

CHAPTER 7

Research Methodology

7.1 Introduction

The linking of accounting research with the perspectives of other disciplines may lead to the enrichment of accounting research. At present, accounting research is extending its boundaries well beyond the boundaries presented by the pure normative and empirical research methods of the past decades (Wolk *et al.*, 2000:41).

Nicolescu (1999:1), for example, makes it clear that any topic in accounting will ultimately be enriched by a fusion of perspectives from several disciplines. He comments: "... our understanding of certain phenomena in terms of its own discipline (accounting) is deepened by a fertile multidisciplinary approach." A discipline such as accounting should thus be studied not only from an accountant's point of view, but also with a view to blending accounting with other disciplines, because a multidisciplinary approach brings a "plus" to disciplines. The goal of multidisciplinary research is the understanding of the present world. Transdisciplinary research is not antagonistic, but complementary; it overflows the discipline of accounting, but its goal still remains within the framework of accounting research.

Little research has been conducted from a systems perspective on the changing appearance of CARs over the years. Hopwood (1996:55) contends that the CAR "... is a largely unresearched document". In order to attempt to fill this gap in the literature, this research views CARs as a whole from a systems perspective because, "... the more we study the major problems of our time, the more we come to realize that they cannot be understood in isolation. They are systemic problems, which means that they are interconnected and interdependent" (Capra, 1996:3).

To understand how mandatory information is formed through the use of accounting practices and how discretionary information is formed through the use of discretionary accounting practices, CARs are researched by reviewing the whole inclusive process as a system. Systems thinking is contextual, which is the opposite of analytical (Capra, 1996:29). Analysis means taking something apart in order to understand it; systems thinking means putting it into the context of the larger whole. Because stakeholders interact freely with their environment it is assumed that a CAR is the product of an open system and that CARs can be understood by studying their external environment, their internal environment and their interrelationship.

This perspective with its holistic view is therefore the proper one to use in trying to solve the research problem. Owing to the nonlinear nature of the interconnected networks of systems, the solutions they produce are multiple, or “systemic”, solutions. The combined value created by the whole is always greater than the sum of the values that would be generated by independently operating components (Schoonraad, 2004:90). This study is therefore based on systems theory and a feedback perspective. A system is defined as a set of objects or events that are grouped together by sets of relationships (Baskin & Aronoff, 1988:53). The behaviour of the system can only be understood when viewed in context and when focusing on the relationships between the various parts (Schoonraad, 2004:90). Within a systems-based perspective it is perceived that CARs are the product of information-processing systems.

The results of this research show that one system is responsible for generating discretionary disclosures, which also form the context of CARs. Simultaneously, another system is responsible for generating statutory disclosures. The boundaries of these two systems (areas of activity) sometimes overlap, but both systems are responsible for the disclosure of relevant information in minimising the risks of stakeholders. CARs serve as a spotlight on risks and opportunities. In order to ensure their own survival, systems adapt and adjust to changes in the environment. Paradoxically, open systems constantly have to change in order to stay the same (Cutlip *et al.*, 2002:22). An entity’s CAR document is the product of an open system resulting from the interrelationship between the systems that

generate disclosures in CARs. The discretionary information disclosed in CARs created by the DIS, if proven useful over time, has the potential of being accepted as statutory information governed by generally accepted accounting principles (the MFIS). It is evident from the history of CARs, looking in particular at their growth and relationships, that they must be an open system.

The purpose of this chapter is to give an overview of the research methods used for the purposes of this research project. This chapter introduces the empirical component of the study. In terms of content it has therefore deviated from the major themes in the previous chapters (the theoretical component). However, this deviation is necessary to set the scene for the discussions in chapters 8, 9, 10 and 11 (research findings). In order to make sense of the findings of a research project, the reader needs to be fully aware of the research strategy, design, methods and techniques used to obtain the results.

In the discussions of the research findings that follow, the major themes of the theoretical component appear again. In chapter 8 the research findings of the content analyses are reported and interpreted in terms of relevant theory. In chapters 9, 10 and 11 the research findings gleaned from the questionnaires are reported and interpreted in terms of relevant theory. The three methods used in this research are a literature review, a content analysis of CARs and three questionnaires.

7.2 Literature review

A thorough review of relevant literature "... is a crucial stage and the success of the whole enterprise depends on the quality of this step (Ryan, Scapens & Theobald, 2003:165). Mouton (2005:87) reports that the literature review entails "... the most recent, credible and relevant scholarship in your area of interest. For this reason, the term 'scholarship review' would be more accurate ...". The reasons why a review of the existing scholarship is so important include the following (Mouton, 2005:87):

- To ensure that one does not merely duplicate a previous study. This is the first study to view CARs from a systems perspective.
- To discover what the most recent and authoritative theorising about the subject is. The decision usefulness approach has been the ascendant reporting paradigm in the US and other English-speaking countries since the 1970s (Coy & Dixon, 2004:2).
- To find out what the most widely accepted empirical findings in the field of study are. The results of content analysis and of questionnaires were widely accepted in the past.
- To identify the available instrumentation that has proven validity and reliability. The use of content analysis and the distribution of questionnaires showed validity and reliability.
- To ascertain the most widely accepted definitions of key concepts in the field. The most widely accepted definitions of key concepts were dealt with in chapter 1 of this thesis.

To ensure authoritative references use was made of relevant books, articles, theses and dissertations. The reference lists of books and articles were used as a source for additional books and articles to be consulted. To find relevant articles, searches were carried out mostly using the electronic library (i.e. Oasis) of the University of South Africa (UNISA).

7.3 Content analysis

In order to discover how information disclosed in CARs has evolved over time, it was decided to make use of the empirical method termed “content analysis”. Mouton (2005:165) describes content analysis as studies that analyse the *content* of texts or documents (such as letters, speeches, annual reports) and states that “content” refers to

words, meanings, pictures, symbols, themes or any message that can be communicated. The content analysis research method is therefore the ideal method to use to discover certain trends in the disclosure of information in CARs.

The content data was extracted at the Unisa library, the library of the University of Pretoria and the Bureau of Financial Analysis at the University of Pretoria. Any ten companies of the top twenty rated according to market capitalisation were selected on a random basis. Initially only the top ten companies rated according to market capitalisation would have been selected, but due to practical considerations, such as time, cost and manpower, it was decided to select any ten companies from the top twenty. This method was cleared with the statistician consulted for this thesis. Four time periods (1975, 1985, 1995 and 2005) were taken to discover how information had escalated. The *information content* (Smith & Taffler, 2000: 639) of CARs was measured according to the number and/or the number of pages of each disclosure category (refer to table 7.1). Unerman (2000:678) argues that any content analysis study adopting measurement techniques which only capture words and numbers, ignoring pictures and graphics etc. is likely to result in an incomplete representation of the quantum of disclosures in CARs. According to him this is a particularly important issue as one of the key assumptions underlying content analysis is that the volume of disclosure signifies the importance of the items being disclosed. While measurement in sentences may be carried out with greater accuracy than measurement in proportions of a page, the former is likely to give less relevant results than the latter (ibid, 2000:667). It was therefore decided to develop a content analysis of CARs that would analyse disclosure categories in numbers as well as number of pages, for the mandatory information section and the discretionary information section as follows:

Table 7.1: The content analysis

CONTENT ANALYSIS OF CARs

Mandatory information section

Description of disclosures	1975		1985		1995		2005	
	No.	No. of pages	No.	No. of pages	No.	No. of pages	No.	No. of pages
Balance sheet	-		-		-		-	
Income statement	-		-		-		-	
Changes in equity statement	-		-		-		-	
Cash flow statement	-		-		-		-	
Segment information	-		-		-		-	
Accounting policies								
Notes to the financial statements								
Earnings per share note	-		-		-		-	
Directors' report	-		-		-		-	
Photos		-		-		-		-
Graphs		-		-		-		-
Pages covering mandatory information	-		-		-		-	

