he concluded that segment geographical disclosures and systematic risk were significantly associated.

Prodhan and Harris (1989) suggested that the negative result obtained by Horwitz and Kolodny was due to their not considering the effects of geographical segment disclosures. They found that "geographical segmental disclosure ... does appear to have information content which affects the market risk assessments" (Prodhan and Harris: p 482).

Douplik and Rolfe (1990) used an experimental framework to examine whether the level of aggregation of geographic area detail is relevant to the investment decisions of Certified Financial Analysts. They found that "the level of aggregation of geographic areas can be relevant to financial analysts in assessing the risk of investing in a company with foreign operations" (Douplik and Rolfe: p 265).

Thus, it has been seen that the initial research on the risk assessment value of segment information had mixed results, while the later research indicated that segment information did impact on the market risk of diversified companies.

4.3 The effect of segment information on the share price

The research on the effect segment information has on the share price can be divided into two areas, namely that segment information does affect the share price, and that segment information does not affect the share price.

4.3.1 Segment information does affect the share price

As part of his research, Kochanek (1974) tested the effect of segment information on the share price of diversified companies. He found that companies disclosing segment information had lower weekly share price variability over time than did companies not

providing segment information. However, he added the qualification that “the historical growth and stability of earnings and dividends was a more important factor in explaining share price fluctuations” (Kochanek: p 258).

Ortman (1975) conducted a study to determine the effect of segment information on investment analysts' valuations of shares. He found that when the analysts had access to segment information, the share price “was in accordance with the present value of its expected returns as reflected by industry average P/E [price to earnings] ratios. Without segmental data the reverse was experienced” (Ortman: p 304). He concluded that segment information in financial statements could result in a more stable share price.

Foster (1975) found that segment information provided a better association between abnormal share price changes and changes in accounting earnings than consolidated information. He did, however, note that increased disclosure may not directly affect the ability to predict share prices as there were other, non-accounting sources of information that affected share prices.

Swaminathan (1989) researched the effect of segment information on share price variability. He concluded that segment information increased share price variability and reduced the divergence of beliefs. Based on these results, he concluded that “segment data is more precise than consolidated data” (Swaminathan: p 87). His objective was to determine the usefulness of segment accounting information by interpreting its usefulness in terms of reliability. Swaminathan examined the impact of segment information at the individual investor level (divergence of beliefs) and at the aggregate level (share price variability) on the share price. Swaminathan concluded that since “precision can be linked to the accounting concept of reliability, it can be said that segment data increased the reliability of the accounting information system” (Swaminathan: p 87).

4.3.2 Segment information does not affect the share price

Dascher and Copeland (1971) tested whether there was a change in the share price when segment information was presented in the financial statements, as compared to segment information that was available from other sources. Dascher and Copeland concluded that the valuations of share price were unaffected by disclosure changes.

4.3.3 Summary

Segment information does appear to stabilise share price valuations. The comments made by Kochanek regarding stability of earnings and dividends must however, be borne in mind when considering the impact of segment information on the share price of a diversified company.

4.4 Segment identification

The review of authoritative pronouncements revealed that no specific rules are provided for the identification of industry or geographic segments. The reasons for this apparent omission will be explained through the conclusions reached in the following research projects. The research on industry segment identification is addressed first, followed by the research conducted on geographic segment identification.

4.4.1 Industry segment identification

The issue of segment identification was first raised by Emmanuel and Gray (1977) when they examined the quality of the segment information provided by large United Kingdom companies in terms of the requirements of the 1967 Companies Act. They argued that the quality of the segment information was affected by segment identification. At that time, companies were required to disclose certain segment information. Emmanuel and Gray compared the segment information of the one

hundred largest companies, as ranked by turnover, with the supplementary disclosures about the company's organisation, such as the statement of principal activities, the chairman's review and the directors' report, and the list of subsidiaries. Their findings are summarised in table 3 below.

They identified that, for half the companies disclosing segment revenue and results, the information included in the chairman's review and directors' report was not consistent with the segment information disclosed. A similar trend was found when the segment information was compared with the disclosures contained in the grouping of subsidiaries required by the Companies Act.

Emmanuel and Gray concluded that the segment information disclosed provided less information about the activities of the companies than that which was disclosed in the supplementary information. The reason they put forward for the inconsistencies was that there was no criteria to identify different classes of business. Consequently the opinion of the directors, with regard to the identification of segments, could not be verified. They suggested that the following standard classifications could be used to identify reportable segments: the United Kingdom Standard Industrial Classification (which comprised 27 Orders and 181 Minimum List Headings) or the Financial Times - Actuaries Index Classification. However, they found that neither of these two systems are by themselves adequate, particularly when companies in a group were heavily integrated. They suggested, however, that these two standard classifications could form a starting point for the development of a more appropriate classification system.

Emmanuel and Gray (1978) continued the effort to identify bases for identifying industry segments. They examined four alternatives, and assessed whether they were feasible in light of United Kingdom disclosure practices.

The four alternatives considered were:

- (i) the United Kingdom Standard Industrial Classification,

- (ii) the markets in which products of the various segments were sold,
- (iii) geographical areas in which the segments operated, and
- (iv) the organisation lines within the diversified company.

They argued that the fourth basis would be inappropriate if the organisational unit does not correspond with an industry, product line, market or geographical area. They noted that “[d]ivisions or legal entities may be created for other than economic reasons” (Emmanuel and Gray: p 171). However, where the organisational unit did correspond, they suggested that the segment information should be consistent with the organisational structure.

Emmanuel and Gray concluded that all the bases discussed had relevance in practice, and that a “combination of bases may provide the most meaningful presentation” (Emmanuel and Gray: p 173).

Lurie (1980) made suggestions for identifying segments. He suggested that the following factors, amongst others, should be considered when grouping products and services into segments: the organisational structure, how the segment is managed, controlled or reported on, the extent of integration with other departments, the extent of common facilities between segments, the rate of profitability, the degree of risk associated with the manufacture, use and marketing of the product, and the capital demands of the different product lines. He concluded that if segments were properly identified, then “segment reporting can furnish management with a good tool” (Lurie: p 44).

Emmanuel and Garrod (1985) reported on the observations of users and preparers of segment information in the United Kingdom. They examined industry and geographic segments. They found that the bases used for industry segment identification were diverse. Some of the bases used were organisational structure, product-markets served and industry classification. They found that the “overall impression given is that these preparers identify geographic and business segments to

reflect the reality of their corporate activities in a consistent manner over successive years” (Emmanuel and Garrod: p 15).

Mirza (1978) surveyed company management’s views on segment reporting. He concluded that “a single basis of segmentation would not suit all the company managements” and that company managements “were best qualified to define reportable segments” (Mirza: p 12).

Boersema (1992) surveyed analysts for recommendations regarding segment identification. One analyst suggested that the term “industry” segment was too broad, and that a focus on “business” segment would force companies to think in narrower terms when choosing their segments. Boersema went on to recommend that a business segment be defined as “any distinguishable line of business, major product category or market all parts of which are subject to essentially similar risks *and* rewards. Products or services which are subject to different risks *or* rewards should *not* be grouped together within one segment” (Boersema: p 65). It is interesting that these principles have been incorporated into E51 (refer to section 2.3.1 above).

Boersema highlighted the following factors which could expose business activities to different risks and rewards: distribution methods, government regulation, growth rates, liquidity risk (if activities are individually financed), markets, market risk, nature of products and services, production processes, organisation structure, profitability, sources of raw materials, and vulnerability due to concentrations in assets products, services, suppliers customers and geographic locations. Similar suggestions are contained in E51.

Thus, many methods for identifying segments have been suggested. The issue of industry segment identification has largely been resolved. Researchers have concluded that to identify a single basis for determining segments would be inappropriate due to the differing degrees of diversification and integration among companies. The overall conclusion, which was first suggested by Mautz, was to allow management to identify the segments as they were best qualified to do so.

4.4.2 Geographic segment identification

In 1980, Arnold, Holder and Mann examined the segment disclosures contained in the reports filed with the SEC. They discovered that there was a great deal of diversity in practice in regard to the disclosure of foreign activities. They found that companies were not disclosing foreign activities at the subcontinent or country level.

Similarly, Bavishi and Wyman (1980) analysed compliance with SFAS14 by reviewing annual financial statements and reports filed with the SEC. The main disclosure deficiency which they identified was that the classification of geographic segments was broad. They also found that different industries were using different classifications of geographic segments.

Gray and Radebaugh (1984) compared geographical segment disclosures between United States and United Kingdom diversified companies. At the time of the comparison, no United Kingdom accounting standard on segment reporting had been issued, although the American statement had been in use for eight years. They concluded that the extent of information disclosed in the United Kingdom was generally less than that disclosed in the United States. However, the average number of segments reported in the UK exceeded the average number reported by US diversified companies. Thus, United Kingdom companies were identifying more geographic segments than American companies, who were complying with an accounting standard.

Emmanuel and Garrod (1985), when reporting on the observations of users and preparers of segment information in the United Kingdom, found that geographic segments were being reported on a basis consistent with sub-continentals. However, they noted that no common definition of sub-continentals had been used across companies. They felt that "if comparability is to be improved then a guideline to define the countries comprising the [sub]continentals may be a small step forward" (Emmanuel and Garrod: p 13).

Thus, no common means of identifying geographic segments has been identified in the literature. The issue of geographic segment identification has not been resolved. Emmanuel and Garrod suggested that a subcontinent basis be used, and that the countries which made up those subcontinents be defined. Therefore, this issue has been addressed in this research project.

4.5 Objections to providing segment information

The review of the initial research on segment information identified objections raised by preparers to providing segment information. The objections to providing segment information are discussed below, followed by an assessment of the validity of the objections.

4.5.1 Objections raised to providing segment information

Emmanuel and Garrod (1992) in investigating international issues relating to segment reporting identified four objections to supplying segment information.

The first objection raised was that the disclosure of segment information may result in a competitive disadvantage to the company. In particular, the preparers of segment information felt that foreign governments may query significantly different profitability rates across segments, and that competitors would be able to gauge the company's strategy in different countries.

The second objection raised was that segment information may confuse the user by creating the impression that a segment of the company was independent of the company as a whole.

The third objection raised was that the preparers were concerned that the disclosure of sensitive information, such as transfer pricing, could draw the attention of the fiscal agencies in several countries, not merely the host country. Emmanuel and Garrod

suggested that transfer pricing could be used to minimise the amount of tax paid. They suggested that this is why SSAP25 does not require diversified companies to disclose the basis of intersegment pricing.

The fourth objection raised was cost. The primary costs envisaged included preparation costs, audit costs, and costs associated with explaining the segment information to outsiders and company staff. The secondary costs envisaged included the costs incurred in allocating assets, and increased demands for compensation or bonus payments by employees. In addition, the company faced the risk that analysts would only focus on poorly-performing segments, and the poaching of heads of successful segments by competitors.

4.5.2 Validity of objections raised to providing segment information

Boersema (1992) also identified objections. He investigated the validity of the objections raised by preparers of segment information by surveying analysts.

First, with regard to the preparation costs, the analysts argued that “a well-managed company will generally collect such data routinely for management reporting purposes; the extra cost is, therefore, negligible” (Boersema: p 34).

Second, the potential of costly competitive disclosure was acknowledged, but some of the analysts argued that a public company should be making these disclosures by virtue of the fact that it is listed.

A third cost identified was other commercial disadvantages such as customers identifying profit margins. Most analysts felt that segment information would rarely be specific enough to permit such use of the information. Other analysts noted that only in certain specific industries was this a valid objection.

Fourth, the suggestion was made by Boersema that increased disclosure may cause society to bear certain costs, in that companies may elect not to undertake certain projects due to their effect on a segment's result. This would result in lost production, lower gross national product and lower employment.

A fifth cost considered was that the complexity of segment information would result in confusion for the layman. The majority of the analysts surveyed were of the opinion that segment disclosures would not be too complex for users.

Finally, the argument that segment information would be misleading was investigated. Analysts argued that if users were unable to understand segment information they could request experts to advise them. Experts would be able to effectively understand and use segment information.

4.5.3 Conclusion on the objections raised to providing segment information

The review of literature identified a number of objections which had been raised against providing segment information. These objections consisted of additional costs and disadvantages which would be incurred by the diversified company. The validity of these objections were assessed. The viewpoint from the literature survey is that the objections are not valid. This is interesting when one considers the inclusion of a "seriously prejudicial" clause in AC115.

4.6 Extent of segment disclosures

The research reviewed to date has revealed that companies had objections to disclosing segment information. A consequence of these objections has been varying degrees of compliance with the standards. The extent of disclosure of segment information is examined in this section.

Three research projects compared the extent of voluntary disclosures before the Australian standard became effective with the extent of compliance after the standard was issued. Miller and Scott (1980) reviewed the annual reports of one hundred listed companies. They found that only 36% of these companies voluntarily supplied segment financial information prior to the issue of the Australian Accounting Standard 16 (AAS16) in March 1985.

Carnegie, Davies and Gavens (1986) analysed compliance with AAS16 by reviewing the 1985 annual financial statements of one hundred and thirty-seven industrial and diversified mining entities listed on the Melbourne Stock Exchange. Gavens and Carnegie (1988) performed the same analysis on the 1986 annual financial statements of the same one hundred and thirty-seven entities. The results are summarised in table below:

Table 2: Results of Australian compliance with AAS16

	1985 (%)	1986 (%)
Complied fully with AAS16	28	56
Not full compliance with AAS16	26	23
No segment disclosures	42	1
Not in best interests to disclose	4	11
Other - entities taken over and accounts not available	0	9
	100	100

This table indicates that the extent of compliance improved over the two years which were studied. Only one percent of companies did not disclose any segment information in 1986, compared to 42 percent in 1985. However, 23% of the companies were not complying fully with the requirements of AAS16 in 1986.

Steedle (1983) evaluated the effectiveness of SFAS14 by gauging compliance with the standard. The majority of the sixty-one financial statements reviewed contained the

disclosure items required by SFAS14. He concluded that while companies were “complying with the letter of SFAS14, compliance with its spirit is uneven” (Steedle: pp 40-41). In addition to reviewing financial statements, Steedle conducted interviews with users of segment information. Steedle selected financial analysts as a user group of segment information. They felt that SFAS14 was “one of the best accounting standards ever published” (Steedle: p 47). Segment information was used by the financial analysts to evaluate the performance of the companies.

