TOWARDS A CLASSIFICATION FRAMEWORK FOR ACCOUNTING INFORMATION

By

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Abstract

This thesis is concerned with the classification of accounting information from the recording phase through to the reporting phase. Various criticisms on the way information is presented in financial statements, especially in the balance sheet and income statement are found in the literature. Classification models for accounting information have been proposed in the literature but the main disadvantages of these models are that they are inherently static in nature and do not embed the notion of time.

To further test the various criticisms of present classification structures, 1) a comprehensive literature survey of the criticisms of present accounting classification structures as presented by researchers in the literature was conducted, 2) a questionnaire was prepared and sent out to companies in industry, academics as well as analysts in order to test these criticisms, and 3) an analysis of the financial statements (balance sheet and income statement) of 93 companies listed on The JSE Securities Exchange South Africa (JSE) was undertaken.

The outcome of the above three (3) actions led to the following hypothesis:

> The current classification of accounting information, from the recording phase to reclassification in the reporting phase, does not supply users of such information with the necessary information for decision-making purposes. In this regard a comprehensive classification framework for accounting information is proposed, with the following properties:
>
> - A well-defined set of attributes will be used, ultimately to classify a transaction into a static subframework to aid decision-making.
> - Time will be used to classify a transaction at the time of recording and later to reclassify it at the time of reporting.
> - The proposed framework will guide the classifier as to how an item finds its way into a static structure.

Classification has as its first step the identification of all the attributes known at the time of recording and reporting of the items implicitly involved in a transaction. These attributes in essence define the items that are to be classified into a structure as well as allowing for relationships to be drawn among the said items.

One of the advantages of classification is the creation of (new) knowledge or information. The utility of such information depends on the quality of the classification performed. Normally the responsibility for classification at both the recording and reporting phases rests with the accountant. The resultant classification should provide enough information to users of financial statements, especially financial managers, to allow them to reclassify the given information to suit their own needs.

An important influence on a classification framework for accounting information is the various requirements put forward by a variety of users of such information. Some of these requirements may conflict with one another. It is proposed in this thesis that a distributed union of all requirements of users be taken and all conflicting requirements be removed from the union (i.e. simply put all requirements into one group and remove all those that conflict with one another). Classification is then performed for the result. Additional information may be supplied in the statements to cater for the requirements outside the result.

The classification framework for accounting information proposed in this thesis is made up of three (3) subframeworks as follows:

- A normative subframework that defines a number of attributes for a transaction and which is based on the recording (past) and reporting (present) phases of accounting information. This framework also takes transactions with future aspects into account.
- A decision subframework which follows directly on the normative subframework and which directs the classifier as to where a transaction should be classified in a final, static subframework.
- A static subframework which shows where items implicitly involved in a transaction are finally classified.

Classification frameworks are proposed for both the balance sheet and the income statement. The balance sheet framework embodies a temporal component, a decision component and a static structure. A different classification layout for the income statement, including a temporal component and a static structure, is also proposed in this thesis.

Keywords Accountability
Accounting information
Attributes
Classification framework
Decision usefulness
Distributed union
Temporal

Opsomming

Hierdie tesis gaan oor die klassifikasie van rekeningkundige inligting vanaf die teboekstellingsfase tot en met die verslagdoeningsfase. Vele kritiek oor die manier hoe inligting in die finansiële state, hoofsaaklik die balansstaat en inkomstestaat, voorgestel word, word in die literatuur aangetref. Klassifikasie modelle vir rekeningkundige inligting word in die literatuur voorgestel, maar die hoofnadele van sodanige modelle is dat hulle inherent staties van aard is en ook nie die idee van tyd insluit nie.

Ten einde die verskeidenheid van kritiek op bestaande strukture te toets, is 1) 'n deeglike literatuurstudie van die kritiek op bestaande rekeningkundige klassifikasie strukture deur navorsers in die literatuur onderneem, 2) 'n vraelys opgestel en aan maatskappye in die industrie asook analiste en akademici gestuur ten einde die geldigheid van die kritiek in die literatuur te toets en 3) 'n analise van die finansiële state (balansstate en inkomstestate) van 93 JSE-genoteerde (JSE Securities Exchange South Africa) maatskappye onderneem.