Discretionary information section

Description of disclosures	1975		1985		1995		2005	
	No.	No. of pages	No.	No. of pages	No.	No. of pages	No.	No. of pages
Chairman's statement	-		-		-		-	
Financial review – management discussion including key figures – financial highlights as well as performance measures and review of operations, businesses and markets and global activities	-		-		-		-	
Sustainable development review	-		-		-		-	
Corporate governance	-		-		-		-	
Value added statement	-		-		-		-	
Visual illustrations		-		-		-		-
Photography		-		-		-		-
Graphs		-		-		-		-
Risk factors	-		-		-		-	
Board of directors	-		-		-		-	
Pages covering discretionary information	-		-		-		-	

The data devoted to each of these categories in the CARs was recorded for each time period. The content data was extracted at the Unisa library, the library of the University of Pretoria and the Bureau of Financial Analysis at the University of Pretoria. Any ten companies of the top twenty rated according to market capitalisation were selected on a random basis. In order to examine how information had escalated over the years, four time periods (1975, 1985, 1995 and 2005) were chosen. The content of CARs in these time periods was measured according to the number and/or the number of pages of each disclosure category (12 and 11). It was decided to investigate the disclosure categories as set out in table 7.1, as these represent the most significant disclosure categories of CARs.

The content of CARs was measured according to the number of each disclosure category and/or the number of pages for each disclosure category. Categories for photos and graphs were also included under the mandatory information section as there was a possibility that they could be included in directors' reports of companies, which form part of mandatory disclosures. At any period, as specified above, 10 companies were sampled. It was argued that although the 10 companies might vary from one period in time to the next, the aim of the study was not to study the underlying trend (growth) within individual companies over time, but to evaluate general CARs content and developmental trends of JSE-listed companies as represented by a sample of 10 such companies. Of importance was whether JSE-listed companies increased the information content within their CARs **in general** – and this reasoning was followed since the research perspective of this study was a holistic approach. From this perspective it was reasoned that the effect of individual companies could be ignored in the research and that the focus should be on the general trend in CARs content of JSE-listed companies.

The issue of whether content information on companies on the JSE increased over time was of importance. The content analysis of this research is divided into two sections. The first section is aimed at the content of the **mandatory section** of CARs and to what extent the information in that section has increased over time. The second section is aimed at the content of the **discretionary section** of CARs and to what extent the information in that section has increased over time.

The nature of the data collected proved to be categorical and ordinal in the sense that the number of disclosures and/or number of pages of disclosures allocated to each section in

CARs over time were recorded. The use of frequency tables and trend tests to present the research results was decided on since **observations over time** were available and made it feasible to study probable/foreseeable trends over time. It was anticipated that **positive** relationships over time would emerge. The research results of the content analysis are discussed in Chapter 8.

7.4 Questionnaires

In order to investigate whether CARs is the information product of interdependent information-processing systems, three questionnaires were developed in MS Word 2000 format. The first questionnaire was aimed at the preparers of CARs, the second at users and the third at designers of CARs. The objectives of the questionnaires were to determine the extent to which CARs are the information products of accounting practices in transition and to research the contribution of all the relevant role players.

The questionnaires were sent by e-mail. The purpose of the study was set out on the cover page and the questionnaire followed on the next page. The following sequence of events was used to prepare, send and analyse the responses to the questionnaires:

7.4.1 Setting up the questionnaires

Statements were compiled on the basis of the literature review. The questionnaires are presented in Appendices A, B and C and the questionnaire results are discussed in chapter 9 (in respect of responses from preparers of CARs), chapter 10 (in respect of responses from users of CARs) and chapter 11 (in respect of responses of designers of CARs). Statements in the various questionnaire items were evaluated on a 5-point agreement Lickert scale rating. Respondents were requested to indicate on a scale rating:

- S/D Strongly disagree
D Disagree
U Unsure
A Agree
S/A Strongly agree

to what extent they disagreed/agreed with each statement. The theme of the statements centred on the hypothesis of the study.

7.4.2 Preparing an electronic mailing list

The populations of the preparers, users and designers of CARs were defined in terms of electronic mailing lists. Returned electronic responses/questionnaires constituted convenience sampling of the relevant groups.

- **Questionnaires for preparers of CARs**

In order to send the questionnaires to all the listed companies, which represented the entire population of CARs preparers, a database from the JSE-listed groups of companies dated 23 November 2006 was used. The list contains the e-mail addresses of 357 groups of companies.

- **Questionnaires for users of CARs**

Due to the fact that the traditional user of CARs is unknown, it has been decided to use auditors, investment analysts etc. as specified on the questionnaire for users (see appendix B) to reflect the viewpoint of users. Convenience sampling (via returned e-mail responses) was used in respect of the user population (to be completed by users of CARs), as the total population of users of CARs is unknown. This statistical method was cleared with the statistician consulted for this thesis. The electronic mailing lists of the South African Institute of Chartered Accountants (SAICA) and the South African Institute of Professional Accountants (SAIPA), as well as the 2006 Southern African Accounting Association's (SAAA) list of conference attendants, were used to represent the user population.

- **Questionnaires for designers of CARs**

Convenience sampling was (via returned e-mail responses) used in respect of the designer population (to be completed by designers of CARs), as the total numbers of CARs designers is unknown. This statistical method was also cleared with the statistician used for this thesis. An internet-composed electronic list formed the basis of the designer population.

7.4.3 Sending out the questionnaires

- **Questionnaires for preparers of CARs**

A generic message was compiled to direct the mail to the financial director of a company. Electronically returned questionnaire responses represented conveniently sampled preparers of CARs.

- **Questionnaires for users of CARs**

Electronic questionnaires for users were sent out to SAICA's database of members.

The user groups targeted were

- members in public practice
- members in commerce and industry

The members in commerce and industry included financial advisors and investment analysts, corporate financiers, credit and risk managers, corporate strategists, private investors, auditors, government departments and agencies, accountants and taxation directors. The database of the South African Institute of Professional Accountants (SAIPA) was also used and questionnaires were also distributed to members of SAIPA. The 2006 SAAA conference attendance list was used to target academics.

- **Questionnaires for designers of CARs**

The internet was used to obtain e-mail addresses of designers of CARs.

7.4.4 Receiving the responses

- **Questionnaires for preparers of CARs**

Table 7.2 gives a summary of the preparer responses. Of the total population of 357, thirty potential respondents had no e-mail addresses. Forty-five e-mails bounced back because the e-mail addresses, as per the e-mail list, did not exist. Ten companies indicated that they were unable to respond for various reasons (such as that they did not have the time or resources to complete the questionnaire, or that it was not their policy to participate). This left 272 responses that could be expected.

Table 7.2: Summary of preparer responses

Total population	357
Less: Number of potential respondents with no e-mail addresses on the JSE list.	(30)
E-mails that bounced back.	(45)
Companies not prepared to respond.	(10)
Responses that could be expected	272

A total of 45 responses were received, which equates to a response rate of $(45/272)$ 16.5 percent. The low response rate may not guarantee representativeness.

- **Questionnaires for users of CARs**

A total of 118 questionnaires were returned and processed. As the total population of users of CARs could not be determined, use was made of nonprobabilistic convenience sampling. As such, representativeness cannot be guaranteed. However, respondents included in the study in respect of users consisted of users included in electronic mailing lists (see paragraph 7.4.3), all of whom received electronic questionnaires. Since the study was regarded as exploratory it was

argued (Kerlinger, 1986:110) that all respondents included possessed the basic characteristics that the greater population of users would possess and that these were being researched in the study.

As such they are representative of the population in a sense but, since representativeness could not be strictly guaranteed, generalisations about the population as a whole should be approached with caution.