Gray (1978) reviewed the extent of disclosure within the European Economic Community (EEC). Gray concluded that the “segmental disclosure practices by EEC multinational companies in 1972-73 suggests that the overall level of disclosure is low apart from sales analyses” (Gray: p 252).

Thus, compliance with the standards differs between countries, and that not all diversified companies are disclosing the extent of segment information required in terms of the standards. The foreign research revealed that companies are complying with the letter of the accounting standards, but not with the spirit.

5. SOUTH AFRICAN RESEARCH

A review of table 1 reveals that the disclosure requirements of AC115 are not as extensive as the other authoritative pronouncements. In addition, AC115 contains a “seriously prejudicial” clause which permits companies not to disclose segmental information. Therefore, the research undertaken in South Africa on the topic of segment reporting has been separately reviewed in this section.

The only significant research to date on segment reporting in South Africa was undertaken by Hemus in 1991. The summary of his research is divided into three sections, namely a discussion of the research methodology employed, an analysis of the preparers survey, and an analysis of the users survey.

5.1 Research methodology

Hemus conducted two surveys. He first surveyed preparers of segment information to obtain information about the companies and their views on segment information. The financial directors of the Financial Mail Top 100 companies, excluding mining companies, were identified as the group to represent the preparers of segment information.

Second, he surveyed users of segment information. Hemus identified investment analysts as a user group of segment information. He selected this user group as they were representative of sophisticated financial statement users, and would best be able to use operating data on a less than consolidated basis (Hemus: p 50).

Hemus elected to survey both groups through the use of mailed questionnaires for the following reasons:

- (i) a larger number of respondents could be surveyed (Hemus: p 48),
- (ii) the cost associated with mailing questionnaires was less than conducting interviews (Hemus: p 48),
- (iii) the information required for the study was essentially of a factual nature (Hemus: p 48),
- (iv) the information required could be structured into a questionnaire format (Hemus: p 49).

The questionnaires for the two groups were formulated with reference to past research, primarily that conducted by Mautz (1968), Mirza (1978), Steedle (1983) and Miller and Scott (1980).

Due to the nature of his research, Hemus evaluated his results statistically. The results are presented in the following two sections.

5.2 Analysis of preparers' survey

The preparers questionnaire was divided into three sections, namely general information on the company and the segment information disclosed, the specific problems or issues identified with segment reporting and a final section on AC115. The results from each section of the questionnaire are presented separately.

5.2.1 General information

With respect to industry segment information, Hemus found that there was a high degree of general disclosure, but noted that only 62% of companies were disclosing segmental revenue in their annual reports. The most common reason given for non-disclosure was that the segment information was prejudicial to the company.

Hemus also found that geographic segment disclosures were minimal, with the majority of companies not disclosing any geographic segment information in their annual reports.

These findings are similar to those presented in section 4.6 above. Thus, it was necessary to include the possibility of non-disclosure in the questionnaire to be used in this research project.

5.2.2 Specific problems or issues identified with segment information

Hemus then focused on three complex areas of segment information, namely segment identification, the allocation of common costs and assets, and the issue of intersegment transactions. Hemus' findings were as follows:

First, the most common basis used for determining segments by preparers was organisational units. The organisational units were identified by area of management responsibility or authority. The majority of the preparers (86%) were of the opinion

that external users would be able to understand their internally produced segment information.

Second, Hemus found that most preparers allocated common costs to segments. In response to a question whether the preparers found it misleading to allocate common costs, the majority of preparers responded negatively.

Hemus also addressed the issue of common assets. The majority of preparers indicated that at least 90% of assets could be identified with individual segments. This indicated that extensive disclosure of segment information in respect of assets was possible, and that the issue of the common costs was not very prevalent.

Third, Hemus found that with regard to the treatment of intersegment transactions, these were in most cases included in the segment report when the intersegment transactions had been conducted at an arm's length price. The explanation given by preparers was that, as the intersegment sales were at arm's length, excluding these sales would not enhance fair presentation. The respondents that excluded intersegment sales from the segment information, had priced these sales on a transfer price which was agreed upon by the senior management in the divisions concerned.

5.2.3 Preparers assessment of AC115

The preparers assessed AC115 by evaluating their compliance with the statement, and identifying reasons why they do not disclose segment information.

The final section of the preparers questionnaire focused on AC115 and segment reporting in general. Only 33% of the preparers indicated that they considered themselves to comply with AC115. This indicated that there was little support for AC115. Despite this admission, the majority of preparers felt that AC115 required "just enough segmental disclosure". A further question revealed that the majority found it easy to fulfil the disclosure requirements of AC115. This indicated that the

potential difficulties in extracting segment information did not affect the decision not to disclose segment information.

The reason that over half the preparers gave for not disclosing segment information, was that they felt that the disclosure of segment information would be seriously prejudicial to their companies. Hemus reviewed the annual financial statements of the companies and found that in most instances no mention was made of the fact that segment information was not given. This represents non-compliance with AC115 as discussed in section 2.6 above.

The majority of the preparers (69%) had a “favourable” or “qualified approval” attitude towards segment information, and 67% felt that segment information would be useful to investors.

5.3 Analysis of users survey

The users questionnaire was also divided into three sections, namely: investment characteristics that users consider, the use made of segment information and their opinion on the specific issues related to AC115, and a final section of general questions. The results of the first and third sections are not presented as they are beyond the scope of this report. The results from the remaining section of the questionnaire are presented in two parts, namely use of segment information, and the specific issues related to AC115.

5.3.1 Use made of segment information.

A number of questions dealt with the use that analysts made of segment information. Hemus found that in general, when segment information was presented by a company, it was used by the analysts. The users were then asked to assess the adequacy of AC115. The majority of users felt that the requirements of AC115 were “sufficient”

or “somewhat sufficient”. Approximately 37% of the users felt that the disclosure requirements were less than sufficient.

In the opinion of the users, no companies were complying completely with the requirements of AC115, although 69% of the users indicated that companies were at least partly complying with AC115. This compared to 33% of preparers who considered that they were complying with AC115.

The users also indicated that they did not believe a company to be prejudiced competitively by disclosing segment information. However, users were aware of the potential competitive disadvantages in disclosing segment information. The users indicated that if there were competitive disadvantages, then this constituted a valid reason for non-disclosure of segment information. The majority of the users indicated that it should be left to the discretion of the management of the company to invoke the seriously prejudicial clause. If the company were not to disclose segment information on the grounds that it would be seriously prejudicial, then the reasons therefor should be stated.

5.3.2 Specific issues related to AC115

The users' attention was also focused on the allocation of common costs and assets, intersegment transactions, the relevance of geographic segment disclosures, whether segment information should be audited, and the usefulness of additional segment disclosures.

Most users indicated that they were satisfied if the allocation of common costs and assets was performed by management. Less than half of the users regarded intersegment sales of less than 10% as material enough to exclude such sales from the segment information.

Questions were then asked about the relevance of geographical segment disclosures to users. 83% of the users regarded geographic segment information as being important, but less useful than industry segment analysis. The results also indicated that users preferred an international geographic analysis (31%) over a regional or provincial approach (17%). The most popular approach (49%), however, was a combination of international and regional or provincial borders.

Most of the users (71%) indicated that segment information should be audited. This result was interesting as Hemus conducted a review of the preparers annual reports and found that only “50% of the segment information provided is audited, either by inclusion in the financial statement disclosures or by reference in the audit report” (Hemus: p 104).

As a result of the question on auditing segment information, Hemus concluded that “investors place great emphasis on the usefulness of segment information” (Hemus: p 105). A related question asked the users to indicate whether segment information was as valuable as consolidated information. The majority of the users (69%) indicated that segment information was as valuable to them as consolidated information.

The users were then asked to rank a number of segment disclosures. Of the segment disclosures listed, the rankings showed a “clear preference for income statement disclosures over balance sheet disclosures” (Hemus: p 107).

5.4 Conclusion

Thus, preparers and users agreed that the disclosure of segment information could be prejudicial to the company, although the users felt that this was not the usual case. Both groups agreed that if there was a competitive disadvantage in disclosing segment information, then the management of the company should invoke the “seriously prejudicial” clause.

An area of difference between the users and preparers was the extent of compliance with AC115. The users indicated that in their opinion, no companies were complying fully with AC115, whereas 33% of the preparers considered themselves to comply with AC115.

As in the other literature reviewed, the following issues were surveyed:

- (i) the allocation of common costs,
- (ii) the allocation of common assets,
- (iii) the identification of industry segments, and
- (iv) the identification of geographic segments.

6. CONCLUSION

This chapter identified the issues and problems surrounding segment reporting through a review of authoritative pronouncements and prior research.

The literature survey of authoritative pronouncements revealed six objectives of segmental information. These objectives can be summarised as follows: the objective of segment information is to enable the users of financial statements to make informed decisions about diversified enterprises based on information that is useful and relevant.

The issues that were relevant related to the usefulness of segment information, segment identification, objections to providing segment information, and the extent of segment disclosure. These issues were reviewed from an international and a South African perspective.

The following chapter will identify how the issues identified affected the development of the research problem.

CHAPTER III: THE RESEARCH PROBLEM

1. INTRODUCTION

The literature survey identified the issues and problems surrounding segment reporting. This chapter extends these issues and problems to formulate the research problem.

2. MATTERS ARISING OUT OF LITERATURE SURVEY

Five core issues were identified through the review of certain authoritative pronouncements, prior research and journal articles. The first core issue related to the stated objectives of segment information. This served as the basic premiss for the research project.

The second core issue related to the usefulness of segment information to predict future revenue and earnings, to assess the risk of the company and to assess the share price of listed companies. The prior research on this issue was not conclusive.

The third core issue was basis of the identification of industry and geographic segments. The literature review concluded that management should identify the industry segments to best reflect activities of the company. A conclusive basis for the identification of geographic segments was not found.

The fourth core issue was the validity of objections to providing segment information. The only objection which was valid related to competitive disadvantage.

The fifth core issue related to the extent of disclosure of segment information. This was an area of concern to users of segment information.

The literature survey identified objectives of segmental reporting, which had been empirically tested. A number of problems associated with segment information were also identified. Despite this volume of research, Alexander (1976) suggested that “there seems to be little knowledge of the use that the various users of accounts, actually do make of accounts” (Alexander: p 100). Thus, further research is required into the use made of segmental information.

3. DEVELOPMENT OF RESEARCH PROBLEM

Statement of Generally Accepted Accounting Practice AC000 “Framework for the Preparations and Presentation of Financial Statement” (AC000) identifies the following financial statements user groups in South Africa:

- (i) investors,
- (ii) employees,
- (iii) lenders,
- (iv) suppliers and other trade creditors,
- (v) customers,
- (vi) Governments and their agencies, and
- (vii) the public (AC000: para .09).

Only one group of users identified by AC000 have been surveyed in South Africa with regard to segment reporting, namely investment analysts. Another potential user of segment information is employees and their representative groups. It was decided that trade unions would be surveyed as representatives of employees, and potential users of segmental information.

Trade unions have been identified in literature as an annual financial statement user pressurising for information disclosure (Radebaugh: p 40). He suggested that trade unions and employees would have to rely on information disclosed in the annual financial statements that are received by all external users. Of special interest to trade unions would be information concerning the terms, conditions, scale, security and

location of employment. This information would be used to “determine the plans of the MNC [multi-national corporation] and the impact of these plans on employment” (Radebaugh: p 54).

This view was confirmed through preliminary discussions held with a member of the Congress of South African Trade Unions. Therefore, trade unions, as representatives of employees, were identified as a potential user group of segment reporting.

4. STATEMENT OF THE RESEARCH PROBLEM

The research project will attempt to determine the extent to which trade unions use segment information. They will be surveyed on the usefulness of disclosures as well as their response to the issues identified in the literature survey.

The research problem is formally stated as follows:

Are the segment disclosures of South African listed companies sufficient to meet the information needs of trade unions in South Africa, and if not, what additional information do they require?

The problem has been limited to listed companies as it was suggested by Radebaugh that trade unions may experience difficulty in obtaining information which is not available to the general public. The problem has also been limited to South African companies to avoid complications caused by differing disclosure requirements between countries.

In addressing this problem, the following sub-problems were considered:

- (i) what information provided by South African listed companies in respect of segment information do trade unions use?
- (ii) do the segment disclosures satisfy the information needs of trade unions?
- (iii) what additional segment disclosures would trade unions require?

5. CONCLUSION

This chapter has set out the research problem to be investigated, as developed from the literature survey. The problem identified is the extent to which trade unions use segment information. The research problem will require a survey of trade unions to be undertaken. The following step in the research process will be to identify an appropriate methodology to enable the research problem to be answered.

CHAPTER IV: RESEARCH METHODOLOGY

1. INTRODUCTION

The research problem developed in chapter III required a survey of trade unions to be undertaken. In order to answer the research problem, the first methodological issue to be addressed was the choice between a qualitative and quantitative approach. This choice then affected the sample design, the questionnaire design, the data collection procedures and the data analysis procedures used.

2. RESEARCH DESIGN

The research method needed to be designed to obtain quality information on trade unions' use of, and need for, segment reporting. There were two possible approaches to achieve this objective. The choice of approach would have a direct impact on the decision to use a personal interviews or mailed questionnaires.

2.1 Qualitative versus quantitative approach

The first step in formulating a research methodology was to choose between a qualitative and a quantitative approach. The primary criterion in making this choice was the quality of results that the chosen approach would yield.

2.1.1 Factors affecting the choice between a qualitative and quantitative approach

The literature survey revealed that empirical research had been undertaken both internationally and locally to evaluate the usefulness of segment reporting. In addition, much of the prior research, including the local research, had evaluated investment analysts' (a sophisticated user group) need for segment information.

However, the discussion in chapter III revealed that there was no prior research into the segment information needs of other user groups, in particular the segment information needs of trade unions. In addressing a survey of the trade union user group, this research project therefore represented a preliminary investigation into the segment reporting requirements of trade unions. As such, the nature of the research was exploratory.

In particular, the following factors were considered when deciding whether to conduct qualitative or quantitative research:

- (i) trade unions do not form part of the sophisticated user groups researched in the past,
- (ii) there was no knowledge of the expertise available in the trade unions, and
- (iii) trade unions may have specific segment information needs which are different to other users' needs.

After consideration of the above factors, it was decided that a qualitative approach would best yield meaningful results.

2.1.2 Determination of research method

As a result of the decision to conduct qualitative research, it was necessary to identify a qualitative approach and to determine what generalisations could be made as a result of this approach.