Die bevindings van bostaande drie aksies het tot die volgende hipotese gelei:

> Die huidige klassifikasie van rekeningkundige inligting vanaf die teboekstellingsfase tot en met die herklassifikasie tydens die verslagdoeningsfase, verskaf nie aan gebruikers van sodanige inligting die nodige inligting vir doeleindes van besluitneming nie. In hierdie verband word 'n omvattende klassifikasie raamwerk vir rekeningkundige inligting voorgestel wat die volgende eienskappe bevat:
>
> - 'n Goed gedefinieërde versameling attribute sal gebruik word om die finale klassifikasie van 'n transaksie in 'n statiese raamwerk wat besluitneming bevorder, te klassifiseer.
> - Tyd sal gebruik word om 'n transaksie op die tydstip van teboekstelling te klassifiseer en later tydens verslagdoening te herklassifiseer.

- Die voorgestelde raamwerk sal die klassifiseerder leiding gee oor hoe om 'n item in 'n statiese struktuur te plaas.

Klassifikasie het as 'n eerste stap die identifisering van alle bekende attribute tydens teboekstelling van 'n transaksie en verslagdoening oor die items implisiet betrokke in 'n transaksie. Sodanige attribute definieer in wese die items wat in 'n struktuur geklassifiseer moet word. Dit laat ook ruimte vir verwantskappe wat tussen die betrokke items bepaal kan word.

Een van die voordele van klassifikasie is die skep van (nuwe) kennis of inligting. Die bruikbaarheid van sulke inligting hang af van die kwaliteit van die klassifikasie wat uitgevoer is. Die verantwoordelikheid van die klassifikasie tydens teboekstelling sowel as veslagdoening berus gewoonlik by die rekenmeester. Die gevolglike klassifikasie moet genoeg inligting verskaf aan gebruikers van finansiële state, veral finansiële bestuurders, om hul in staat te stel om herklassifikasie te kan uitvoer om aan hul eie behoeftes te voldoen.

'n Belangrike invloed op 'n klassifikasie raamwerk vir rekeningkundige inligting is die onderskeie vereistes wat deur 'n verskeidenheid gebruikers van rekeningkundige inligting gestel word. Party van hierdie vereistes is noodwendig in konflik met mekaar en in hierdie tesis word voorgestel dat 'n verspreide vereniging van al die vereistes van die gebruikers geneem word en dat al die vereistes wat in konflik met mekaar is van die vereniging verwyder word (di. al die vereistes word in een groep geplaas en al dié wat in konflik met mekaar is word verwyder). Klassifikasie word dus vir die resultaat gedoen. Bykomende inligting kan moontlik by die state gevoeg word ten einde voorsiening te maak vir vereistes buite die resultaat.

Die voorgestelde klassifikasie raamwerk vir rekeningkundige inligting berus soos volg op drie (3) subraamwerke:

- 'n Normatiewe subraamwerk wat 'n aantal attribute vir 'n transaksie definieer en gebaseer is op die teboekstellingfase (verlede) en verslagdoeningfase (tans) van rekeningkundige inligting. Die raamwerk neem ook transaksies met toekomstige effekte in ag.

- 'n Besluitnemingsubraamwerk wat uit die normatiewe subraamwerk vloei en wat die persoon wat die klassifikasie doen, lei na waar die transaksie in die finale statiese subraamwerk inpas.
- 'n Statiese subraamwerk wat aantoon waar items wat deur 'n transaksie geïmpliseer word, finaal geklassifiseer word.

'n Klassifikasie raamwerk vir beide die balansstaat en die inkomstestaat is voorgestel. Die balansstaatraamwerk beslaan 'n temporale-komponent, 'n besluitnemingskomponent en 'n statiese struktuur. In hierdie tesis word 'n aangepaste klassifikasie-uitleg vir die inkomstestaat voorgehou met 'n temporale komponent sowel as 'n statiese struktuur.