- **Questionnaires for designers of CARs**

A total of seven questionnaires were returned and processed. This is seen as a limitation. As the total population of designers of CARs could not be determined, use was made of nonprobabilistic convenience sampling. As such, representativeness cannot be guaranteed. However, respondents included in the study in respect of designers consisted of designers obtained from the internet. Approximately one hundred e-mails were electronically distributed to designers, but only seven responded. It was not possible to determine whether these designers specialise in annual reports.

7.4.5 Recording the responses

A record of all responses of all three electronic mailing lists was kept for follow-up purposes. In this way companies that did not respond to the first e-mail could be reminded to respond.

7.4.6 Follow up

In respect of the questionnaire for preparers, a number of reminders were sent out. A total of 45 preparers' questionnaires were returned. The returned questionnaires were regarded as the preparers' sample. One hundred and eighteen users' questionnaires and seven designers' questionnaires were returned and processed. All returned questionnaires were entered into the analyses reported on in chapter 9 (preparers),

chapter 10 (users) and chapter 11 (designers). As mentioned in a previous paragraph, this constituted convenience sampling with regard to the preparers, users and designers, as the researcher had no way of determining/estimating the number of questionnaires that would be returned.

7.5 Summary

In this chapter the various research methods used in this study were described. These methods include a literature survey, content analysis and the use of questionnaires. The literature review undertaken in chapters 2 to 6 is *inter alia* necessary in order to formulate the statements of the questionnaires covered in chapters 9, 10 and 11. The content analysis in chapter 8 is undertaken in order to establish whether and to what extent disclosures in CARs escalated over time. The content analysis of this research is divided into two sections. The first section is aimed at the content of the mandatory section of CARs and to what extent the information in that section has increased over time. The second is aimed at the content of the discretionary section of CARs and to what extent the information in that section has increased over time. In total content analyses of 40 companies listed on the JSE were performed.

In order to investigate whether CARs is the information product of accounting practices in transition and to research the contribution of all the relevant role players, three questionnaires were developed, making use of the literature review findings in chapter 2 to 6, in MS Word format.

The first questionnaire is aimed at the preparers of CARs. A generic message was compiled to direct the mail to the financial director of a company. Electronically returned questionnaire responses represented conveniently sampled preparers of CARs.

The second questionnaire is aimed at users of CARs. SAICA's, SAIPA's and the 2006 SAAA conference attendance list were used for this purpose. As the total population of users of CARs could not be determined, use was made of nonprobabilistic convenience sampling. As such, representativeness cannot be guaranteed. Since the study was regarded as exploratory it was argued (Kerlinger, 1986:110) that all respondents included possessed the basic characteristics that the greater population of users would possess and that these were being researched in the study.

The third questionnaire is aimed at designers of CARs. The internet was used to obtain email addresses of designers of CARs. Approximately one hundred e-mails were electronically distributed to designers, but only seven responded. This is seen as a limitation. A total of 170 (45 from preparers, 118 from users and 7 from designers) questionnaires were processed. In the next chapters the empirical research results are analysed and interpreted.

CHAPTER 8

Research results: content analysis of CARs

8.1 Introduction

One of the research questions set out in chapter 1 was: “Can CARs be visualised as a product of information-processing systems, representing an interaction between entities and stakeholders to generate and share information that is constantly escalating and being presented in different formats?” In order to arrive at an answer to the above research question, the aim of the content analysis performed was to evaluate how and to what extent entities’ information disclosure has evolved over time.

8.2 The content-analysis used

CARs are divided into two sections; the first part consists of mandatory disclosures and the second part of discretionary disclosures/information. Content evaluation was addressed according to the mandatory and discretionary information categories as presented in table 7.1 of chapter 7.

8.3 The companies analysed

As part of the process of convenience sampling, ten companies were selected from the top 20 companies listed on the JSE for the various time periods: 1975 year ends, 1985 year ends, 1995 year ends and 2005 year ends. It was argued that although the 10 companies might vary from one period in time to the next, the aim of this research was not to study the underlying trend (growth) within individual companies over time and thus include companies as a probable influential variable in the research, but to evaluate general CARs content and the developmental trends of companies in general. Of importance was whether any 10 companies in the top 20 increased the information content of their CARs **in general** – and this reasoning was followed since the research perspective of this study entailed a holistic approach. From this perspective it was reasoned that the effect of individual companies could be ignored in the research and that the focus should be on the general trend in CARs content. The issue of whether content

information of companies on the JSE in general increased over time was of importance. In the following sections, reference to and comments made on individual companies should therefore be regarded as interesting additional information obtained and reported on, and should not obscure the main research objectives of the content analysis, which aims at identifying trends in CARs content of JSE-listed companies. The same applies to references made to sectors within the JSE-listed companies, for example, mining, manufacturing and financial sectors. This type of informative comment will be included in square brackets. The following companies listed on the JSE were used for the content analysis.

Table 8.1 Companies for the year ended 1975

Company	Year ended
AE & CI	31 December 1975
Barlow Rand Limited	30 September 1975
Highveld Steel and Vanadium Corporation Ltd	30 June 1975
Lonrho	30 September 1975
National Amalgamated Packaging Limited	30 April 1975
OK Bazaars (1929) Limited	31 March 1975
Rembrandt Controlling Investments Ltd	31 March 1975
South African Breweries Ltd	31 March 1975
Tiger Oats and National Milling Company Ltd	31 December 1975
Woolworths Holdings Limited	31 May 1975

Table 8.2 Companies for the year ended 1985

Company	Year ended
Amgold	28 February 1985
Anglo American Corporation of South Africa	28 February 1985
Barlow Rand Limited	30 September 1985
DeBeers	31 December 1985
Gencor	31 December 1986*
Gold Fields	30 June 1985
Lonrho	30 September 1985
Minorco	30 June 1986*
Sasol	29 June 1985
South African Breweries Ltd	31 March 1985

*As the 1985 annual reports of these two companies were not available in the libraries, the 1986 annual reports were used instead.

Table 8.3 Companies for the year ended 1995

Company	Year ended
Anglovaal Industries Limited	28 February 1995
Barlow Limited	30 September 1995
Gencor	30 June 1995
Malbak Ltd	31 August 1995**
Murray & Roberts	30 June 1995
Richement	31 March 1996*
SAPPI Limited	30 September 1995
Sasol	30 June 1995
South African Breweries Ltd	31 March 1995
Tiger Oats Limited	30 September 1995

*As the 1995 annual report was not available in the libraries, the 1996 annual report was used instead.

**As an original copy of the annual report was not available at the Bureau for Financial Analysis, a copy was extracted from the internet.

Table 8.4 Companies for the year ended 2005

Company	Year ended
Anglogold Ashanti	31 December 2005
First Rand	31 June 2005
Implats	30 June 2005
Lonmin Plc	30 September 2005
MTN Group Limited	31 March 2005
Nedbank Ltd	31 December 2005
Remgro Limited	31 March 2005
SAB Miller	31 March 2005
Sanlam	31 December 2005
Standard Bank	31 December 2005

The following section compares the mandatory information with the discretionary information contained in CARs for the 1975, 1985, 1995 and 2005 year ends.

8.4 Mandatory information versus discretionary information

The aim of table 8.5 is to compare the disclosure of mandatory information with discretionary information of companies' 1975 year-end reports.