Ryan, Scapens and Theobald (1992) identified the case study method as a qualitative research method that is appropriate for exploratory research. They described the objective of exploratory case studies as being “to generate ideas and hypotheses for rigorous empirical testing at a later stage” (Ryan, Scapens and Theobald: p 115). They continued to state that case studies represent a preliminary investigation from which generalisations can be made about accounting practice.

The nature of generalisations that may be made from a qualitative approach was then considered. Ryan, Scapens and Theobald made the point that it would be appropriate to “apply the logic of replication, rather than sampling logic, to case study research” (Ryan, Scapens and Theobald: p 117). They argued that this approach would require the researcher to look for “‘theoretical generalizations’, and not ‘statistical generalizations’” (Ryan, Scapens and Theobald: p 117). The objective of theoretical generalisations was described as attempting to generalise theories so that the observations which are made can be explained.

In view of the preliminary nature of this research, it was considered appropriate to implement a replicative case study approach on the following basis:

- (i) Each trade union surveyed would be regarded as an individual case study, describing what use is made of segment information and what additional disclosures are required.
- (ii) The results of the individual case studies would then be compared, and theoretical generalisations drawn, based on the individual case studies, thus providing answers to the research problem and subproblems.

Therefore, a qualitative research approach would enable the necessary conclusions to be drawn. A replicative case study approach, which would allow theoretical generalisations to be drawn, was identified as a suitable research tool. A consequence of this methodology was that it would not be necessary to draw statistical generalisations. Consequently, the choice of a replicative case study approach would provide flexibility in the choice of the data collection method.

2.2 Interview versus mailed questionnaire method

As has been discussed above, the research project represented preliminary research into the segment information requirements of trade unions in South Africa. It was therefore felt that the data collection method needed to focus on providing meaningful responses. Emory and Cooper (1991) identified the greatest value of personal

interviewing as being “the depth and detail of information that can be secured” (Emory and Cooper: p 320).

The advantages of using the interview method, as well as a consideration of the limitations inherent in the use of this method are now discussed.

The following advantages of interview studies would be beneficial in achieving the objective of obtaining meaningful responses:

- (i) the volume of information secured in an interview far exceeded that obtained from telephone or mail surveys (Emory and Cooper: p 320),
- (ii) the interviewer could do more to improve the quality of information (Emory and Cooper: p 320),
- (iii) the interview allows more flexibility than a mailed questionnaire as it enables the interviewer to probe for more specific answers and provides opportunities for clarifying uncertainties (Bailey: p 182, Emory and Cooper: p 338),
- (iv) the interviewer is able to standardise the environment in which the questionnaire is answered, and to ensure that the correct person completes the questionnaire, (Bailey: p 182, Emory and Cooper: p 320),
- (v) it is not possible for the respondent to change the question order or in any way affect the questionnaire structure (Bailey: p 182),
- (vi) spontaneous answers can be recorded which could be more informative than answers about which the respondent has had time to think, (Bailey: p 182),
- (vii) the interviewer can ensure that all questions are answered, (Bailey: p 183),
- (viii) co-operation from the respondent can be encouraged (Emory and Cooper: p 338),
- (ix) the interviewer can make adjustments to the language being used in the interview if difficulties in understanding the questionnaire are being experienced by the respondent (Emory and Cooper: p 320).

Thus, there were distinct advantages for using personal interviews to survey trade unions. However, using the personal interview method would result in the following limitations:

- (i) the respondents are less accessible than they would be for a mailed questionnaire (Bailey: p 184) as trade unions have their head offices in different cities,
- (ii) the conduct of interviews can be costly (Bailey: p 183, Emory and Cooper: p 320). In the case of this research project, travel costs would be incurred as result of (i) above.
- (iii) the interview process is time consuming (Emory and Cooper: p 339).

To a large extent these disadvantages were limited or controlled. Ultimately, the main constraint identified in using the interview method was time. This constraint was controlled to some extent by structuring the interview by means of a questionnaire. In addition, the question structure was set so as to gather the most information in the shortest time possible. Nevertheless, this constraint would limit the number of trade unions that could be surveyed. In view of the nature of the generalisations that would be made (refer 2.1.2 above), it was considered that the constraints in the number of trade unions to be surveyed would not diminish the meaning of the results.

The effect of this constraint was limited by the size of the population. The population was determined to consist of twelve trade unions in section 3.1 below.

There were two advantages associated with using a questionnaire to structure the interview. First, the use of a questionnaire would reduce the length of time to conduct an interview. Second, the use of a questionnaire would promote comparability of answers among the various trade union representatives interviewed.

Bailey (pp 183-184) and Emory and Cooper (p: 321) identified further problems and disadvantages which were either not relevant to this research project or were

controlled. Where appropriate these factors were taken into account when planning for and conducting the interviews. (Refer to the discussion on data collection in section 5 below).

It was therefore considered that the benefits of conducting personal interviews outweighed the disadvantages of this data collection method. The personal interview method was selected, although it was decided to structure the interview by means of a questionnaire.

3. SAMPLE DESIGN

In selecting a sample of trade unions to be surveyed, the population to be surveyed was defined, an optimal sample size was determined, the sample selection criteria were specified, and the composition of the sample was reviewed.

3.1 Population definition

Before the identity of trade unions to be surveyed could be determined, it was necessary to define the population from which the sample would be drawn. A report on labour relations in South Africa (1995-1996), identified that there were at least sixty-four trade unions at the end of 1995 (Andrew Levy and Associates: pp 14-26). Of these trade unions, only twelve trade unions had a membership in excess of 50 000, thirty trade unions had between 10 000 and 50 000 members and the balance of trade unions each had less than 10 000 members.

Thus, although there are many trade unions in South Africa, there are not a large number of significant trade unions, as determined by membership. The reason why there are not many significant trade unions is that trade unions in South Africa have organised themselves into federations. Within these federations, similar trade unions have merged, and are continuing to merge, resulting in fewer unions with larger memberships.

It was decided to stratify the population of trade unions and to survey trade unions with more than 50 000 members. As has been stated above, the quality of data obtained would be important to the results of the research project. It was considered that the larger unions would be more likely to have persons who would be familiar with generally accepted accounting practice, analyse financial statements of companies, and use segment information.

3.2 Sample size

The determination of a sample size would be affected by the research method employed. There would have to be a balance between the need to obtain meaningful results and the logistical requirements of the research method.

The decision to survey trade unions by means of interviews as opposed to mailed questionnaires (refer section 2.2 above) placed an upper limit on the number of trade unions which could practically be surveyed. The maximum number of trade unions which could practically be interviewed was considered to be ten.

Ryan, Scapens and Theobald (1992) suggested that a case study could be a single unit or a "more aggregated unit of analysis" (Ryan, Scapens and Theobald: p 113). However, in order to make theoretical generalisations, it was decided to use replicative case studies (refer 2.1.2 above). It would therefore be necessary to interview more than one trade union.

The above discussion on sample size determination has revealed that it would be necessary to survey more than one trade union, although it would not be practical to interview more than ten. Ultimately, within these constraints, it was decided to select as many trade unions as possible in view of the exploratory nature of the research. The final sample size would therefore be a function of the sample selection criteria discussed below.

3.3 Sample selection criteria

The rationale behind using the interview method (refer section 2.2 above) was to obtain meaningful results. As it was not necessary to statistically generalise the results obtained, the sample selection method could be judgmental. The objective of a judgmental selection process was that trade unions could be selected which would be best equipped to understand the research problem and thus supply meaningful results.

In order to achieve the above objective, the selection of the sample of trade unions to be interviewed, from the population of twelve trade unions, was based on two criteria.

The first criterion was that the trade union had to have members employed by listed companies. The reason for this criterion is that the research problem, as developed in chapter III, was limited to the segment disclosures made by listed South African companies. Thus, government-related trade unions and municipal workers' trade unions were excluded from the sample. There were four such trade unions who had in excess of 50 000 members.

The second criterion was that the trade unions had to be involved in diversified companies. There was one trade union with a membership of over 50 000 which was unlikely to have members employed by diversified companies. This trade union was therefore excluded from the sample.

The third criterion was that trade unions representing similar groupings of employees, would not be selected. There were two such trade unions, both with more than 50 000 members. It was decided to exclude the smaller trade union from the sample in preference to the larger one. This was consistent with the decision to focus on significant trade unions discussed in section 3.1 above.

Thus, there were six trade unions left in the defined population of trade unions that could be surveyed. All six trade unions were approached to participate in the survey.

Of the six trade unions approached, five responded that they would be prepared to grant interviews. The sixth trade union indicated that they did not personally evaluate companies' financial statements, but relied upon the Labour Research Service for financial information on the companies. As the research involved surveying the opinions of trade unions, this trade union was excluded from the sample.

Thus, five trade unions were identified. The composition of the sample was then reviewed.

3.4 Composition of the sample

In order to limit the risk that industry-specific disclosures may affect the results of the survey, it was considered necessary to ensure that there was a sufficient spread of trade unions selected so that a variety of sectors on the Johannesburg Stock Exchange would be covered by the trade unions in the sample.

With the organisation of trade unions into federations, the names of the individual trade unions have become more specific and descriptive of the industry in which their members were employed. Thus, it was possible to determine the extent of coverage of the different sectors by referring to the names of the individual trade unions identified. A review of the listed companies and sectors of the Johannesburg Stock Exchange indicated that a majority of the sectors were potentially affected by the trade unions that agreed to be interviewed. The results of this review was tested in the questionnaire.

Thus it was considered that the sample selection procedures employed were appropriate to select a balanced sample that would yield meaningful results.

4. QUESTIONNAIRE DESIGN

It has been established that a questionnaire would be used to structure the interviews with trade unions. In formulating the questionnaire, the content of the questionnaire, questionnaire format, and the testing of the questionnaire were considered.

4.1 Questionnaire content

The questionnaire content was initially based on the questionnaire designed by Hemus for his survey of investment analysts. As discussed in the literature survey, his questionnaires were based on those developed by Mautz and others. In designing the questionnaire to be used for the survey of trade unions, the questionnaire designed by Hemus was:

- (i) adjusted for the conclusions reached by Hemus,
- (ii) adjusted to include the proposals contained in the international exposure draft (E51), which was issued in 1995, after the completion of Hemus' research, and
- (iii) adjusted for issues identified through the literature survey which are specific to trade unions.

The primary reason for using Hemus' questionnaire as a base was that this would allow comparison of the results of his survey of investment analysts to the results of the survey of trade unions. AC115 was used as a frame of reference for the questionnaire.

4.2 Questionnaire format

The format of the questionnaire was affected by the following issues: the order of questions, the structure of the questions, and the approach to complex issues.

4.2.1 Order of questions

Emory and Cooper argued that the question order was particularly important to a questionnaire. They identified the following four guidelines for question order which were taken into account when the questionnaire was designed:

- (i) the questionnaire must quickly arouse the interest of the respondent and motivate the respondent to participate in the interview (Emory and Cooper: p 370),
- (ii) personal or ego threatening questions should not be placed early on in the questionnaire,
- (iii) the questionnaire should start with simple items and move towards the more complex, and should move from general items to more specific items (Emory and Cooper: p 370), and
- (iv) changes in the frame of reference should be minimal and clearly pointed out to the respondent (Emory and Cooper: p 370).

In addition to the above guidelines, Bailey offered the following advice on question order. First, vary question length and type to help maintain interest. He noted however that this may make the questionnaire more difficult to complete. Second he advised against establishing a “response set” otherwise defined as “a tendency to reply to items in a particular manner, regardless of the question’s content or the correct answer” (Bailey: p 140).

In order to implement the guidelines given by Emory and Cooper and Bailey, the questionnaire started with general questions concerning the trade unions. The questions sought to identify the industries, listed companies and other large non-listed enterprises in which each of the trade unions had members employed, and the membership of the trade union. The initial section of the questionnaire ended off with questions evaluating the trade unions’ use of the annual financial statements, and segment information in particular. It was considered that these questions provided a stimulating starting point without being threatening or complex.

The remainder of the questionnaire was split into two parts; one for those trade unions that made use of segment information (sections D to F of the questionnaire) and the other for those trade unions that did not make use of segment information (sections G to H of the questionnaire). When the questionnaires were printed, sections D to F were printed on green pages and sections G to H on pink pages in order to easily differentiate between the two parts. A filter question was included to ensure that each trade union answered only one part of the questionnaire.

Sections D to F of the questionnaire focused on the segment disclosures currently required by AC115, and an assessment of AC115. The section then moved onto the complex issues as identified in the literature survey, and the identification of additional segment information that the trade union may find useful.

Sections G to H of the questionnaire sought to identify reasons why the trade union did not use segment information, and how useful it would find the current and additional disclosures if it needed to make use of segment information.

Thus, it was considered that the question order was appropriate to stimulate the participants and not to threaten them.

4.2.2 Structure of the questions

The second aspect of the questionnaire format was the structure of the questions. This revolved around the choice between open and closed ended questions.

In section 2.2, time constraints were identified as a disadvantage to using the personal interview. In order to reduce the length of time taken to conduct the interview, it was decided to use close ended questions wherever possible. Many of the issues raised in the questionnaire had been identified by Hemus and other researchers before him, so the use of close ended questions was possible.

However, when appropriate, the close ended questions had an option for the respondent to raise additional issues that were not identified in the questionnaire. In addition, the respondents were invited to make additional comments at any stage of the interview, in order to gain possible insights into the present use and potential future use of segment information by trade unions.

Thus, the number of open ended questions was limited, reducing the risk of not accurately recording answers. Standardised answer formats were used wherever possible, and check boxes were used to reduce recording errors.

4.2.3 Approach to complex issues

The third aspect of the questionnaire format was the treatment of complex issues. The complex issues were identified as those which required the trade union to make a judgement.

The complex issues in the questionnaire related to the seriously prejudicial clause in AC115, the treatment of intersegment transactions and the basis for the allocation of common assets and costs, and the identification of additional disclosures that the trade union would find useful. Consequently these issues were addressed towards the end of the questionnaire.

4.3 Testing of questionnaire

The testing of the questionnaire was undertaken in two phases. The first phase involved a review of the questionnaire by academics who were familiar with the theoretical aspects of segment reporting. The second phase involved a pilot interview with a respondent familiar with segment reporting requirements and trade unions.

As a result of the review by academics, certain recommendations were made regarding questionnaire content, wording and structure. These recommendations were considered and where appropriate, implemented.

The second stage in the testing process was to undertake a pilot interview. Emory and Cooper recommended that a pilot interview be conducted in order to “identify problems before the actual collection of data begins” (Emory and Cooper: p 382).