Sleutelwoorde Attribute
Besluitnemingsbruikbaarheid
Klassifikasie raamwerk
Rekeningkundige inligting
Temporaal
Verantwoordbaarheid
Verspreide vereniging

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CHAPTER 1 BACKGROUND AND THE RESEARCH PROBLEM

1.1 Introduction

This thesis is about the development of a classification framework for accounting information to provide users of financial statements, especially financial managers, with useful information of indisputable quality, enabling them to make informed decisions. The financial statements ought to comply with the four qualitative characteristics: 1) understandability, 2) relevance, 3) reliability and 4) comparability, as prescribed by the IASC board (IASB 2004) in order to supply useful information to users. Users of accounting information come from a vast range of diverse backgrounds, each with their own set of requirements. To develop a classification framework for accounting information culminating in a single set of financial statements (e.g. one balance sheet and one income statement) to satisfy the needs of all users of financial information may be a complex task because requirements may conflict from one user to the next.

1.1.1 Goal of this chapter

This chapter introduces the background to the problem researched in this thesis and provides a problem statement as well as the motivation for undertaking this research. Previous attempts at solving the classification problem in accounting are presented. The research methodology followed in this work is outlined. This includes a literature survey and an empirical component consisting of the analyses of financial statements and the use of a questionnaire.

1.1.2 Layout of this chapter

Following this introduction, the background of the research problem is discussed in Section 1.2. The question of accountability versus decision-making is addressed in Section 1.3, followed by a statement of the problem to be researched in Section 1.4. A motivation for researching the problem stated is presented in Section 1.5. The importance of the proposed work, previous and present attempts at solving the stated problem and possible beneficiaries of the outcome of this research are also given in Section 1.5. The hypothesis is presented in Section 1.6, while the research aims and objectives are the topic of Section 1.7. In Section 1.8 the research methodology

followed in this work is presented. The nature and form of the results are presented in Section 1.9, and a chapter layout of the rest of this thesis is presented in Section 1.10.

The above layout is represented in Figure 1.1.