**Table 8.5 Mandatory versus discretionary information:
1975 year ends**

Company	Pages of mandatory information	Pages of discretionary information	Total pages
AE & CI	17	8	25
Barlow Rand Limited	24	45	69
Highveld Steel and Vanadium Corporation Ltd	19	14	33
Lonrho	20	16	36
National Amalgamated Packaging Limited	15	10	25
OK Bazaars (1929) Limited	16	18	34
Rembrandt Controlling Investments Ltd	12	3	15
South African Breweries Ltd	28	16	44
Tiger Oats and National Milling Company Ltd	17	17	34
Woolworths Holdings Limited	12	6	18
Total pages	180	153	333
Average number of pages	18	15	33

The table indicates, with a range of 28-12 = 16 for mandatory and 45-3 = 42 for discretionary disclosures, that discretionary disclosures varied to a greater extent than the mandatory disclosures. The average number of pages of mandatory information was 18 (55%) versus 15 pages (45%) for discretionary information. In 1975, the requirements of the King Report regarding corporate governance were not yet in place and therefore companies made fewer discretionary disclosures. Also, companies were not yet disclosing any information on sustainable development matters and therefore it is understandable that in general more mandatory rather than contextual information was disclosed. [In respect of the 1975 companies reviewed the South African Breweries had the most pages

(28) covering mandatory information, while Woolworths and Rembrandt had the fewest (12 pages each). The annual report of Barlow Rand covered 45 pages of discretionary information, while Rembrandt only used three pages. Barlows and OK Bazaars disclosed more contextual information (45 versus 24) than mandatory information (18 versus 16). The other companies disclosed more mandatory than discretionary information.]

**Table 8.6 Mandatory versus discretionary information:
1985 year ends**

The aim of table 8.6 is to compare the disclosure of mandatory information with discretionary information of companies' 1985 year-end reports.

Company	Pages of mandatory information	Pages of discretionary information	Total pages
Amgold	10	29	39
Anglo American Corporation of South Africa	25	70	95
Barlow Rand Limited	27	61	88
DeBeers	21	25	46
Gencor	25	38	63
Gold Fields	20	41	61
Lonrho	32	64	96
Minorco	13	21	34
Sasol	12	27	39
South African Breweries Ltd	19	32	51
Total pages	204	408	612
Average number of pages	20	41	61

In 1985 companies disclosed more contextual than mandatory information. The average number of pages of statutory information disclosed by 1985 companies was 20 (33%) and of contextual information 41 (67%). Reporting of information on corporate governance and sustainable development was still in its infancy, but the use of photography had begun to play an important role in the disclosure of discretionary information and contributed to the fact that more contextual than mandatory information was disclosed. Very few photos

were included in the disclosure of mandatory information. [The companies that disclosed the most discretionary information were Anglo American, with 70 pages and Lonrho with 64 pages. Amgold only disclosed 10 pages of mandatory information.]

**Table 8.7 Mandatory versus discretionary information:
1995 year ends**

The aim of table 8.7 is to compare the disclosure of mandatory information with discretionary information of companies' 1995 year-end reports.

Company	Pages of mandatory information	Pages of discretionary information	Total pages
Anglovaal Industries Limited	22	64	86
Barlow Limited	25	38	63
Gencor	35	75	110
Malbak Ltd	19	43	62
Murray & Roberts	20	40	60
Richement	21	50	71
SAPPI Limited	24	52	76
Sasol	19	60	79
The South African Breweries Ltd	34	58	92
Tiger Oats Limited	21	29	50
Total Pages	240	509	749
Average number of pages	24	51	75

In 1995, companies again disclosed more contextual than statutory information. The disclosure of discretionary information varied more amongst the companies when compared to the more stable disclosure of mandatory information. The average number of pages in respect of statutory disclosures was 24 (32%) and that of discretionary information 51 (68%). In 1995 more information was disclosed on corporate governance and sustainable development issues, including information on aspects of remuneration and the management of risk. [With regard to individual 10 companies Gencor disclosed 75 pages of discretionary information followed by Anglovaal with 64. Gencor also disclosed more statutory information (35 pages), with the SAB in second place (34 pages).]

**Table 8.8 Mandatory versus discretionary information:
2005 year ends**

The aim of table 8.8 is to compare the disclosure of mandatory information with discretionary information of companies' 2005 year-end reports.

Company	Pages of mandatory information	Pages of discretionary information	Total pages
Anglogold Ashanti	128	126	254
First Rand	194	156	350
Implats	70	100	170
Lonmin Plc	38	31	69
MTN Group Limited	75	165	240
Nedbank Ltd	101	133	234
Remgro Limited	46	38	84
SAB Miller	60	80	140
Sanlam	99	178	277
Standard Bank	100	96	196
Total pages	911	1103	2014
Average number of pages	91	110	201

Companies in the financial sector on average disclosed more information in CARs. Large range values of 156 for mandatory and 147 for discretionary information indicated that the disclosure of both statutory and contextual information varied markedly amongst the companies. On average 91 pages (45%) of mandatory information was disclosed compared to 110 pages (55%) of discretionary information. The introduction of International Accounting Standards (IASs) and International Financial Reporting Standards (IFRSs) had a major impact on the escalation of mandatory information; while information on risk management and embedded value had a major role to play in the escalation of discretionary information. [Sanlam had 178 pages of contextual information and First Rand disclosed 194 pages of mandatory information.]

**Table 8.9 Mandatory versus discretionary information:
1975 to 2005**

The aim of table 8.9 is to establish how disclosures in CARs escalated from 1975 to 2005.

Year end	Average number of pages of mandatory information	Average number of pages of discretionary information	Total average number of pages
1975	18	15	33
1985	20	41	61
1995	24	51	75
2005	91	110	201

Statutory disclosures on average increased marginally from 1975 to 1995, but in 2005 escalated markedly as IASs and IFRSs were then applicable. More disclosures had to be made in terms of IFRS, for example risk disclosure and the management thereof in respect of financial instruments. It now also became compulsory to include segment reporting, which in earlier years formed part of discretionary disclosures, in mandatory information. Earnings per share disclosure, previously part of discretionary disclosures, now formed part of statutory disclosures and called for expanded disclosure.

Contextual information increased dramatically from 1975 to 2005. Illustrations, photography and graphs contributed to the escalation of discretionary disclosures. Here the introduction of disclosure with regard to corporate governance and sustainable development issues also had an important role to play.

8.5 The escalation of mandatory information

The content analysis of companies' CARs revealed ever-accelerating growth in the disclosure of mandatory information from 1975 to 2005. The main reason for this growth was the introduction of more generally accepted accounting practices in the form of IASs and IFRSs, which require more disclosure of information. New IASs introduced during this period were for example; IAS 19 (Employee Benefits) initially issued in 1993, IAS 20 (Accounting for Government Grants and Disclosure of Government Assistance) in 1984,

IAS 24 (Related Party Disclosures) in 1994, IAS 27 (Consolidated and Separate Financial Statements) in 2000, IAS 32 (Financial Instruments: Presentation) in 2000, IAS 34 (Interim Financial Reporting) in 1999, IAS 36 (Impairment of Assets) in 1998, IAS 38 (Intangible Assets) in 1998, IAS 39 (Financial Instruments: Recognition and Measurement) in 2004, IAS 40 (Investment Property) in 2000, IFRS 1 (First-time Adoption of International Financial Reporting Standards) in 2005, IFRS 2 (Share-based Payment) in 2005, IFRS 3 (Business Combinations) in 2004 and IFRS 5 (Non-current Assets Held for Sale and Discontinued Operations) in 2005. Since 2005 IFRS 7 (Financial Instruments: Disclosures) and IFRS 8 (Operating Segments) were also introduced. The introduction of new IASs and IFRSs had a remarkable effect on the growth of disclosures of the mandatory section of CARs.

Currently a joint project of the International Accounting Standards Board (IASB) and the Financial Accounting Standards Board (FASB) is underway with the aim to develop a common conceptual framework that is both complete and internally consistent. Such a framework would provide a sound foundation for developing future accounting standards and is essential to fulfilling the Boards' goal of developing standards that are principles-based, internally consistent, internationally converged, and that can lead to financial reporting that provides the information needed for decision making (FASB, 2007:1). An example of the transition of accounting practices in the public sector is the accounting for heritage assets under the accrual basis of accounting driven by the International Public Sector Accounting Standards Board. Heritage assets are assets with historic, artistic, scientific, technological, geophysical or environmental qualities that are held and maintained principally for their contribution to knowledge and culture and this purpose is central to the objectives of the entity holding them. As well as museum collections such as those of art, antiquities and books the term 'heritage assets' includes assets such as landscape and coastline, historic buildings and archaeological sites (IFAC, 2006:10). These initiatives will influence disclosures in CARs in the future.