The objectives of the pilot interview, as identified by Emory and Cooper, were to ensure that:

- (i) the questionnaire maintained respondent interest and was sufficiently stimulating,
- (ii) the meaning of the questions was clear and relevant,
- (iii) the questionnaire structure was appropriate with regard to the continuity and flow of questions and the question order,
- (iv) skip instructions were clear and assisted the flow of the questionnaire, and
- (v) the length of the interview was reasonable.

It was proposed to undertake one pilot interview because the questionnaire would be used in a personal interview situation, and the results of the academic review procedures were satisfactory. Had the results of the pilot interview been unsatisfactory, suitable modifications would have been made, and further pilot interviews conducted.

It was necessary that the person with whom the pilot interview would be conducted should be in a similar position to that of the respondents identified in the sample and should have a knowledge of the segment information requirements of trade unions. A suitable person was identified, and the questionnaire was administered in an interview situation. The pilot interview was conducted on the same basis that would be used for the final interviews.

The results of the pilot interview were favourable. The questionnaire was found to be interesting and stimulating, and the structure enhanced the flow of the questions. The pilot respondent made suggestions regarding the wording of certain questions and definitions. These suggestions all assisted in clarifying the meaning of the questions and definitions, and so were incorporated into the questionnaire.

In addition, questions which required further explanation from the interviewer were identified. This made it possible to standardise explanations which could be used in the interviews if necessary. The need for additional explanations was not a reflection of the lack of clarity of the questions, but was rather a reflection of the complexity of those questions. The pilot respondent also suggested that a copy of AC115 be on hand during the interview. Finally, the duration of the interview was considered to be reasonable.

The test procedures were considered to be sufficient to confirm that the design and content of the questionnaire were suitable for use in an interview situation.

4.4 Other issues concerning the questionnaire

The issues of the respondents' access to the questionnaire prior to and during the interview were addressed before the pilot interview was undertaken so that the pilot interview could mirror an actual interview as closely as possible.

The first issue was whether the respondents should have access to the questionnaire during the interview. Due to the questionnaire format, which included lists of disclosures and ranking of disclosures, and the need to minimise interview time, it was decided that it was important for the respondents to have the questionnaire in front of them during the interview. The pilot respondent endorsed this decision.

The question that then arose was whether the respondents should have access to the questionnaire prior to the interview to allow them to prepare for the interview should

they wish to do so. It was decided not to send the questionnaires to the respondents in advance for the following reasons:

- (i) the respondents may have been intimidated by the length of the questionnaire, especially if they did not realise that only one part of the questionnaire had to be answered,
- (ii) the questionnaire may have been handed to a less senior member of the trade union staff for completion, and
- (iii) the questionnaire may have been completed in advance of the interview, in order to save time, without the respondent appreciating the purpose of the questionnaire or the interpretation of the questions. This would negate the benefits of spontaneity and would limit opportunities to probe certain issues.

Therefore, while it was necessary for the respondents to be given a copy of the questionnaire at the time of the interview, it was not considered desirable for the respondents to have access to the questionnaire prior to the interview. The pilot respondent concurred with this decision, once the reasons therefor had been explained.

5. DATA COLLECTION

The above discussion has shown that the data collection method would be a series of repeated case studies conducted by means of an interview. Three points needed to be considered in relation to the data collection process, namely the identification of the respondents, the communication with the respondents prior to the interviews, the preparation for the interviews, and the conduct of the interviews.

5.1 Identification of respondents

Once a suitable sample of trade unions had been determined, the interviews were scheduled. This involved identifying a person in each trade union who would have the expertise to answer the questionnaire.

The objective of the personal interview was to determine what the trade unions' requirements were in respect of segment information of listed South African companies. It was therefore essential that the person with whom the interview would be conducted, had responsibility for analysing the financial information of companies. Such people were identified through discussions with University of Natal staff and trade union officials.

5.2 Communication with respondents

Once the potential respondents had been targeted, contact was made with them. The first contact was by means of a telephone conversation between the potential respondent and the researcher. Each potential respondent was informed of the reason for the request for an interview, as well as the scope of the questionnaire. The potential respondent was also made aware that the interview could be undertaken with a suitable qualified alternative should they be better equipped to participate in the survey.

Once a potential respondent had indicated that they were prepared to be interviewed, an interview was scheduled. The interviews were all scheduled to take place within the period of two weeks so as to limit the effects of possible changes in the external environment between interviews. As each potential respondent was contacted directly, there was no need for non-response follow up procedures to be undertaken.

5.3 Preparation for interviews

Prior to the conduct of the interviews, background reading was completed on the status of labour relations in South Africa, the development of trade union federations, and the Labour Relations Act. This information was necessary to obtain an initial understanding of the financial information needs of trade unions.

5.4 Conduct of interviews

At the commencement of each interview, the respondent was handed a letter from a senior member of the University of Natal staff. This letter thanked the respondent for agreeing to be interviewed and lent credibility to the research project.

The interview began with introductory comments about the purpose of the study, the format of the questions, the structure of the questionnaire, and the definitions and terms used in the questionnaire. Respondents were invited to make additional comments or explanations at any stage of the interview.

While conducting the interview, it was important to reduce the risk of bias entering the process. An important aspect of conducting an interview according to Bailey was to use the questions as set out in the questionnaire. This would allow “comparisons of answers from all respondents” (Bailey: p 196). Emory and Cooper endorsed this viewpoint, stating that the results could be adversely affected or biased if the interviewer were to alter the questions.

In addition to asking the questions as they were worded in the questionnaire, the following procedures were followed to reduce the risk of bias entering the process:

- (i) where explanations were required for complex questions standardised answers, as phrased during the pilot interview, were provided,
- (ii) the questions were asked in the order that they were printed on the questionnaires, and
- (iii) notes made during the interview of comments made by the respondent were read shortly after the interview to ensure that the meaning was clear.

It was considered that the above procedures were adequate to minimise the risk of bias entering the process during the conduct of the interviews.

Thus, appropriate methods were employed to identify potential respondents and to establish contact with the respondents. In addition, issues related to the conduct of the interviews were addressed which would ensure that meaningful results were obtained.

6. DATA ANALYSIS AND CONCLUSIONS

The final stage of the research project was to analyse the data and conclude on the results. These two aspects are discussed separately below.

6.1 Data analysis

The data gathered from the interviews was analysed qualitatively. Four types of questions were used in the questionnaire and the analysis of each is discussed separately. First, close ended questions were analysed using spreadsheet software. This allowed the results to be tabulated and interesting and inconsistent answers were highlighted. Second, questions which required the respondent to rank the disclosures in order of usefulness, were analysed in conjunction with the initial questions on the evaluation of the disclosures. Third, additional comments made by the respondents were evaluated individually. The open-ended responses assisted in providing explanations of interesting or unusual responses. Fourth, the open ended questions were evaluated on an individual basis.

6.2 Conclusions

As a final step in the research process, theoretical generalisations were drawn from the results of the survey. In addition, the results of the survey of trade unions was compared to the results obtained by Hemus in his survey of investment analysts, first in order to determine common user needs, and second to identify differences in those needs.

7. LIMITATIONS TO THE RESEARCH METHODOLOGY

In order to obtain meaningful results, it was decided to employ a qualitative research methodology. A possible limitation to such a methodology was that it would not be possible to statistically generalise the results. However, it was considered that the advantage of obtaining meaningful results outweighed the effect of this limitation.

8. CONCLUSION

This chapter explained how the trade unions would be interviewed to provide information to answer the research problem. It was established that a case study approach would be employed, and that through replication, it would be possible to make theoretical generalisations about the segment information needs of trade unions.

CHAPTER V: SURVEY OF TRADE UNIONS - PRESENTATION OF RESULTS

1. INTRODUCTION

The objective of the survey of trade unions was to determine whether the disclosures of South African listed companies were sufficient to meet the information needs of trade unions. The respondents were questioned on the use of disclosures currently required by AC115, and other disclosures which may be relevant.

This chapter is divided into three sections. The first section presents the results of the initial section of the questionnaire, which sought to obtain general information about the trade unions and their use of financial information. The second section presents the results for sections D to F of the questionnaire, which was answered by respondents that analysed segment information. The third section presents the results for sections G to H of the questionnaire, which was answered by respondents that did not analyse segment information.

The responses to the close ended question are set out in Appendix A, and are referred to where necessary in the chapter.

2. GENERAL INFORMATION

In the initial section of the questionnaire, questions were asked about the trade union and the trade union's use of the various financial statement components.

2.1 Information about the trade unions

The first four questions of the initial sections of the questionnaire sought to obtain information about the trade unions. These questions were used to ensure that the sample of trade unions interviewed satisfied the selection criteria (refer chapter IV).

An analysis of the first question (Appendix A, section C, question 1) indicates that the trade unions interviewed had members employed in thirty-six of the forty-three sectors of the Johannesburg Stock Exchange. This result is a function of the sample selection criteria discussed in chapter IV.

Questions 2 and 3 sought to identify the larger listed and non-listed enterprises that employed trade union members. The majority of the listed companies mentioned were diversified, and it was reasonable to expect that the respondents would have had some exposure to segment information.

Question 4 then asked the respondents to indicate the membership of their trade unions. The respondents indicated that these were estimates at the date of interview (November 1996). These were similar to the membership figures obtained from Andrew Levy and Associates at the end of 1995, and which were used to select the trade unions to be interviewed.

The answers to questions 1 to 4 indicated that the sample selection criteria had been successfully implemented. The larger trade unions (as measured in respect of membership) had been selected, all of which were involved in diversified companies and other large enterprises.

2.2 Use made of annual financial statements by trade unions

The respondents were asked to evaluate the usefulness of various financial statement components to their trade unions (Appendix A, section C, question 5). An analysis of the answers set out in Appendix A raised four points of interest.

First, the following financial statement components were considered to be very useful by three or more respondents: the directors' report, the income statement, the notes to the annual financial statements, the balance sheet and corporate governance disclosures. A number of the respondents had expressed the opinion that they were

interested in future prospects and direction of the companies. The directors' report and chairman's statement were used to obtain this information. Despite all four respondents considering the notes to be either "very useful" or "useful", one respondent felt that the disclosures in respect of directors' fees were useless as not enough details were disclosed.

Second, it is interesting that the income statement, balance sheet, cash flow statement, value added statement and audit report were considered to be of little use or useless by one or more of the respondents. The reasons for these responses were as follows:

- (i) the income statement, balance sheet and cash flow statement: These were all considered to be of little use by the same respondent. The reason for this, is that this respondent is involved in a national bargaining forum and evaluates for the bargaining unit as a whole, and not individual companies. It therefore very seldom uses these components of the financial statements.
- (ii) the cash flow statement: Concerns were raised by two respondents regarding their knowledge of the cash flow statement, and this resulted in them regarding it as being either of little use or useless. Both respondents felt that they needed to obtain an understanding of the cash flow statement and make use of it in the future.
- (iii) audit report: Two respondents expressed the view that the audit report was useless as the auditors are not seen as independent, and the audit report of the companies that employ their members are never qualified.

Third, the value added statement was treated with some caution by the respondents. One respondent indicated that the value added statement would become more useful in the future. This respondent envisaged using the value added statement to determine if the company is becoming more productive or efficient due to the training and development of employees. Another respondent indicated that they re-organised the value added statement to meet their definition of value. From their perspective, employee costs are part of production costs and not a distribution of value, as is shown by value added statements.

Fourth, the responses to corporate governance disclosures were interesting. Three of the respondents were of the opinion that these disclosures are useful and would become increasingly useful. One respondent said that his trade union had not yet looked at corporate governance as it was “still new”. The fifth respondent felt that the extent of disclosures needed to improve before they could become truly useful.

The final question in this section acted as a filter question (Appendix A, section C, question 6). The respondents were asked to indicate whether or not they evaluated segment information when it was provided. Four of the respondents surveyed analysed segment information, and they consequently answered sections D to F of the questionnaire, the results are presented in section 3 below. One respondent which is involved in the national bargaining forum, did not analyse segment information, and this respondent answered sections G to H of the questionnaire, the results of which are presented in section 4 below.

3. TRADE UNIONS THAT ANALYSE SEGMENT INFORMATION

The purpose of sections D to F of the questionnaire was to obtain information about how the respondents use the segment disclosures required by AC115, what their opinions were on AC115 and the complex issues related to segment information, and what further disclosures they would find useful.

3.1 Evaluation of current disclosures

The objectives of section D of the questionnaire were to determine the extent to which respondents analyse segment disclosures, to determine how useful the disclosures are to them, to identify where respondents obtain segment information from, and to determine why they analyse segment information.

3.1.1 Extent to which segment disclosures are analysed

The respondents were asked to identify which segment disclosures they used (Appendix A, section D, question 7). An analysis of the answers set out in Appendix A raised five points of interest.

First, all the segment disclosures were used by one or more of the respondents in their analysis of a company's performance.

Second, the most widely used segment disclosures were the description of the activities of each industry segment, the composition of each geographic segment, the capital expenditure for the period for each industry segment and the number of employees in each industry and geographic segment. The description of each industry segment was used to determine which segments each trade union should be targeting. The unions were interested in capital expenditure to assess long term job prospects for their members.

Third, one respondent indicated that two of the disclosures (the extent to which revenue and expenses are derived from intersegment transactions and the reconciliation between the segment information and consolidated information) were not provided, and consequently were not used. This therefore impacted on their ability to assess the usefulness of these disclosures.

Fourth, another respondent indicated that he did not use the revenue from each industry segment, as he used company revenue as a whole for analysis purposes.

Fifth, three respondents indicated that they used the industry segment result and three respondents indicated that they did not use the geographic segment result. Of the three respondents who did not use the geographic segment result, one indicated a clear preference for industry information, while another used neither the industry nor

the geographic segment result. The third respondent generally considered industry and geographic segment information to be equally useful, but remarked that it depended on the circumstances.

3.1.2 Usefulness of segment disclosures

The respondents were then asked to evaluate the usefulness of the disclosures currently required by AC115 (Appendix A, section D, question 8).

Five points are noted about the answers to this question. First, three disclosures were identified as “very useful” by three respondents, namely the revenue from each industry segment, the number of employees in each industry segment and the number of employees in each geographic segment. The fourth respondent to each of these disclosures considered them to be “useful”.

Second, three disclosures were identified as “very useful” by two respondents, namely the description of the activities of each industry segment, the composition of each geographic segment and the segment result for each industry segment.

Third, none of these disclosures required by AC115 were considered to be “useless” by any of the respondents. In thirteen instances various disclosures were considered to be “of little use”.

Fourth, the segment disclosures of depreciation, depletion and amortisation of assets are considered to be “of little use” by two respondents. This result was interesting as this is a non-cash expense. Despite the indication that these disclosures were of little use, all four respondents indicated in question 24 (refer 3.3.1 below) that information about other non-cash expenses would be useful.

Fifth, two of the disclosures had only three responses as these disclosures were not provided as discussed in section 3.1.1 above.

There was one respondent who appeared to have given contradictory answers to questions 7 and 8. This respondent indicated that he did not use industry segment revenue in question 7, and evaluated this disclosure as “very useful” in question 8. At the time of answering the questionnaire, the respondent indicated that he was answering on potential usefulness. This respondent answered in the same manner in respect of geographic segment disclosures and the reconciliation between the segment information and consolidated disclosures. It was decided not to adjust the results for these potentially problematic responses as the answers had been explained.

This question also enabled a comparison of the usefulness of industry and geographic segment information to be made. The industry segment information in relation to revenue and segment result was considered to be more useful than geographic segment information. For the remaining disclosures, the industry and geographic information was seen to be equally useful.

The latter equality between industry and geographic segment disclosures is consistent with the views expressed in question 26 (Appendix A, section F, question 26). In this question the respondents were asked to indicate the relative usefulness of industry and geographic segment information. Two respondents indicated that geographic segment information was as useful as industry segment information, one that geographic segment information was more useful, and the fourth that geographic segment information was less useful than industry segment information.

Question 8 indicated that industry segment disclosures of revenue and segment result are more useful than the corresponding geographic segment disclosures. Surprisingly however, question 26 indicated that in principle industry and geographic segment information are equally useful to trade unions. This inconsistency is highlighted by

table 3 below which lists the disclosures identified as being the most useful disclosure. Other than the number of employees in each geographic segment, no other geographic segment disclosure was listed as being the most useful by any of the respondents.

The respondent that favoured geographic industry segment information explained that he found information about the location of new store locations to be very useful.

The respondents were asked to indicate the five most useful disclosures, in order of usefulness, required by AC115. The disclosures listed in table 3 below were identified by the respondents as being the most useful disclosure. One respondent ranked two disclosures as being equally the most important disclosure. (The disclosures listed in table 3 are in no particular order.)

Table 3: Listing of disclosures identified as being the most useful by respondents

Disclosure	Number of respondents
The segment result for each industry segment	1
The number of employees in each industry segment	1
The number of employees in each geographic segment	1
The revenues from each industry segment	1
Research and development costs for each industry segment	1

Table 4 indicates the disclosures which respondents ranked in their list of five most useful disclosures. Only disclosures listed by at least two trade unions were included in table 4, to identify disclosures which were commonly thought to be useful.



Table 4: Listing of disclosures ranked as one of the five most useful disclosures

Disclosure	Number of respondents
The number of employees in each industry segment	4
The number of employees in each geographic segment	2
Research and development costs for each geographic segment	2
The revenues from each industry segment	2
The segment result for each industry segment	2
The extent to which revenues and expenses are derived from intersegment transactions	2

It is interesting to note from table 3 that each of the respondents elected different disclosures as being the most useful to their trade union. Table 4 is interesting as it indicates that there are only six disclosures which at least two of the respondents consider to among the most useful to their trade union.

3.1.3 Sources of segment information

The next two questions sought to identify the sources used by respondents to obtain segment information (Appendix A, section D, questions 10 and 11). The two most common sources are the annual financial statements and discussions with the employees of the enterprise. In addition, further common sources used by the respondents are interviews or discussions with management, press or journal articles, and industry reports. Other sources identified by the respondents were the Labour Research Service (two), stock brokers' reports and discussions with stock brokers (one), investment managers of trade union-related retirement funds (one), and Community Growth Fund Reports (one).

3.1.4 Reasons for evaluating segment disclosures

In response to the question on the use of segment information (Appendix A, section D, question 12), all four of the respondents interviewed indicated that segment information was used to form the basis for wage negotiations. One respondent elaborated on this point and said that it was important to “unpack the company”, and segment information enabled him to do this. The segment information was used to evaluate a company’s wage increase offer.

Four other reasons were also given for using segment information. First, when a company is not performing well, the segment information was used to compare the results of the segments with competitors, the state of the economy and the profitability of the various industries in which the company operated. The respondent indicated that he was then able to assess the reasons for the poor performance.

Second, one respondent used segment information to obtain financial information about subsidiaries which are not listed, and to which the trade union does not have access to the financial statements. The segment information is used to gauge the results and future prospects of the subsidiaries which employ trade union members. This was an important use to this respondent, who indicated that for non-listed public companies, the Registrar of Companies did not always have “up-to-date” copies of annual financial statements.

Third, this respondent also explained that when a company was negotiating retrenchments, segment information was used to assess whether the risk faced by the company justified the retrenchments.

Fourth, one respondent found that segment information assisted them in assessing company performance, the environment in which the company operates, projections for the future and estimated growth of the company. Segment information was also used to anticipate problems that the company may face in the future.

It is interesting that none of the respondents used segment information to predict the future share price of an enterprise. It is considered that this use of segment information would be useful to investment analysts and not trade unions.

Thus, the respondents use the disclosures required by AC115 to varying extents, yet overall considered the disclosures to be useful. The most useful disclosures were the number of employees in each industry and geographic segment, industry segment revenue, industry segment result and industry research and development costs.

3.2 Assessment of AC115

The objective of section E of the questionnaire was to determine the trade unions' views on AC115. Question 15 (Appendix A, section E) was a filter question. The respondents were asked whether they were familiar with the disclosure requirements of AC115. All four of the respondents responded negatively. Consequently, the following question concerning the sufficiency of AC115 to address the information needs of the trade union, was not answered. This response implies that the trade unions are not concerned with the formalised accounting requirements, and may not be aware of the extent of information which should be disclosed in annual financial statements.

Even if trade unions were not familiar with the disclosure requirements of AC115, it was considered that they would still be able to answer the questions on the problematic clauses of AC115. The problematic clauses identified were the "seriously prejudicial" clause, the treatment of intersegment transactions, the allocation of common costs and assets, the identification of geographic segments, whether segment information should be audited and whether segment information was as useful as consolidated information.

3.2.1 Assessment of the “seriously prejudicial” clause

The first problematic clause of AC115 addressed was the “seriously prejudicial” clause, which allows diversified companies not to disclose segment information if it would be seriously prejudicial to the interests of the enterprise. The respondents were asked whether an enterprise would be prejudiced competitively by providing segment information (Appendix A, section E, question 16).

All four of the respondents considered that an enterprise may sometimes be prejudiced competitively by providing segment information. The second part to the question required them to comment on their answer.

One respondent argued that where companies are in a competitive market, then the disclosure of segment information could be prejudicial. There would be a risk that the information may be used by competitors to reduce the competitive advantage enjoyed by successful segments.

A second respondent put forward a similar reason. The respondent said that some of the companies are extremely large, and the disclosure of segment information would supply their competitors with useful information. However, the respondent argued that this was not a valid reason not to disclose segment information. This means that even when segment information is prejudicial, the trade union felt that it should be disclosed.

The third respondent considered that the information could be prejudicial where it has been used in negotiations with the trade union. The other trade union members, who are not part of the negotiating team, may misconstrue the segment information provided by the company, and interpret the information as suggesting that the segments are independent units.

The fourth respondent said that segment information may be sensitive, and the company would be prejudiced if the information was made available to the public. The respondent indicated that in these instances segment information should not be made public, but that the trade union should still have access to that information as and when it required it.

Question 17 (Appendix A, section E) asked the respondents to indicate who should make the decision not to disclose segment information in the annual financial statements on the grounds that it would be seriously prejudicial to the enterprise. All four respondents indicated that this was the responsibility of the Board of Directors, although one respondent felt that the trade union should also be consulted on this decision.

One of the respondents commented that the Board of Directors were better placed to identify which information was sensitive and could be prejudicial. Another respondent further explained this answer by saying that the decision not to disclose segment information would be more acceptable if it were made by the top decision-making body of the company. This body was in charge of the company, and was the only body with the authority to release financial information, and therefore they were the only body with the authority to withhold financial information.

The response to question 17 was interesting in that only one of the respondents wanted the trade union to be consulted on this decision. Another point of interest was that the respondents accepted the Board of Directors as the top decision-making body in a company.

The following question (Appendix A, section E, question 18) required the respondents to indicate whether the external auditors should be required to report on the decision not to disclose segment information on the grounds that it was seriously prejudicial to the enterprise. Three respondents answered "Yes" and one responded

“No”. The latter respondent had indicated that he regarded the audit report as useless in section 2.2 above.

Thus, it has been seen that trade unions consider that segment information could be prejudicial to the company. Trade unions also felt that the decision not to disclose should be made by the Board of Directors, and that the external auditors should report on this decision in their audit report.

3.2.2 Treatment of intersegment transactions

The respondents were asked at what percentage of a segment’s revenue they would be satisfied with the non-disclosure of revenue derived from intersegment transactions (Appendix A, section E, question 19).

One respondent indicated that the non-disclosure of intersegment transactions comprising less than ten percent of a segment’s revenue was acceptable. The other three trade unions representatives were indifferent towards this issue.

Of the three respondents who were indifferent, one stated that the extent of intersegment transactions was immaterial from their point of view, while another respondent said that they would not use this information but that their external analysts would. The third respondent said that this was not an important issue to them. It would only become a material issue if intersegment transactions affected the ability of the company to provide for the well-being of the workers due to the effect of transfer pricing.

3.2.3 Allocation of common costs and common assets between segments

Two of the trade union representatives experienced difficulty in answering the question concerning the allocation of common costs and common assets among segments (Appendix A, section E, question 20).

One respondent felt that he did not have the expertise to answer the question, whilst the second respondent said their external analysts would be concerned with this issue, but that it was not an important issue to the trade union itself.

The remaining two trade union representatives felt that common costs and common assets should either be allocated based on actual usage, or that they should be ignored and only directly attributable costs and assets should be reflected in the segment information.

Thus, no consensus was reached on the issue of the allocation of common costs and assets.

3.2.4 Identification of geographic segments

The respondents were asked what basis the providers of segment information should use to identify geographic segments (Appendix A, section E, question 21). This question provided a variety of responses.

One respondent indicated that regional borders should be used, another favoured the use of provincial borders, the third respondent preferred the use of international borders, and the fourth respondent favoured a combination of regional and provincial borders depending on the concentration of employees. This last answer is interesting as the respondent is suggesting that concentration of employees be used as a base for determining geographic segments.

Thus, no consensus was obtained on the basis for determining geographical segments, although most respondents were in favour of segment information being presented on a regional or provincial basis. The diversity of bases does not necessarily present a problem. It is the researcher's view that as long as a company is consistent with regard to geographic segment identification over time, its geographic segments do not have to be comparable with other companies.

3.2.5 Audited segment information

The respondents were asked whether segment information should be audited (Appendix A, section E, question 22). Three of the four respondents indicated that segment information should be audited. The fourth respondent did not express an opinion on this question as he would support what his trade union's accountants advised him. This respondent was sceptical about the independence of the auditors, and was one of the respondents who considered the audit report to be "useless" in section 2.2. The responses to this question are consistent with the respondents' responses to section E question 18 and the related discussion in section 3.2.1 above.

The respondents were also asked to comment on their answers. One respondent wanted segment information to be audited so that it provided assurance as to the fair presentation of the segment information, especially in light of the issue of transfer pricing and the related issue of cross-subsidisation between segments. This respondent was concerned that intersegment transactions were being used to affect the profitability of the various segments of an enterprise. The other two respondents felt that if the segment information was audited, it would be more reliable and credible.

3.2.6 Segment versus consolidated information

The sixth issue surveyed in section E concerned the relative usefulness of segment and consolidated information (Appendix A, section E, question 23). Two of the respondents stated that segment information was as useful as consolidated information. The remaining two respondents felt that segment information was more useful than consolidated information.

Thus, respondents considered segment information to be at least as useful as consolidated information. One respondent stated that segment information was essential as the trade union did not negotiate wage increases for companies as a

whole. This respondent indicated that the trade union sometimes required even more disaggregated information than segment information as for some companies the trade union negotiated on a shift basis.

3.3 Evaluation of possible additional disclosures

Section F of the questionnaire sought to determine what additional disclosures may be useful to trade unions and what format should be used to present the segment information.

3.3.1 Usefulness of possible additional segment disclosures

A list of possible additional disclosures was presented to the respondents (Appendix A, section F, question 24). The respondents were then required to indicate how useful each of these disclosures would be to them if they were to be provided on a segment basis. An analysis of the responses reveals four interesting points.

First, all the respondents identified the management earnings, employee earnings and employer contributions as “very useful”. The responses to this question indicate that there is a demand for this information. The respondents stated that they would use these disclosures to compare average earnings per employee with the present minimum wage for that company, and to put pressure on management to reduce the wage gap. This answer was supported by their comments on the notes to the annual financial statements in section 2.2 above. The King Report on Corporate Governance refers to similar disclosures in respect of directors.

Second, all four respondents considered the disclosure of administration expenses to be “useful”. It is the view of the researcher that this information would be useful to the trade union as their members are not involved in administrative functions. The respondents would therefore find it useful to know how much is being spent on so-called non-productive functions when they are negotiating for wage increases.

Third, cash flow information by segment was considered to be “useless” by respondents. This is explained by the fact two of the respondents admitted that they do not understand the cash flow statement as discussed in section 2.2 above.

Fourth, all four respondents viewed information about non-cash expenses as “useful”. It is the researcher’s view that these non-cash expenses may be viewed with scepticism by the respondents due to their effect on earnings.

One respondent identified the following additional disclosures that his trade union would find very useful:

- (i) a breakdown of the workforce numbers in each segment by race,
- (ii) a breakdown of the workforce earnings in each segment by race, and
- (iii) training and human resource development costs for each segment.

This information would be useful to the respondent to monitor the implementation of affirmative action policies and employee development.

Another respondent commented that any information that would allow the respondent to better understand how the company operates, and thereby apply pressure on management, would be useful. The trade union required this information to support their wage increase demands.

The respondents were asked to indicate which of the possible additional disclosures would be the five most useful disclosures to their trade union. The disclosures listed in table 5 below, were identified by the respondents as being the most useful. Most of the respondents indicated more than one disclosure as being the most important disclosure, hence the total number being greater than four. The disclosures listed in table 5 are in no particular order. The “number” column indicates how many respondents ranked the particular disclosure as the most important disclosure.