8.5.1 The escalation of the number of notes, graphs and photos

Table 8.10 sets out the number of accounting policy notes, notes to the financial statements, graphs and photos disclosed in the mandatory section of the CARs of ten conveniently selected companies with 1975 year ends.

**Table 8.10 The escalation of the number of notes, graphs and photos:
1975 year ends**

Company	Number of accounting policy notes	Number of notes to the financial statements	Number of graphs	Number of photos
AE & CI	6	17		
Barlow Rand Limited	5	20		
Highveld Steel and Vanadium Corporation Ltd	6	12		2
Lonrho	7	25		
National Amalgamated Packaging Limited	8	18	1	1
OK Bazaars (1929) Limited	8	23		
Rembrandt Controlling Investments Ltd	7	14		
South African Breweries Ltd	13	29	3	
Tiger Oats and National Milling Company Ltd	6	31		
Woolworths Holdings Limited	5	15		
Total	71	204	4	3
Average number	7	20	0.4	0.3

The average number of accounting policy notes for 1975 year ends was seven. Apart from the number of accounting policies disclosed by the South African Breweries, the number disclosed by the other companies was fairly constant. [For 1975, South African Breweries Limited disclosed 13 accounting policies, while Barlow Rand Limited and Woolworths Holdings Limited only had five each.]

The number of notes to the financial statements varied between 12 [Highveld Steel and Vanadium Corporation Limited] and 31 [Tiger Oats and National Milling Company Ltd], with an average number disclosed of 20. In 1975, the notes to the financial statements, which shed more light on the numbers disclosed in the balance sheet and income

statement, and the source and application of funds statement, were still very few, as the generally accounting practices of the day did not require excessive disclosure.

In 1975 graphs and photos were infrequently included in the mandatory section of the CARs of the companies investigated. Most of the graphs and photos appeared in the directors' report, which, being in narrative form, gives more information *inter alia* about the business of the company. Better use of graphs in the mandatory section of CARs could play an important role in illustrating relationships between figures disclosed in the balance sheet, the income statement and so on.

The following table (8.11) sets out the number of accounting policies, notes to the financial statements, graphs and photos disclosed in the mandatory section of the CARs of 1985 year ends of 10 selected companies. It will be noted that there was a slight increase in the number of accounting policies and notes to the financial statements.

Table 8.11 The escalation of the number of notes, graphs and photos:
1985 year ends

Company	Number of accounting policy notes	Number of notes to the financial statements	Number of graphs	Number of photos
Amgold	5	11		
Anglo American Corporation of South Africa	12	24		
Barlow Rand Limited	15	36		
DeBeers	13	20		
Gencor	9	33		
Gold Fields	9	31		
Lonrho	11	34		
Minorco	6	9		
Sasol	9	22		
South African Breweries Ltd	10	29		
Total	99	249		
Average number	10	25		

The number of accounting policy notes disclosed for 1985 varied to a greater extent than those disclosed for 1975. A range of seven in 1975, compared to a range of nine in 1985, attests to this. The average number of accounting policy notes was 10. A slight increase over the number disclosed in 1975 (7) is observable. This represents an increase of 43 percent. This increase shows that accounting practices explained in accounting policy notes were already escalating and in a transition phase. [In 1985 Barlow Rand Limited disclosed 15 accounting policy notes, while Amgold only disclosed five.] The average number of notes to the financial statements disclosed for 1985 was 25. There was therefore a slight increase over the 20 disclosed in 1975. This represents an increase of 25 percent and confirms that accounting practices that required more notes to be disclosed in the financial statements were on the increase from 1975 to 1985. [Apart from Amgold, which only disclosed 11 notes to the financial statements, and Minorco, which only disclosed nine, the remainder of the companies in table 8.11 disclosed fewer numbers of notes. Barlow Rand had the most notes (36).] No graphs or photos were observed in the mandatory section of CARs for 1985 for the companies selected. Graphs could however play an important role in giving meaning to certain relationships between figures in the balance sheet, income statement and so on.

In table 8.12 the number of accounting policy notes, notes to the financial statements, graphs and photos are illustrated for 10 companies with 1995 year ends. It will be noted that there is a sharp increase in disclosures in 1995 compared to 1985.

**Table 8.12 The escalation of the number of notes, graphs and photos:
1995 year ends**

Company	Number of accounting policy notes	Number of notes to the financial statements	Number of graphs	Number of photos
Anglovaal Industries Limited	21	27		
Barlow Limited	25	44	2	
Gencor	14	49		
Malbak Ltd	17	44		
Murray & Roberts	15	45		
Richement	15	31		
SAPPI Limited	16	35		
Sasol	10	32		
South African Breweries Ltd	14	89		
Tiger Oats Limited	14	34	2	
Total	161	430	4	
Average number	16	43	0.4	

The companies as per table 8.12 disclosed accounting policy notes evenly (with the exception of Anglovaal and Barlow Limited) and the average number disclosed was 16. [For 1995, Barlow Limited disclosed the most accounting policy notes (25), while Sasol disclosed the fewest (10).] There is a remarkable increase if compared to the average number of 1985, that is 10, which represents an increase of 60 percent. The average number of notes to the financial statements was 43. [Here the South African Breweries disclosed 89 notes and Anglovaal Industries Limited 27.] The other companies in table 8.12 disclosed notes fairly evenly. Compared to 1985 (25) there was an increase of 72 percent in the notes. The accelerating growth in accounting practices is therefore apparent. In the case of Tiger Oats Limited, graphs now appeared on the balance sheet and income statement. This confirms the viewpoint of this thesis that information disclosed in CARs is constantly escalating and being presented in different formats.

Table 8.13 displays the number of accounting policy notes, notes to the financial statements, graphs and photos disclosed in CARs of 10 companies for 2005. As a result

of the introduction of IASs and IFRSs that require more disclosure, the number of accounting policies and notes increased conspicuously.

Table 8.13 The escalation of notes graphs and photos:

2005 year ends

Company	Number of accounting policy notes	Number of notes to the financial statements	Number of graphs	Number of photos
Anglogold Ashanti	57	67		
First Rand	88	171		
Implats	55	54		
Lonmin Plc	9	34		
MTN Group Limited	40	53		
Nedbank Ltd	21	44		
Remgro Limited	16	39		
SAB Miller	26	41		
Sanlam	87	39	10	
Standard Bank	30	38		
Total	429	580	10	
Average number	43	58	1	

In 1995 some companies adopted IFRSs early. These required expanded disclosures and therefore a remarkable variation in the number of accounting policies and notes is observable. The average number of disclosures was 43. If this number is compared to that of 1995 (16), there is an increase of 169 percent. This increase confirms the fact that accounting practices and particularly generally accepted accounting practices are in transition and constantly escalating. [Companies in the financial sector of the JSE seemed to disclose more accounting policy notes and notes to the financial statements than companies in other sectors, for example First Rand and Sanlam. First Rand disclosed 88 accounting policy notes. One reason for this is the fact that First Rand conducts several diversified entities and as such disclosed accounting policy notes and notes to the financial statements for each of the diversified entities. Another reason is that companies in the financial sector that adopted IFRSs had to disclose expanded information in respect of financial instruments, the risks involved and the management of those risks. Lonmin Plc disclosed only nine accounting policy notes.]