Table 5: Listing of additional disclosures identified as being the most useful by respondents

Disclosure	Number
Total assets	1
Fixed assets	1
Stock	1
Contingencies and commitments	1
Management earnings - gross salaries	2
Management earnings - bonuses	2
Management earnings - fringe benefits	2
Management earnings - share options	2
Employee earnings - gross salaries and wages	1
Employer contributions	1
Selling expenses	1

One interesting response in table 5 was the ranking of selling expenses as the most useful disclosure by one respondent. The explanation given for this ranking was that the respondent wanted this expense justified by the volume of sales. It is the researchers view that the association between selling expenses and the level of sales would be useful to the trade union when evaluating a company's wage offer.

It is interesting that the respondents identified different potential disclosures as the most important possible additional disclosure in table 5. However, table 6 indicates that the respondents consider similar disclosures to be useful. Table 6 indicates the disclosures which two or more respondents ranked in their list of five most useful disclosures.

Table 6: Listing of disclosures ranked as one of the five most useful disclosures

Disclosure	Number
Management earnings - gross salaries	3
Employee earnings - gross salaries and wages	3
Management earnings - bonuses	2
Management earnings - fringe benefits	2
Management earnings - share options	2
Total assets	2

One respondent explained that the disclosures concerning management and employee earnings were very useful as they had a direct bearing on company performance, and therefore on the ability of the company to meet wage demands.

Thus, some additional disclosures were found to be useful by the respondents, namely management earnings, employee earnings, employer contributions and total assets.

3.3.2 Presentation of segment information

Finally, the respondents were asked if there is an optimal format for presenting segment information (Appendix A, section F, question 27). All four respondents indicated that the preferred format was a table of figures accompanied by an analysis thereof. One respondent indicated that either a narrative divisional review or the table of figures accompanied by an analysis thereof were equally important and useful.

One respondent made the comment that due to the limited technical skills available within his trade union, he would prefer commentary on the numeric analysis so that it would be more understandable.

The respondents also stated that a narrative divisional review (two) or a graphical analysis (two) would also be understandable. However, the respondents were unanimous that the most understandable format for the presentation of segment information was a table of figures with an analysis.

3.4 Summary

The survey of trade unions established that some trade unions are analysing segment disclosures. The respondents indicated that segment disclosures were generally useful, particularly for wage increase negotiations. The diversity of viewpoints and indifference to the complex issues may be due to the fact that these issues are technical accounting concepts, beyond the scope of the trade unions' segment information needs.

4. PART TWO: TRADE UNIONS THAT DO NOT ANALYSE SEGMENT INFORMATION

Sections G and H of the questionnaire had two objectives. The first was to identify why the trade union did not analyse segment information. The second was to establish which disclosures would be useful to the trade union if it was to use segment information.

4.1 Reasons for not evaluating segment information

An open ended question was posed to the respondent, asking for reasons why segment information was not analysed by the trade union.

The primary reason given was that the trade union was part of a national bargaining forum. Its main focus was therefore on centralised bargaining for the whole industry, and not on individual company negotiations. Consequently, the trade union did not want to bargain on a segment basis. The respondent felt that over a long period of

time this was more equitable for its members. The segments which perform better change depending on the economy, and this method of wage negotiation enables the wage increases to be more constant year on year.

Thus, in the normal course of its operations, this respondent's trade union does not analyse the financial statements of individual companies that employ its members, and therefore does not analyse segment information.

However, the respondent indicated that the annual financial statements of individual companies were analysed when consistent losses are reported, or if large losses are reported in one year.

4.2 Potential usefulness of segment information

Information was also required from the respondent on the usefulness of segment information currently provided and on the usefulness of possible additional segment information. The respondent was also asked about the desirability of auditing the segment information and the preferred format for the presentation of segment information.

4.2.1 Potential usefulness of current disclosures required by AC115

The respondent was asked to evaluate the usefulness of the disclosures required by AC115 as though the trade union made use of segment information. An analysis of the results revealed two points of interest.

First, there was a preference for industry segment information over geographic segment information, particularly in connection with the "income statement" disclosures. The respondent explained that as the trade union was organised along industry lines, industry segment information would generally be more useful than geographic segment information. This contrasts with the trade unions which make

use of segment information who indicated that industry and geographic information are equally useful.

The preference for industry segment information was supported by the result of question 33 (Appendix A, section H, question 33). The respondent indicated in this question that geographic segment information was less useful than industry segment information.

Second, this respondent indicated that all the disclosures required by AC115 would be either useful or very useful. This contrasted to the respondents who analysed segment information, who considered that some of the disclosures were of little use.

Question 30 asked the respondent to indicate the five disclosures which would be most useful to the respondent. The ranking was as follows, with “1” being the most useful:

Table 7: Ranking of disclosures required by AC115

Ranking	Disclosure
1.	The reconciliation between the segment information and consolidated disclosures.
2.	The number of employees in each industry segment.
2.	The number of employees in each geographic segment.
4.	Capital expenditure for the period for each industry segment.
4.	Capital expenditure for the period for each geographic segment.

Table 7 indicates that this respondent ranked two disclosures as being second most useful and fourth most useful.

The common rankings between trade unions that analyse segment information and the trade union that does not, were:

- (i) the number of employees in each industry segment, and
- (ii) the number of employees in each geographic segment.

The respondent ranked the reconciliation between the segment information and consolidated disclosures as the most useful disclosure as it incorporated all the income statement and balance sheet segment disclosures. Therefore, this item must be seen as representing these disclosures as well. Thus, all five respondents ranked similar disclosures as being most useful to them.

Thus, this respondent would find the segment disclosures required by AC115 either very useful or useful if the trade union was to analyse segment information.

4.2.2 Potential usefulness of additional disclosures

The following question (Appendix A, section H, question 31) of the questionnaire sought to determine what additional segment disclosures would be useful to the respondent and what format should be used to present the segment information in an understandable manner, if the respondent was to make use of segment information.

The respondent indicated that all of the possible disclosures would be “very useful” or “useful”. This is consistent with the answers of the four respondents whose trade unions make use of segment information.

Question 32 asked the respondent to indicate the five disclosures which would be most useful. The ranking was as follows, with “1” being the most useful:

Table 8: Ranking of possible additional disclosures

Ranking	Disclosure
1.	Management earnings - gross salaries.
1.	Management earnings - bonuses.
1.	Management earnings - fringe benefits.
1.	Management earnings - share options.
5.	Total assets.

The joint ranking of the management earnings disclosures would be used by the respondent to reduce the wage gap. This is consistent with the results obtained from the other four respondents whose trade unions make use of segmental information.

The respondent also indicated an additional two disclosures that his trade union would find very useful. First, pension and retirement fund information on a segment basis would be very useful to the trade union. The trade union would also be interested in:

- (i) the percentage contributed by the company to the funds,
- (ii) whether the fund was a fixed contribution or defined benefit fund,
- (iii) the surplus in the fund, and
- (iv) whether the company is on a “pension holiday” (i.e. the company was not required to pay its share of the contribution due to a surplus in the fund, as determined by an actuary). The respondent expressed a concern that a company may use a surplus to fund a buy-out or to fund severance benefits.

It is the researcher’s view that a company may experience difficulty in allocating pension and retirement fund information across segments.

Second, the respondent would also find information relating to employees very useful, particularly information related to affirmative action, such as the number of employees

by race and by gender, and the number of employees with disabilities. This is consistent with the additional disclosures identified by the trade unions who make use of segment information.

Thus, the respondent would find all of the additional disclosures useful if his trade union used segment information. Two additional disclosures, in respect of pension and retirement funds, and affirmative action, were identified by the respondent as being very useful.

4.2.3 Audited segment information

The respondent was asked (Appendix A, section H, question 34) whether segment information should be audited. The respondent indicated that segment information should be audited. This answer was interesting as this respondent considered the audit report to be “useless”. One reason for this apparent contradictory response is that the respondent commented that it would be preferable if the trade union was involved in the appointment of the auditor. However, the respondent went on to state that even if the trade union was not involved in the appointment of the auditor, the trade union would still prefer that the information be audited.

4.2.4 Presentation of segment information

The final question (Appendix A, section H, question 35) concerned the format for the presentation of segment information. The respondent indicated that for external reporting purposes, a table of figures accompanied by an analysis thereof would be the most easily understood. However, if the company wanted to communicate segment information to employees, the respondent recommended that a graphical analysis would be more useful and effective.

4.3 Summary

Thus, the reason for this respondent not analysing segment information is that the trade union is involved in centralised bargaining. This form of negotiation results in segment information having no applicability. However, the respondent indicated that he would find segment information useful if he ever needed to evaluate it.

5. CONCLUSION

The use of segment information has been surveyed by conducting interviews with four trade unions. The primary disclosures used have been identified, and additional disclosures have been assessed for usefulness. In addition, reasons for trade unions not using segment information were surveyed, and their opinion on AC115 and additional disclosures sought. Reasons for not analysing segment information have been identified through an interview with one trade union. Once the use of segment information was established, the next step was to evaluate whether the disclosures of South African listed companies in respect of segment reporting is sufficient to meet the needs of the trade unions.

CHAPTER VI: SURVEY OF TRADE UNIONS - ANALYSIS OF RESULTS

1. INTRODUCTION

The final stage of the research project was to draw conclusions on the results of the survey of trade unions. There were three steps in this process. First, theoretical generalisations about the use of segment information by trade unions in South Africa were formulated. Second, these generalisations were compared and contrasted with the results obtained by Hemus from his survey of investment analysts. Third, E51 was evaluated in terms of these two user groups of segment information. Once these three steps had been completed, it was possible to answer the research problem.

2. THEORETICAL GENERALISATIONS ON THE USE OF SEGMENT INFORMATION BY TRADE UNIONS

Based on the results of the survey of trade unions presented in chapter V, it was possible to draw theoretical generalisations about the use of segment information by trade unions, the assessment of AC115 by trade unions, and other segment information issues.

2.1 Use of segment information

The trade unions were surveyed on their use of segment disclosures required in terms of AC115. Two theoretical generalisations can be drawn about the use that trade unions make of these segment disclosures. First, trade unions analyse segment information as part of their evaluation of a company's performance. In addition, trade unions consider segment information to be at least as useful as consolidated information.

The exception to this generalisation is where the trade union is involved in a national bargaining forum. Under these circumstances the trade union focuses on the financial results of the industry as a whole and does not evaluate the annual financial statement components, such as the income statement and balance sheet. Thus, segment information is not analysed either.

Second, trade unions analyse segment information primarily for the purpose of wage negotiation. Trade unions do analyse segment information for more general purposes, for example, to assess the company's overall performance.

2.2 Assessment of AC115

The trade unions were surveyed to identify their views on the requirements of AC115. The survey of trade unions resulted in the following six generalisations being drawn about their assessment of AC115.

First, trade unions are not concerned with the formal accounting requirements for segment information. A consequence of this generalisation is that trade unions may be unaware of the extent of information which diversified companies are required to disclose in terms of AC115. It is also suggested that trade unions may be unconcerned with other accounting statements.

Second, the segment disclosures required in terms of AC115 are considered to be useful by trade unions that analyse segment information. The most useful disclosures are revenue for each industry segment, and number of employees in each industry and geographic segment. These disclosures are also considered to be potentially useful by trade unions that do not evaluate segment information.

Third, the issues of the allocation of common costs and assets, as well as the effect of intersegment transactions, are not important to trade unions. It is submitted that these complex accounting issues are beyond the scope of trade unions' segment information

needs. Only one trade union was concerned with the issue of transfer pricing and the related issue of cross-subsidisation between segments.

Fourth, trade unions do not agree on the basis for geographic segment identification. Acceptable bases are the use of regional borders, provincial borders, international borders and concentration of employees. It is submitted that, as segments do not need to be comparable across companies, this generalisation does not represent a problem. AC115 is not prescriptive, and requires the companies to disclose the composition of each geographic segment.

Fifth, trade unions acknowledge that an enterprise may be prejudiced competitively by providing segment information in certain circumstances. Where an enterprise elects not to disclose segment information on the basis that it is seriously prejudicial to the interests of the company, the trade unions agreed that the decision should be made by the Board of Directors. The trade unions also require the auditors to report on the decision not to disclose segment information.

Sixth, trade unions consider industry segment information to be more useful than geographic segment information. However, the disclosures of the number of employees in each industry and geographic segment, the activities of each industry segment and the composition of each geographic segment are considered to be equally useful by trade unions.

2.3 Other segment information needs

The survey of trade unions questioned the trade unions on four further segment information issues, namely possible additional disclosures, whether segment information should be audited, the sources of segment information, and preferred formats for the presentation of segment information.

First, trade unions consider that the following possible additional segment disclosures would be useful:

- management earnings - gross salaries,
- management earnings - bonuses,
- management earnings - fringe benefits,
- management earnings - share options,
- employee earnings - gross salaries and wages,
- employer contributions,
- total assets, and
- affirmative action disclosures.

These possible additional disclosures are similar to the recommendations in respect of directors earnings contained in the King Report on Corporate Governance.

Second, trade unions agree that segment information should be audited to provide assurance as to the fair presentation of segment information. However, some reservations were expressed concerning a perceived lack of independence of auditors.

Third, all the trade unions use the annual financial statements of companies in conjunction with discussions with employees to obtain segment information. Other sources used by most trade unions to obtain segment information are interviews or discussions with management, press or journal articles, industry reports and the Labour Research Service.

Fourth, the trade unions consider that the most useful format for the presentation of segment information is a table figures accompanied by a narrative discussion of the figures. The trade unions indicated that if the company wanted to present segment information to its employees, then the segment information should be presented as a graphical analysis.

2.4 Summary

Thus, twelve theoretical generalisations have been drawn on the use of segment information by trade unions. These generalisations relate to the use made of the disclosures required in terms of AC115, segment information issues arising out of AC115, as well as other disclosures not required by AC115.

3. COMPARISON OF TRADE UNIONS AND INVESTMENT ANALYSTS AS USERS OF SEGMENT INFORMATION

A comparison of the results of the survey of trade unions and investment analysts was made to identify common segment information needs. The twelve theoretical generalisations arising out of the survey of trade unions were compared to the results of the survey of investment analysts conducted by Hemus. This comparison is discussed by first identifying the similarities between the results of the surveys of the two user groups, and then the differences.