The number of notes to financial statements increased to an average of 58. [Again First Rand disclosed the most notes to the financial statements, for reasons already mentioned.] The percentage increase over the average number of 1995 (43) is 35 percent. All categories of mandatory information disclosure in CARs have therefore escalated remarkably. [Sanlam used 10 graphs in the notes to the financial statements category of the mandatory section of CARs and is therefore the forerunner in this regard for 2005.]

Table 8.14 summarises the escalation of the number of accounting policy notes, notes to the financial statements, graphs and photos from 1975 to 2005. The escalation of mandatory disclosures is remarkable.

Table 8.14 The escalation of the number of notes, graphs and photos in the mandatory section of CARs

Year end	Number of accounting policy notes	Number of notes to the financial statements	Number of graphs	Number of photos
1975	7	20	0.4	0.3
1985	10	25		
1995	16	43	0.4	
2005	43	58	1	

Table 8.14 shows the escalation in the number of disclosures of accounting policy notes and notes to the financial statements. Accounting policy notes increased from an average of seven for 1975 to 43 for 2005. The number of notes to the financial statements increased from an average of 20 for 1975 to 58 for 2005. This escalation can be attributed to the introduction of IASs and IFRSs, which require enhanced disclosures for the mandatory section of CARs. The number of graphs used in the mandatory section of CARs is still sporadic, although it could be a useful tool for giving meaning to the numbers of *inter alia* the balance sheet, income statement, cash flow statement and notes. Graphs and photos could be used in the directors' report to a much greater extent.

8.5.2 The number of pages covering the notes and the directors' report

Table 8.15 gives an indication of the number of pages covering the accounting policy notes, notes to the financial statements and the directors' report in 1975 year ends of 10 companies.

Table 8.15 The number of pages covering the notes and directors' report: 1975 year ends

Company	Pages of accounting policy notes	Pages of notes to the financial statements	Pages covering the directors' report
AE & CI	1	8	5
Barlow Rand Limited	1	15	2.5
Highveld Steel and Vanadium Corporation Ltd	1	3	10
Lonrho	1	10	6
National Amalgamated Packaging Limited	1	6	4
OK Bazaars (1929) Limited	1	11	1
Rembrandt Controlling Investments Ltd	1	4	4
South African Breweries Ltd	2	15	7
Tiger Oats and National Milling Company Ltd	1	7	4
Woolworths Holdings Limited	1	6	2
Total	11	85	45.5
Average number	1	9	5

The pages of accounting policies were stable (with a range of 1) amongst the companies with an average page number of one. The number of pages covering the notes to the financial statements varied between four and 15 for 1975 with an average of nine. [Barlow Rand Limited and South African Breweries Ltd used 15 pages each for their notes to the financial statements.] The directors' report averaged five pages [with Highveld Steel and Vanadium Corporation Ltd using 10 pages]. Most companies only disclosed the minimum information required by law in their directors' report. For the 1985 year end, with the exception of the directors' reports, there was a slight increase in the number of pages covering accounting policy notes, notes to the financial statements and the directors' report as illustrated in table 8.16.

**Table 8.16 The number of pages covering the notes
and directors' report: 1985 year ends**

Company	Pages of accounting policy notes	Pages of notes to the financial statements	Pages covering the directors' report
Amgold	1	4	2
Anglo American Corporation of South Africa	3	17	2
Barlow Rand Limited	2	20	2
DeBeers	1	7	9
Gencor	3	17	2
Gold Fields	2	11	4
Lonrho	2	25	2
Minorco	1	6	1
Sasol	1	7	1
South African Breweries Ltd	2	11	2
Total	18	125	27
Average number	1.8	13	3

The average number of pages covering accounting policy notes was 1.8 compared to the average number of pages for 1985 of one. The average number of pages covering the notes to the financial statements increased from nine in 1975 to 13 in 1985. The directors' reports of the companies still only reflected the minimum information required by law. [Only DeBeers used nine pages.] There was a drop in the number of pages used for the directors' report from an average of five for 1975 to an average of three for 1985.

Table 8.17 sets out the number of pages used for accounting policy notes, notes to the financial statements and the directors' report for 10 companies with 1995 year ends. Again there was a marginal increase in the number of pages used for the accounting policy notes and the notes to the financial statements and a further drop in the average number of directors' report pages.

**Table 8.17 The number of pages covering the notes
and directors' report: 1995 year ends**

Company	Pages of accounting policy notes	Pages of notes to the financial statements	Pages covering the directors' report
Anglovaal Industries Limited	2	13	4
Barlow Limited	2	19	1
Gencor	4	21	3
Malbak Ltd	3	12	1
Murray & Roberts	2	11	3
Richement	3	13	1
SAPPI Limited	2	16	2
Sasol	1	13	2
South African Breweries Ltd	2	27	2
Tiger Oats Limited	2	13	2
Total	23	158	21
Average number	2.3	16	2

For 1995 the number of pages used for the disclosure of accounting policy notes averaged 2.3, which was slightly higher than the average for 1985 of 1.8. The average number of pages of notes to the financial statements increased from 13 in 1985 to 16 in 1995. [Anglovaal Industries Limited used four pages for their directors' report.] Only the minimum information as required by the Companies Act is disclosed in companies' directors' reports.

Table 8.18 shows a sharp increase in the average number of pages covering the accounting policy notes, the notes to the financial statements and the directors' report.

**Table 8.18 The number of pages covering the notes
and directors' report: 2005 year ends**

Company	Pages of accounting policy notes	Pages of notes to the financial statements	Pages covering the directors' report
Anglogold Ashanti	14	97	9
First Rand	23	136	6
Implats	14	36	12
Lonmin Plc	2	27	3
MTN Group Limited	13	36	18
Nedbank Ltd	13	79	4
Remgro Limited	6	27	9
SAB Miller	5	47	3
Sanlam	17	68	1
Standard Bank	19	56	6
Total	126	609	71
Average number	13	61	7

The number of pages for 2005 covering accounting policy notes varied between two [Lonmin Plc] and 23 [First Rand], with an average number of pages of 13. [Companies in the financial sector used more pages, as there were now more disclosure requirements for financial instruments.] The pages used for the notes to the financial statements varied between 27 [Lonmin Plc and Remgro Limited] and 136 [First Rand]. [Again companies in the financial sector used more notes to the financial statements as a result of more disclosure requirements for financial instruments, the risks involved and the management of those risks.] Companies that adopted the IFRSs early used more pages for disclosure. The pages used for directors' reports increased substantially. [MTN Group Ltd disclosed in the directors' report information about the groups' share option and incentive schemes, staff incentive schemes, equity compensation benefits for executives and officers as well as directors' interests, emoluments and related payments.]

Table 8.19 compares the number of pages used for disclosing accounting policy notes, notes to the financial statements and the directors' report from 1975 to 2005.

Table 8.19 The escalation of the number of pages covering the notes and directors' report

Year End	Pages of accounting policy notes	Pages of notes to the financial statements	Pages covering the directors' report
1975	1	9	5
1985	1.8	13	3
1995	2.3	16	2
2005	13	61	7

The content analysis of companies with year ends 1975, 1985, 1995 and 2005 revealed an increase in disclosures as a result of the introduction of new generally accepted accounting practices (IFRSs). Also, segment information was previously disclosed as discretionary information for the year ends 1975, 1985 and 1995. For the 2005 year end, segment information was included in the notes to the financial statements as mandatory disclosure. This covered between five to 21 pages.

Earnings per share disclosures were initially part of discretionary disclosures (for 1975), disclosed either numerically as part of group results at a glance or as part of the ten-year review, or in one instance graphically. The earnings per share note gradually found its way into mandatory disclosures and in 2005 covered one or more pages of the notes to the financial statements. The statement of source and application of funds (1975 and 1985 year ends) became the cash flow statement. The evolution from the statement of source and application of funds to the cash flow statement represents an expansion of reported information (Wolk *et al.*, 2000:437). For the 2005 year end the statement of changes in equity appeared on the scene. Included in the notes to the financial statement for 2005 year ends were disclosures (between eight and 10 pages) on the implementation of IFRSs. From the above it is evident that information initially disclosed as discretionary could become mandatory if proven useful over time, for example segment information and earnings per share information. It is also clear that mandatory disclosures are

continuously escalating as a result of new generally accepted accounting practices being introduced. Mandatory information is also presented in different formats, for example the source and application of funds became a cash flow statement and graphs are occasionally used to illustrate relationships between certain mandatory information better.