3.1 Similarities between the results from the surveys of trade unions and investment analysts

Seven similarities were noted between the results from the surveys of trade unions and investment analysts. First, both user groups considered segment information useful in their analysis of a company. The majority of the investment analysts used segment information when it was provided, and all of the trade unions that made use of annual financial statements made use of segment information.

Second, both user groups use similar sources to obtain segment information. Both user groups used the annual financial statements. Other common sources of segment information identified by both user groups are press or journal articles and industry reports. Both groups also identified discussions as being a source of segment information, with trade unions primarily holding discussions with employees, and to a

lesser extent with management, and the investment analysts using interviews with management.

Third, both user groups recognised that disclosing segment information may sometimes be prejudicial to the interest of an enterprise. In addition, both the trade unions and investment analysts indicated that the Board of Directors of an enterprise should decide whether segment information was seriously prejudicial to the interests of the enterprise, and therefore make the decision not to disclose segment information in the annual financial statements. The investment analysts also indicated that the reasons for not disclosing segment information should be disclosed.

Fourth, both user groups indicated a preference for the segment information presented in the annual financial statements to be audited.

Fifth, there was consensus among the trade unions and investment analysts that industry segment information was more useful than geographic segment information although this preference was more evident from the results of the survey of investment analysts than the survey of trade unions.

Sixth, both trade unions and investment analysts indicated that consolidated information was not more useful than segment information for analysis purposes. However whilst trade unions consider segment information to be more useful than consolidated information, investment analysts consider segment information to be as useful as consolidated information.

Seventh, the following disclosures were identified as being very useful by both trade unions and investment analysts:

- segment revenue,
- total assets, and
- segment result.

3.2 Differences between the results from the surveys of trade unions and investment analysts

The main difference between the results of the survey of trade unions and that of investment analysts related to the treatment of complex issues. The investment analysts expressed opinions on the issues of the allocation of common costs and assets and the disclosure of intersegment transactions. These issues were not as relevant to the trade union representatives, some of whom were not prepared to comment on these issues. This suggests that analysts have a better understanding of these issues.

3.3 Summary

The survey of trade unions and that of investment analysts indicated a common need for segment information. A number of similarities were also identified in respect of sources of segment information, whether segment information should be audited, the relative usefulness of industry versus geographic segment information, and the relative usefulness of segment versus consolidated information. In addition, both user groups recognised that sometimes the disclosure of segment information could be prejudicial to the interests of the company. The differences identified related to the more complex issues, which the trade unions did not consider to be relevant.

4. COMPARISON OF THE RESULTS OF THE SURVEYS OF USERS WITH THE REQUIREMENTS OF E51

The international exposure draft E51 is evaluated in light of the results of the surveys of the two user groups because of the likelihood of this exposure draft being issued as a South African exposure draft. As discussed in chapter II, the South African Institute of Chartered Accountants is following a harmonisation project to bring South African accounting standards in line with the international standards.

This section will compare the results of the surveys of trade unions and investment analysts with the proposals contained in E51. Where the proposals in E51 are similar to the results of the surveys, this will be highlighted. Similarly, differences between E51 and the surveys will be contrasted. In addition, consideration will be given to the inclusion of a “seriously prejudicial” clause in a revised South African statement on segment reporting.

4.1 Similarities between E51 and the results of the surveys of user groups

Similarities were noted between E51 and the results of the surveys of the user groups, first in respect of including primary and secondary reporting formats, and second in respect of some of the additional disclosures required for the primary reporting format.

First, the proposal requiring enterprises to identify a primary and a secondary reporting format has relevance in South Africa. Both user groups indicated a preference for industry over geographic segment information. This suggests that one of the formats is more useful and the same extent of disclosure is therefore not necessary for the second format. Both the trade unions and the investment analysts would prefer the primary reporting format to be industry segment information, with geographic segment information being classified as a secondary reporting format. However, this decision should be made by the management of each enterprise.

Second, the following additional disclosures, not required by AC115, but proposed by E51 for the primary reporting format were considered to be useful by trade unions:

- depreciation, depletion and amortisation of assets,
- other significant non-cash expenditure,
- capital expenditure for the period,
- contingencies and commitments,
- and investment income.

It is noted that some of these disclosures are currently suggested disclosures in terms of AC115.

4.2 Differences between E51 and the results of the surveys of user groups

A comparison of table 1 in chapter II and the results of the surveys of trade unions and investment analysts indicates that the disclosures required by E51 are considered to be useful by trade unions and investment analysts. However, the survey of trade unions identified three additional disclosures which would be useful.

First, the trade unions consider the number of employees in each industry and geographic segment to be “very useful”. This disclosure is currently a suggested disclosure of AC115 (refer table 1). In view of the importance placed on this disclosure by the trade unions, consideration should be given to including it as a required disclosure in any revised statement on segment reporting.

Second, the trade unions are most interested in management earnings. Including such a requirement in a revised statement on segment reporting would be in line with the King Commission’s recommendations on increased disclosures regarding directors earnings.

Third, the unions indicated that information on affirmative action policies would be useful. E51 does not propose any disclosures on racial breakdown of the workforce, nor in respect of gender and disabilities. In view of the importance placed on such information by the trade unions, consideration should be given to including affirmative action policies in a revised statement on segment reporting.

4.3 Consideration of a “seriously prejudicial” clause

AC115 and SFAS25 are the only two authoritative pronouncements considered which contain a “seriously prejudicial” clause. In both the survey of trade unions and

investment analysts, the users recognised that there could be circumstances under which it would be prejudicial for an enterprise to disclose segment information. Both user groups indicated that the Board of Directors of the enterprise should be responsible for making this decision. In addition, the user groups responded that the auditors should report on this decision not to disclose segment information. However, investment analysts required the Board of Directors to state the reasons for the non-disclosure of segment information in the annual financial statements.

Thus, there appears to be support for the retention of a “seriously prejudicial” clause amongst user groups in South Africa. This is a departure from the proposals of E51. Should this clause be retained, then the circumstances surrounding the non-disclosure of segment information should be reviewed and reported on by the external auditors.

5. CONCLUSION - ADDRESSING THE RESEARCH PROBLEM

The research problem was developed in chapter III. This section will first use the results of the survey of trade unions to address the research subproblems, and these answers are then used to address the research problem.

5.1 Addressing the research subproblems

Three research subproblems were developed in chapter III. First, with regard to the segment information provided by South African listed companies, the following information was used by four of the trade unions surveyed:

- the description of the activities of each industry segment,
- the composition of each geographic segment,
- capital expenditure for the period in respect of each industry segment,
- the number of employees in each industry segment, and
- the number of employees in each geographic segment.

The following segment information provided by South African listed companies were used by three of the trade unions surveyed:

- the revenue from each industry segment,
- the segment result from each industry segment, and
- the depreciation, depletion and amortisation of assets for each industry segment.

The remainder of the disclosures required by AC115 were used by either one or two of the trade unions.

Two of the disclosures required in terms of AC115 were identified by one trade union as not being disclosed, namely the extent to which revenue and expenses are derived from intersegment transactions and the reconciliation between the segment information and consolidated disclosures.

It is therefore concluded that trade unions do use the segment information provided by South African listed companies.

Second, with regard to whether the segment disclosures satisfy the segment information needs of trade unions, the following disclosures were identified as being very useful or useful by four of the trade unions surveyed:

- the revenues from each industry segment,
- the number of employees in each industry segment, and
- the number of employees in each geographic segment.
- the description of the activities of each industry segment,
- the composition of each geographic segment,
- capital expenditure for each industry segment, and
- capital expenditure for each geographic segment.

None of the disclosures were identified as being useless by any of the trade unions surveyed. Thus, the segment disclosures do at least partially satisfy the information

needs of trade unions.

Third, with regard to additional disclosures required by trade unions, four of the trade unions surveyed identified the following additional segment disclosures as being very useful or useful:

- management earnings - gross salaries,
- management earnings - bonuses,
- management earnings - fringe benefits,
- management earnings - share options,
- employee earnings - gross salaries and wages,
- employer contributions,
- administration expenses,
- interest, dividend and other investment income,
- directly attributable interest expense,
- total assets,
- fixed assets,
- stock,
- contingencies and commitments, and
- investments directly attributable to the segment.

In addition to the above list, two trade unions required information on a segment basis concerning affirmative action, and one of these trade unions required segment information on training and human resource development costs.

5.2 Addressing the research problem

The above discussion on the research subproblems identified that trade unions do use segment information, that the disclosures do at least partially satisfy the information needs of trade unions, and that there are some additional segment disclosures which trade unions would find useful.

The answers to the subproblems indicated that the segment disclosures of South African listed companies are generally sufficient to meet the information needs of trade unions, although the trade unions also identified additional disclosures that would be useful.

CHAPTER VII: CONCLUSION

1. INTRODUCTION

The research project had the objectives of:

- (i) determining the use trade unions make of segment information, and
- (ii) determining the segment information requirements of trade unions, or
- (iii) determining the reasons why trade unions may not use segment information.

This chapter discusses the main research findings, and identifies areas for further research.

2. MAIN RESEARCH FINDINGS

The main findings of the research project can be divided into three areas. First, the significant results from the survey of trade unions are summarised. Second, these results are compared and contrasted to the results of a similar survey of investment analysts. Third, the proposals contained in E51 are compared to the results of the surveys of trade unions and investment analysts.

2.1 Main findings from the survey of trade unions

The following theoretical generalisations were drawn from the survey of trade unions:

- (i) trade unions analyse segment information as part of their evaluation of a company's performance,
- (ii) trade unions do not use segment information if they are involved in a national bargaining forum,
- (iii) trade unions consider segment information to be at least as useful as consolidated information,
- (iv) trade unions use segment information primarily to form the basis for wage negotiations,

- (v) trade unions are not concerned with the formal accounting requirements of segment information,
- (vi) the disclosures required in terms of AC115 are considered to be useful,
- (vii) trade unions acknowledge that an enterprise may be prejudiced competitively by providing segment information,
- (viii) industry segment information is considered to be more useful than geographic segment information,
- (ix) trade unions consider that additional disclosures relating to management earnings, total assets and affirmative action would be useful,
- (x) trade unions agree that segment information should be audited, and
- (xi) the most popular format for the presentation of segment information is a table of figures accompanied by an analysis thereof.

2.2 Main findings from the comparison of the surveys of trade unions and investment analysts

Similarities were noted between the survey of trade unions and the survey of investment analysts conducted by Hemus. These were:

- (i) segment information is used by both user groups,
- (ii) both user groups use similar sources to obtain segment information,
- (iii) both user groups acknowledged that the disclosure of segment information may be prejudicial to the interests of the enterprise,
- (iv) segment information should be audited,
- (v) industry segment information is more useful than geographic segment information, and
- (vi) consolidated information is not more useful than segment information.

Differences between the results of the surveys of trade unions and investment analysts were identified in respect of complex issues which were not as relevant to trade union information needs as they were for investment analysts.

2.3 Evaluation of the proposals contained in E51

The proposals contained in E51 were evaluated in terms of the above generalisations made about the use of segment information in South Africa. The distinction drawn in E51 between primary and secondary reporting formats for segment information, and the differences in the extent of disclosures required for each format, would appear to be acceptable to both user groups. In addition, both of the user groups considered that the additional disclosures suggested by E51 for the primary reporting format, would be useful.

The disclosures that trade unions consider would be useful, but that are not contained in E51 are:

- (i) the number of employees in each industry and geographic segment,
- (ii) management earnings, and
- (iii) information concerning affirmative action.

In addition to these disclosure differences, the responses given by the user groups indicated that consideration should be given to retaining the “seriously prejudicial” clause contained in AC115.

3. AREAS FOR FURTHER RESEARCH

The following areas for further research were identified:

- (i) research that would statistically test the theoretical generalisations drawn,
- (ii) the value of the audit function to different user groups and the different perceptions concerning auditors’ independence,
- (iii) the use that trade unions make of other annual financial statement components, and
- (iv) the views of preparers of annual financial statements on the proposals contained in E51.

4. CONCLUSION

The research project achieved three objectives. First, it was determined that trade unions use segment information. Second, the usefulness of various segment disclosures were evaluated from a trade union perspective. Third, it was established that when a trade union is involved in a national bargaining forum, segment information is not used. Finally, areas for further research have been identified.

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Trade Union Name

**QUESTIONNAIRE
TO TRADE UNIONS
SEGMENT REPORTING**

SECTION A: INTRODUCTION & CONTENTS

This questionnaire is intended to be used in a personal interview situation. It is applicable to listed companies and other significant enterprises which employ your trade union members. This questionnaire is addressed to you in your capacity as a trade union representative.

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SECTION B: DEFINITIONS

Segments of an enterprise: "Industry and geographical components whose activities, assets and results of operations are clearly distinguishable physically, operationally and for financial reporting purposes, from the other activities, assets and results of operations of the enterprise." (AC115 para .05)

Industry segment: "the distinguishable components of an enterprise each engaged in providing a different product or service, or a different group of related products or services, primarily to parties outside the enterprise." (AC115 para .06)

Examples: clothing, motor vehicles, household appliances

Geographic segment: "the distinguishable components of an enterprise each engaged in operations in individual countries or groups of countries within particular geographical areas as may be determined to be appropriate to the particular circumstances of an enterprise." (AC115 para .07)

Examples: Gauteng, South Africa, North America

Segment revenues: "revenues that are directly attributable to a segment, or the relevant portion of revenues that can be allocated on a reasonable basis to a segment." (AC115 para .08)

Segment expense: "expenses that are directly attributable to a segment or the relevant portion of expenses that can be allocated on a reasonable basis to a segment." (AC115 para .09)

Segment result: "the difference between segment revenues and segment expenses." (AC115 para .10)

Segment assets: "the assets net of non interest bearing liabilities that are directly attributable to a segment or the relevant portion of assets and non interest bearing liabilities that can be allocated on a reasonable basis to a segment." (AC115 para .11)

SECTION C: GENERAL INFORMATION

1. In which of the following industry sectors as defined by the Johannesburg Stock Exchange does your trade union have members employed?

Coal.	1	Industrial holding.	3
Diamonds.	1	Beverages, hotels and leisure.	1
Gold - Rand and others.	1	Building, construction and allied.	2
Gold - Evander.	1	Chemicals, oils and plastics.	2
Gold - Klerksdorp.	1	Clothing, footwear and textiles.	2
Gold - O.F.S.	1	Development stage.	0
Gold - West Witwatersrand.	1	Electronics and electrical.	1
Curtailed operations.	1	Engineering.	1
Metals and minerals - Copper.	2	Food.	1
Metals and minerals - Manganese.	2	Furniture, household and allied.	3
Metal and minerals - Platinum.	2	Media.	1
Metals and minerals - Other.	2	Motor.	1
Mining houses.	1	Packaging and printing.	1
Mining holding.	1	Paper.	1
Mining exploration.	1	Pharmaceutical and medical.	0
Banks and financial services.	1	Steel and allied.	2
Insurance.	1	Stores.	2
Investment trusts.	0	Transportation.	0
Redevelopment.	0	Cash companies.	0
Property.	2	Development capital.	1
Property Trust.	0	Venture capital.	1
Property loan stock.	1		

2. In which three listed companies are the majority of your members employed?

3. In which other large non-listed enterprises is your trade union represented?

4. What is your trade union's total membership?

5. Please evaluate the usefulness of the following financial statement components to your trade union:

	Very useful	Useful	Of little use	Useless
5.1 the income statement.	4	0	1	0
5.2 the balance sheet.	3	1	1	0
5.3 the cash flow statement.	0	2	2	1
5.4 the notes to the annual financial statements.	3	2	0	0
5.5 the directors' report.	4	1	0	0
5.6 the value added statement.	0	4	1	0
5.7 the audit report.	1	2	0	2
5.8 the chairman's statement.	2	3	0	0
5.9 corporate governance disclosures.	3	0	2	0
5.10 other disclosures (please specify).	2	0	0	0

6. Does your trade union analyse segmental information when it is provided by the enterprise in which it is represented?

6.1 Yes.

4

6.2 No.

1

If "yes", please proceed with sections D to F (green pages).

If "no", please proceed with sections G to H (pink pages).

SECTION D: CURRENT DISCLOSURES

7. Does your trade union make use of the following segmental disclosures for analysis purposes:

	Yes	No	Information is not provided
7.1 the description of the activities of each industry segment?	4	0	0
7.2 the composition of each geographic segment?	4	0	0
7.3 the revenue from each industry segment?	3	1	0
7.4 the revenue from each geographic segment?	2	2	0
7.5 the segment result for each industry segment?	3	1	0
7.6 the segment result for each geographic segment?	1	3	0
7.7 the extent to which revenue and expenses are derived from intersegment transactions?	2	1	1
7.8 the basis used of intersegment pricing?	2	2	0
7.9 the reconciliation between the segment information and consolidated disclosures?	1	2	1
7.10 the depreciation, depletion and amortisation of assets for each industry segment?	3	1	0
7.11 the depreciation, depletion and amortisation of assets for each geographic segment?	2	2	0
7.12 research and development costs for each industry segment?	2	2	0
7.13 research and development costs for each geographic segment?	2	2	0
7.14 capital expenditure for the period for each industry segment?	4	0	0
7.15 capital expenditure for the period for each geographic segment?	1	2	0
7.16 the number of employees in each industry segment?	4	0	0
7.17 the number of employees in each geographic segment?	4	0	0

8. Please evaluate the usefulness of the following segmental disclosures for the purposes of your trade union's analysis:

		Very useful	Useful	Of little use	Useless
8.1	the description of the activities of each industry segment.	2	2	0	0
8.2	the composition of each geographic segment.	2	2	0	0
8.3	the revenues from each industry segment.	3	1	0	0
8.4	the revenues from each geographic segment.	1	2	1	0
8.5	the segment result for each industry segment.	2	1	1	0
8.6	the segment result for each geographic segment.	0	2	2	0
8.7	the extent to which revenues and expenses are derived from intersegment transactions.	1	1	1	0
8.8	the basis of intersegment pricing.	1	2	1	0
8.9	the reconciliation between the segment information and consolidated disclosures..	0	2	1	0
8.10	the depreciation, depletion and amortisation of assets for each industry segment.	1	1	2	0
8.11	the depreciation, depletion and amortisation of assets for each geographic segment.	1	1	2	0
8.12	research and development costs for each industry segment.	1	2	1	0
8.13	research and development costs for each geographic segment.	1	2	1	0
8.14	capital expenditure for the period for each industry segment.	1	3	0	0
8.15	capital expenditure for the period for each geographic segment.	1	3	0	0
8.16	the number of employees in each industry segment.	3	1	0	0
8.17	the number of employees in each geographic segment.	3	1	0	0

9. Of the disclosures mentioned in question 8 above, please indicate the five most useful disclosures to your trade union, with "1" being the most useful.

1. _____

2. _____

3. _____

4. _____

5. _____

10. Does your trade union use the following as sources of segmental information:

	Yes	No
10.1 annual financial statements?	4	0
10.2 interviews or discussions with management of the enterprise?	3	1
10.3 press or journal articles?	3	1
10.4 industry reports?	3	1
10.5 discussions with employees of the enterprise?	4	0
10.6 internal management reports?	2	2
10.7 employer organisations?	2	2
10.8 industrial councils?	2	2
10.9 universities?	2	2
10.10 Department of Labour?	2	2

11. Please list any other sources your trade union uses to obtain segmental information:

Stock brokers reports and discussions with stock brokers (1)

Investment managers of trade union-related retirement funds (1)

Labour Research Service (2)

Community Growth Fund Reports (1)

12. Segmental information is used by your trade union to:

	Yes	No
12.1 predict the future earnings of the enterprise.	2	2
12.2 predict the future share price of the enterprise.	0	4
12.3 assess the risk of the enterprise.	2	2
12.4 form the basis for wage negotiations.	4	0
12.5 assess the future cash flows of the enterprise.	2	2

13. Please list any other reasons why your trade union evaluates segmental information:

SECTION E: ASSESSMENT OF AC115

14. Are you familiar with the disclosure requirements of AC115?

14.1 Yes.

14.2 No.

0
4

If "yes", please proceed with question 15.

If "no", please proceed with question 16.

15. Are the disclosure requirements of AC115: (please tick one block)

15.1 more than sufficient to meet the information needs of your trade union?

15.2 sufficient to meet the information needs of your trade union?

15.3 only partly sufficient to meet the information needs of your trade union?

15.4 of no use at all to your trade union?

16. Does your trade union consider that an enterprise may be prejudiced competitively by providing segmental information? (Please tick one block.)

16.1 Always.

0

16.2 Sometimes.

4

16.3 Never.

0

Please comment.

17. Where an enterprise proposes not to provide segmental information on the grounds that it would be prejudicial, the decision not to disclose should be made by:

17.1 the Board of Directors.

4

17.2 the Managing Director.

0

17.3 the Financial Director.

0

17.4 the Audit Committee.

0

17.5 the Trade Union.

1

17.6 some other body (please specify) _____

0

Please give reasons for your answer.

18. Is your trade union of the opinion that the external auditors should be required to report on the decision not to disclose segmental information on the grounds that it is seriously prejudicial to the enterprise?

18.1 Yes.

3

18.2 No.

1

19. At what percentage of a segment's revenue would your trade union be satisfied with the non-disclosure of revenue derived from intersegmental transactions? (Please tick one block.)

19.1 Up to 5%.

0

19.2 Up to 10%.

1

19.3 Up to 15%.

0

19.4 Other (please specify) _____

2

20. Is your trade union of the opinion that the providers of segmental information should:

	Yes	No
20.1 base the allocation of common assets on actual usage?	1	1
20.2 base the allocation of common assets on a best estimate of actual usage?	0	2
20.3 ignore common assets and only show directly attributable assets?	1	1
20.4 base the allocation of common costs on actual usage?	1	1
20.5 base the allocation of common costs on a best estimate of actual usage?	0	2
20.6 ignore common costs, and only show directly attributable costs?	1	1

21. Which basis should be used for determining geographical segments?

21.1 Magisterial districts.	0
21.2 Regional borders.	1
21.3 Provincial borders.	1
21.4 International borders.	1
21.5 Other (please specify).	1

A combination of regional and provincial borders depending on the concentration of employees

22. In the opinion of your trade union, should segmental information be audited? (Please tick one block.)

22.1 Yes.

3

22.2 No.

0

Please give reasons for your answer.

23. In the opinion of your trade union, is segmental information: (please tick one block)

23.1 as useful as consolidated information?

2

23.2 more useful than consolidated information?

2

23.3 less useful than consolidated information?

0

SECTION F: ADDITIONAL DISCLOSURES

24. Please indicate how useful your trade union would find the following additional segmental disclosures:

	Very useful	Useful	Of little use	Useless
24.1 selling expenses.	2	1	1	0
24.2 administration expenses.	0	4	0	0
24.3 interest, dividend and other investment income.	3	1	0	0
24.4 directly attributable interest expense.	1	3	0	0
24.5 taxation paid.	1	3	0	0
24.6 management earnings - gross salaries.	4	0	0	0
24.7 management earnings - bonuses.	4	0	0	0
24.8 management earnings - fringe benefits.	4	0	0	0
24.9 management earnings - share options.	4	0	0	0
24.10 employee earnings - gross salaries and wages.	4	0	0	0
24.11 employer contributions.	4	0	0	0
24.12 accounts receivable.	1	1	2	0
24.13 accounts payable.	1	2	1	0
24.14 total assets.	2	2	0	0
24.15 fixed assets.	2	2	0	0
24.16 stock.	2	2	0	0
24.17 cash flow information.	1	1	2	0
24.18 contingencies and commitments.	1	3	0	0
24.19 significant non-cash expenses (excluding depreciation and amortisation).	0	4	0	0
24.20 investments directly attributable to the segment.	2	2	0	0
24.21 other (please specify).				
racial breakdown of workforce - numbers	1			
racial breakdown of workforce - earnings	1			
training & human resource development costs	1			

25. Of the disclosures mentioned in question 24 above, please indicate the five most useful disclosures to your trade union, with "1" being the most useful.

1. _____

2. _____

3. _____

4. _____

5. _____

26. In the opinion of your trade union, is geographic segmental information:
(please tick one block)

26.1	as useful as industry segmental information?	2
26.2	more useful than industry segmental information?	1
26.3	less useful than industry segmental information?	1

27. In the opinion of your trade union, segmental information is most easily understood when it is presented in the form of:

	Strongly agree	Agree	Indifferent	Disagree	Strongly disagree
27.1 a narrative divisional review.	1	2	0	0	0
27.2 table of figures, accompanied by an analysis thereof.	4	0	0	0	0
27.3 a graphical analysis.	0	2	1	0	0
27.4 other (please specify).	0	0	0	0	0

SECTION G: REASONS FOR NOT ANALYSING SEGMENT INFORMATION

28. Why does your trade union not analyse segmental information?

SECTION H : POTENTIAL USE OF SEGMENT INFORMATION

29. The following segmental disclosures are required by AC115. If your trade union was to make use of segmental information, please indicate the usefulness of these disclosures:

		Very useful	Useful	Of little use	Useless
29.1	the description of the activities each industry segment.	1	0	0	0
29.2	the composition of each geographic segment.	0	1	0	0
29.3	the revenues from each industry segment.	1	0	0	0
29.4	the revenues from each geographic segment.	0	1	0	0
29.5	the segment result for each industry segment.	1	0	0	0
29.6	the segment result for each geographic segment.	0	1	0	0
29.7	the extent to which revenues and expenses are derived from intersegment transactions.	1	0	0	0
29.8	the basis of intersegment pricing.	1	0	0	0
29.9	the reconciliation between the segment information and consolidated disclosures.	0	1	0	0
29.10	the depreciation, depletion and amortisation of assets for each industry segment.	0	1	0	0
29.11	the depreciation, depletion and amortisation of assets for each geographic segment.	0	1	0	0
29.12	research and development costs for each industry segment.	1	0	0	0
29.13	research and development costs for each geographic segment.	0	1	0	0
29.14	capital expenditure for the period for each industry segment.	1	0	0	0
29.15	capital expenditure for the period for each geographic segment.	1	0	0	0
29.16	the number of employees in each industry segment.	1	0	0	0
29.17	the number of employees in each geographic segment.	1	0	0	0

30. Of the segmental disclosures mentioned in question 29 above, please indicate the five disclosures which would be most useful to your trade union, with "1" being the most useful.

1.

2.

3.

4.

5.

31. If your trade union was to make use of segmental information, please indicate how useful your trade union would find the following additional disclosures:

	Very useful	Useful	Of little use	Useless
31.1 selling expenses.	1	0	0	0
31.2 administration expenses.	0	1	0	0
31.3 interest, dividend and other investment income.	1	0	0	0
31.4 directly attributable interest expense.	0	1	0	0
31.5 taxation paid.	0	1	0	0
31.6 management earnings - gross salaries.	1	0	0	0
31.7 management earnings - bonuses.	1	0	0	0
31.8 management earnings - fringe benefits.	1	0	0	0
31.9 management earnings - share options.	1	0	0	0
31.10 employee earnings - gross salaries and wages.	1	0	0	0
31.11 employer contributions.	1	0	0	0
31.12 accounts receivable.	0	1	0	0
31.13 accounts payable.	0	1	0	0
31.14 total assets.	1	0	0	0
31.15 fixed assets.	1	0	0	0
31.16 stock.	1	0	0	0
31.17 cash flow information.	1	0	0	0
31.18 contingencies and commitments.	0	1	0	0
31.19 significant non-cash expenses (excluding depreciation and amortisation).	0	1	0	0
31.20 investments directly attributable to the segment.	0	1	0	0
31.21 other (please specify).				
Information relating to employees, e.g. affirmative action information	1			
pension, retirement fund information.	1			

32. Of the disclosures mentioned in question 31 above, please indicate the five disclosures which would be most useful to your trade union, with "1" being the most useful.

1. _____
2. _____
3. _____
4. _____
5. _____

33. In the opinion of your trade union, would geographic segmental information be: (please tick one block.)

- | | |
|---|---|
| 33.1 as useful as industry segmental information? | 0 |
| 33.2 more useful than industry segmental information? | 0 |
| 33.3 less useful than industry segmental information? | 1 |

34. In the opinion of your trade union, should segmental information be audited? (Please tick one block.)

- | | |
|-----------|---|
| 34.1 Yes. | 1 |
| 34.2 No. | 0 |

35. In the opinion of your trade union, segmental information would be easily understood if it were presented in the form of:

	Strongly agree	Agree	Indifferent	Disagree	Strongly disagree
35.1 a narrative divisional review.	0	0	0	0	0
35.2 table of figures, accompanied by an analysis thereof.	1	0	0	0	0
35.3 a graphical analysis.	0	1	0	0	0
35.4 other (please specify).	0	0	0	0	0