8.6 The escalation of discretionary information

A content analysis of the CARs of companies revealed accelerating growth in the disclosure of discretionary information from 1975 to 2005. The main reason for this growth was attempts by companies to give more contextual information against which to better understand mandatory disclosures.

8.6.1 Number of visual aids

Table 8.20 sets out the number of illustrations, photos and graphs disclosed in the discretionary section of the CARs of ten selected companies with 1975 year ends. Illustrations include, for example, graphical illustrations of brands and products, charts, schematics and so on. Photos include black and white and colour photos, big and small. Graphs include bar graphs and pie charts.

Table 8.20 Number of visual aids: 1975 year ends

Company	Number of illustrations	Number of photos	Number of graphs	Total
AE & CI	-	-	5	5
Barlow Rand Limited	-	38	2	40
Highveld Steel and Vanadium Corporation Ltd	-	6	4	10
Lonrho	-	24	4	28
National Amalgamated Packaging Limited	-	5	-	5
OK Bazaars (1929) Limited	-	23	2	25
Rembrandt Controlling Investments Ltd	-	-	-	-
South African Breweries Ltd	-	2	10	12
Tiger Oats and National Milling Company Ltd	1	22	5	28
Woolworths Holdings Limited	-	-	-	-
Total	1	120	32	153
Average number	-	12	3	15

In the 1975 year ends, minimal use was made of illustrations. The use of graphs was also in its infancy. Table 8.21 that follows shows that more use was made of illustrations, photos and graphs in companies' 1985 year ends. [Rembrandt Controlling Investments Ltd did not use any illustrations, photos or graphs, while Barlow Rand Limited used 38 photos.]

Table 8.21 Number of visual aids: 1985 year ends

Company	Number of illustrations	Number of photos	Number of graphs	Total
Amgold	4	8	6	18
Anglo American Corporation of South Africa	6	22	20	48
Barlow Rand Limited	3	36	37	76
DeBeers	3	14	2	19
Gencor	1	32	-	33
Gold Fields	1	28	12	41
Lonrho	9	82	8	99
Minorco	-	-	13	13
Sasol	3	17	5	25
South African Breweries Ltd	4	11	10	25
Total	34	250	113	397
Average number	3	25	11	39

Table 8.21 indicates that although there was a considerable variation amongst companies in 1985 in the use of visual aids (range of nine), the average number of illustrations increased to three, that of photos to 25 and that of graphs to 11. [Lonrho made use of 82 photos, compared to 24 in 1975.] A substantial increase in general terms occurred in the use of illustrations, photos and graphs to enhance the meaningfulness of discretionary disclosures. Table 8.22 shows a further increase in the use of visual aids for 1995 companies.

Table 8.22 Number of visual aids: 1995 year ends

Company	Number of illustrations	Number of photos	Number of graphs	Total
Anglovaal Industries Limited	2	55	17	74
Barlow Limited	1	45	14	60
Gencor	18	33	21	72
Malbak Ltd	-	-	-	-
Murray & Roberts	-	27	27	54
Richement	2	15	4	21
SAPPI Limited	-	35	68	103
Sasol	1	50	13	64
South African Breweries Ltd	-	14	21	35
Tiger Oats Limited	23	7	24	54
Total	47	281	209	537
Average number	5	28	21	54

For 1995, the use of visual illustrations varied greatly among companies. The average number of illustrations increased from three in 1975 to five in 1985. Photos increased from an average of 25 (1975) to 28 and graphs increased from 11 (1975) to 21. [Anglovaal Industries Ltd and Sasol used the greatest number of photos, namely 55 and 50 respectively. Sappi made use of 68 graphs, while Malbak used no visual aids at all.] Table 8.23 gives evidence of meaningful and expanded use of visual aids in companies' 2005 year ends.

Table 8.23 Number of visual aids: 2005 year ends

Company	Number of illustrations	Number of photos	Number of graphs	Total
Anglogold Ashanti	18	63	114	195
First Rand	15	104	52	171
Implats	22	118	40	180
Lonmin Plc	-	1	9	10
MTN Group Limited	8	103	47	158
Nedbank Ltd	18	55	21	94
Remgro Limited	-	-	-	-
SAB Miller	32	92	20	144
Sanlam	24	120	20	164
Standard Bank	5	49	36	90
Total	142	705	359	1206
Average number	14	70	36	120

The average number of visual aids more than doubled from an average of 54 in 1975 to 120 in 2005. [Sanlam used 120 photos for 2005, followed by Implats with 118. Remgro Limited made no use of illustrations, photos or graphs. Anglogold Ashanti used far more graphs (114) than all the other companies in the sample.] Table 8.24 compares the average number of visual aids for companies with 1975, 1985, 1995 and 2005 year ends.

Table 8.24 The escalation of visual aids

Year End	Number of illustrations	Number of photos	Number of graphs	Total
1975	-	12	3	15
1985	3	25	11	39
1995	5	28	21	54
2005	14	70	36	120

Table 8.24 shows a marked increase in the use of visual aids in the discretionary section of CARs and it is evident that discretionary accounting practices for discretionary disclosures, as in the case of generally accepted accounting practices for mandatory information, are in a transition phase. Visual aids are used far more in the discretionary section of CARs than in the mandatory section, where their use is still in its early stages.

8.6.2 Number of pages covering discretionary information

In this section analyses of the discretionary information in CARs are performed for companies with 1975, 1985, 1995 and 2005 year ends. Table 8.25 analyses discretionary information for 1975 year ends. The “review of operations etc category” includes any financial reviews, management discussions including key figures and financial highlights, as well as performance measures and review of operations, businesses and markets and global activities and embedded value reports. As the structure of this category varied from company to company, it was not broken down further. The number of pages covering discretionary information includes illustrations, photos and graphs.

Table 8.25 Analysis of discretionary information: 1975 year ends

Company	Chairman's statement	Board of directors	Review of operations etc.	Risk management	Sustainable development review	Corporate governance	Total
	pages	pages	pages	pages	pages	pages	pages
AE & CI	2	1	5	-	-	-	8
Barlow Rand Limited	3	1	41	-	-	-	45
Highveld Steel and Vanadium Corporation Ltd	6	1	7	-	-	-	14
Lonrho	6	1	9	-	-	-	16
National Amalgamated Packaging Limited	2	2	6	-	-	-	10
OK Bazaars (1929) Limited	2	1	15	-	-	-	18
Rembrandt Controlling Investments Ltd	-	2	1	-	-	-	3
South African Breweries Ltd	5	2	9	-	-	-	16
Tiger Oats and National Milling Company Ltd	4	2	11	-	-	-	17
Woolworths Holdings Limited	3	2	1	-	-	-	6
Total	33	15	105	-	-	-	153
Average number	3	1	11	-	-	-	15

For 1975 no disclosures were made about risk management, sustainable development or corporate governance matters for companies. These only appeared later on the scene, as discretionary accounting practices evolved over time as indicated in the tables that follow. The chairman’s statement averaged three pages, information about the board of directors averaged one page and the review of operations etc. category averaged 11 pages. [Barlow Rand Limited disclosed more “review of operations etc.” information (41 pages) than most other companies.] Table 8.26 shows that as discretionary accounting practices developed further, more discretionary information was disclosed in the CARs of companies.

Table 8.26 Analysis of discretionary information: 1985 year ends

Company	Chairman's statement	Board of directors	Review of operations etc.	Risk management	Sustainable development review	Corporate governance	Total
	pages	pages	pages	pages	pages	pages	pages
Amgold	10	1	18	-	-	-	29
Anglo American Corporation of South Africa	-	2	68	-	-	-	70
Barlow Rand Limited	4	1	55	-	1	-	61
DeBeers	4	1	17	-	3	-	25
Gencor	4	3	31	-	-	-	38
Gold Fields	3	1	38	-	-	-	42
Lonrho	2	1	61	-	-	-	64
Minorco	2	1	18	-	-	-	21
Sasol	4	1	21	-	1	-	27
South African Breweries Ltd	2	1	29	-	-	-	32
Total	35	13	356	-	5	-	409
Average number	3	1	36	-	1	-	41

For 1985 the average number of pages used for the disclosure of information in the chairman’s statement and board of directors’ categories remained constant compared with companies in 1975. The review of operations etc. category showed an increase from an average number of 11 pages in 1975 to 36 in 1985. [Anglo American Corporation of South Africa disclosed the most (68 pages) and DeBeers the fewest (17 pages).] Here and there

companies started to disclose information on sustainable development, following the example of their international counterparts. Table 8.27 shows that corporate governance information slowly started to make its appearance.

Table 8.27 Analysis of discretionary information: 1995 year ends

Company	Chair- man's state- ment	Board of direc- tors	Review of operations etc.	Risk mana- gement	Sustainable develop- ment review	Corporate gover- nance	Total
	pages	pages	pages	pages	pages	pages	pages
Anglovaal Industries Limited	4	1	58	-	1	-	64
Barlow Limited	4	1	32	-	-	1	38
Gencor	8	1	66	-	-	-	75
Malbak Ltd	9	1	31	-	-	2	43
Murray & Roberts	2	1	36	-	-	1	40
Richement	1	1	48	-	-	-	50
SAPPI Limited	4	2	41	-	4	1	52
Sasol	6	1	49	-	4	-	60
South African Breweries Ltd	5	1	48	-	1	3	58
Tiger Oats Limited	3	1	23	-	-	2	29
Total	46	11	432	-	10	10	509
Average number	5	1	43	-	1	1	51

With the introduction of the requirements of the King Report on corporate governance, companies started to provide information on corporate governance matters. The average number of pages containing corporate governance information for 1995 was one. Companies [like SAPPI and Sasol] increased disclosures concerning sustainable development matters that included their management of the environment. The number of pages for the chairman's statement in 1995 year-end reports increased slightly from an average of three (1985) to five. More information was given in the review of operation etc. category [with Gencor using 66 pages]. Table 8.28 shows that the average number of pages in the review of operations etc. category increased to 68 pages in 2005.

Table 8.28 Analysis of discretionary information: 2005 year ends

Company	Chair- man's state- ment	Board of directors	Review of opera- tions etc.	Risk manage- ment	Sustain- able develop- ment review	Corporate gover- nance	Total
	pages	pages	pages	pages	pages	pages	pages
Anglogold Ashanti	2	4	91	14	5	10	126
First Rand	4	14	97	23	5	13	156
Implats	4	3	83	-	10	-	100
Lonmin Plc	-	1	8	-	17	5	31
MTN Group Limited	7	4	108	14	20	12	165
Nedbank Ltd	8	4	67	22	13	19	133
Remgro Limited	-	2	22	-	7	7	38
SAB Miller	2	3	29	-	38	8	80
Sanlam	7	5	124	-	21	21	178
Standard Bank	4	4	48	22	11	7	96
Total	38	44	677	95	147	102	1103
Average number	4	4	68	9	15	10	110

For 2005 there was a notable increase in the types of discretionary information. For example disclosures were made concerning the management of risks. This aspect is of great importance to users of financial statements who need decision-useful information to, for example, minimise their investment risks. [Fifty percent of the companies in the sample had a specific section on information about the management of risks. Other companies included the management of risks information with their information on corporate governance matters.] Table 8.29 reflects the accelerating growth of discretionary information, driven by the evolution of discretionary accounting practices as summarised over the various year ends.

Table 8.29 Analysis of discretionary information

Year End	Chair- man's statement	Board of directors	Review of operations etc.	Risk manage- ment	Sustain- able develop- ment review	Corporate gover- nance	Total
	pages	pages	pages	pages	pages	pages	pages
1975	3	1	11	-	-	-	15
1985	3	1	36	-	1	-	41
1995	5	1	43	-	1	1	51
2005	4	4	68	9	15	10	110

The information given in the chairman's statement remained fairly constant from 1975 to 2005. The information concerning the board of directors increased in 2005 to four pages on average as more information on company executives was also disclosed. The review of operations etc. section showed a sharp increase from an average of 11 pages in 1975 to 68 in 2005. Segment information formed part of this category for 1975 to 1995. For the 2005 year end, segmental information was disclosed in the mandatory notes to the financial statements. Earning per share information for 1975 and 1985 was also part of the review of operations etc. category; however for the 1995 and 2005 year ends it moved over to the mandatory section of CARs. For 1995 supplementary inflated adjusted information is included in the review of operations etc. section. [For 2005 companies in the financial sector disclosed 'embedded value reports', which varied from five to 12 pages, which is also included in the review of operations etc. category. A ground-breaking issue is the fact that Anglogold Ashanti for 2005 disclosed a one-year forecast (also included in the review of operations etc. category).] In the past, companies were very hesitant about providing forward-looking information, which is of great importance to users. The sustainable development review category analysed included remuneration philosophies and reports.

From the above analysis it is evident that discretionary disclosures are continuously escalating (e.g. forward-looking information is provided) as a result of new discretionary accounting practices being introduced. Discretionary or contextual information is also presented in different formats, for example in the form of illustrations, photos and graphs.

8.7 Summary and conclusion

A content analysis was done on the CARs of ten top companies selected from the top 20 companies listed on the JSE for the various time periods: 1975 year ends, 1985 year ends, 1995 year ends and 2005 year ends. Mandatory disclosures were compared to discretionary disclosures for each of the four time periods. Statutory disclosures on average increased marginally from 1975 to 1995, but in 2005 escalated markedly as IASs and IFRSs were then applicable. The contextual information increased dramatically from 1975 to 2005. Illustrations, photography and graphs contributed to the escalation of discretionary disclosures. Here the introduction of disclosures concerning corporate governance and sustainable development issues also had an important role to play.

The escalation of mandatory information was further analysed into the following categories: number of notes, graphs and photos as well as number of pages covering the notes and the directors' report. The escalation of discretionary information was further analysed into the following categories: number of illustrations, photos and graphs as well as pages covered by the chairman's statement, the board of directors, review of operations, risk management, sustainable development review and corporate governance matters.

The content analysis for companies with year ends 1975, 1985, 1995 and 2005 has proven that accounting practices (generally accepted accounting practices in the case of mandatory information) and discretionary accounting practices (in the case of discretionary information) are in a process of transition.

In the mandatory section of CARs the source and application of funds statement made way for the cash flow statement. A statement of changes in equity was also introduced. Segment information, initially disclosed as discretionary information, is now disclosed as mandatory information. Earnings per share information disclosed in the discretionary section of CARs moved over to the mandatory section. Therefore discretionary information, if proven useful over time, can become mandatory information.

Where certain statements are no longer useful, for example the source and funds statement, they are discarded and replaced with something new, that is, the cash flow statement.

In the discretionary section of CARs new types of disclosure frequently enter the arena, for example embedded value disclosures and forward-looking information. Information on intellectual capital (OECD, 2006) would, until acceptable ways of measuring are found, normally be disclosed as discretionary information rather than mandatory information. The content analyses of CARs have shown that CARs can be visualised as a product of information-processing systems, which are constantly escalating and being presented in different formats.