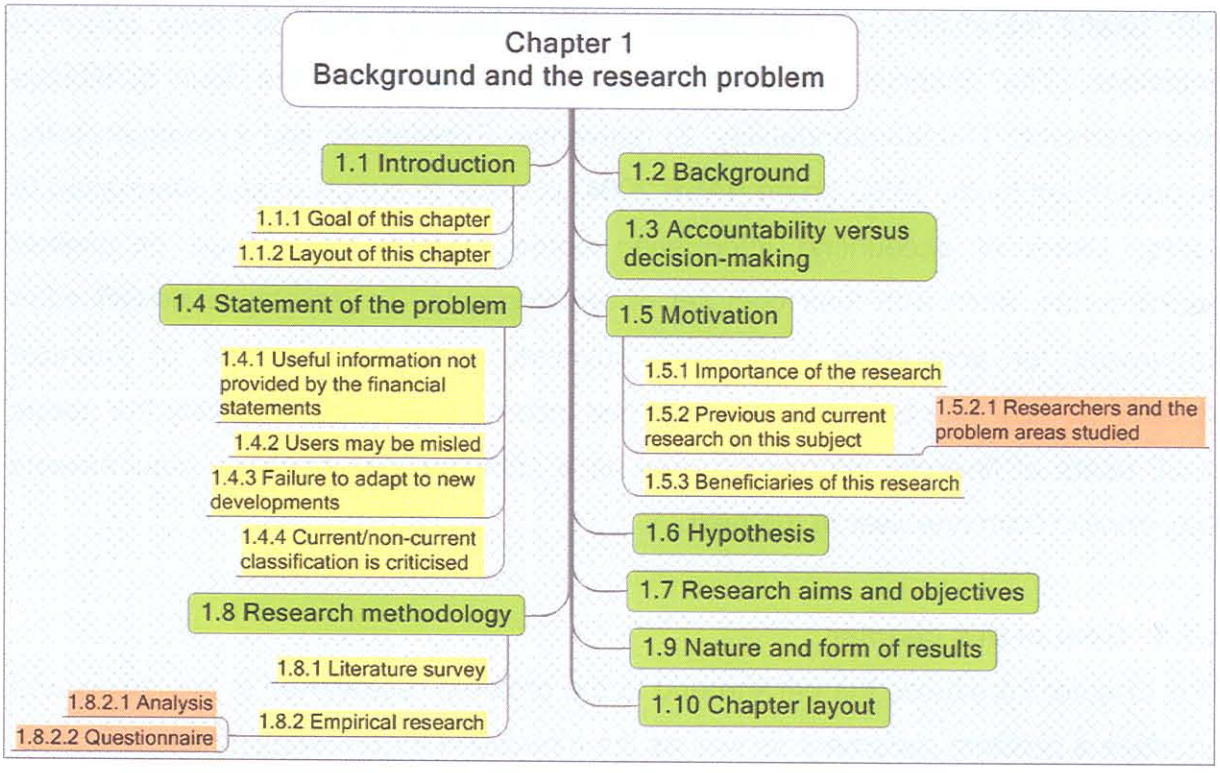


Figure 1.1 A visual representation of the layout of Chapter 1

1.2 Background

Classification plays a fundamental role in accounting science, so much so that the Committee on Terminology of the American Institute of Accountants (now AICPA) explicitly mentions it in the definition they adopt for accounting (italics added by the author):

> Accounting is the art of recording, *classifying* and summarizing, in a significant manner and in terms of money, transactions and events which are, in part at least, of a financial character, and interpreting the results thereof. (Kam 1990:33)

Accounting classification is an ongoing process performed by accountants in the observation of transactions, events and occurrences, the recording thereof and the reporting to a diverse group of users for their financial decision-making objectives (Goldberg 1964). Classification of accounting data can determine and enhance the data's usefulness and transform such data into useful information, thereby creating new knowledge. Classification is a mechanism used by livings beings to make sense of a variety of objects in their world by classifying such objects into groups.

Classification starts as soon as an event (e.g. a transaction) takes place. In accounting a transaction is first classified when it is recorded as a debit or a credit, whereafter it needs to be classified as an asset, a liability, equity, revenue or cost/ expense, guided by the attributes of the transaction that are known at the time of recording the transaction. The last five accounting classes are used uniformly by companies, as prescribed by GAAP (General Accepted Accounting Practices) and/or IFRS (International Financial Reporting Standards). All economic inputs and outputs are recorded according to these classifications (Lev 1974). Throughout this thesis an attribute is the technical name used for a property of an object.

A classification may change over time as a result of environmental effects and managerial decisions. Attributes may change from the time of recording in the past to the time of reporting in the present. Classification is performed for the sake of a moment at year-end, and the final classification is the disclosure of all the economic events in the financial statements of a company. For example, raw materials, work-in-progress and finished goods are classified together as inventory in the subclass of *current assets* at year-end and again as separate accounts after year-end. Therefore, a proposed classification framework for accounting information ought to embed a temporal component, i.e. time has to be taken into account during the classification of a transaction from the time of recording in the past to the time of reporting in the present, including items with future consequences.

The resultant classification depends on how the event under consideration is measured; amongst other things it requires one to determine all relevant attributes of the event prior to classification in the financial statements. Financial statements are mere summaries of financial data and are susceptible to the biases and defects often

present in summaries. By creating summaries, important information for other users may be left out based on the subjectivity of the person making the summary, even though the compiler of the financial statements tries to be objective (Goldberg 1964). Classification has a degree of personal preference that may lead to different outcomes by different accountants.

The practice of accounting performs the function of measuring economic activities of a company and conveying the results to the managers, investors, creditors and other interested parties to facilitate decision-making. Information communicated by accounting is arguably the most sensible way to measure the performance and financial well-being of a company, particularly for those stakeholders other than the managers of the company (Someya 1996). Lev (1974) divides users and their goals into the following categories:

Table 1.1 Users of financial statements

Type of users	Reason for using financial statements
Investors	Portfolio decisions
Management	Evaluation of operational and financial efficiency
Lenders	Determining credit worthiness
Labour unions	Collective bargaining
Regulatory agencies	Controlling of the activities of a company
Researchers	Studying company and individual behaviour

Adapted from Lev (1974)

The diversity of stakeholders in a company is described by Mitroff (1983: xv) as that "each stakeholder has a will of its own and pursues its own goals as well as those of the system as a whole". From Table 1.1 it is evident that, with a diverse group of users and their needs, it becomes a complex task to develop a classification framework for accounting information to satisfy the needs of all users and the requirements of different users may also conflict with one another.

According to the Ernst & Young Foundation (1994:1) there is "a deep concern that financial accounting and reporting is losing relevance in a world characterized by increasingly complex financial transactions and management practices". This sentiment is shared by AICPA (1994). The Ernst & Young Foundation (1994)

furthermore claims that accounting research fails to address the problems that standard setters and practitioners deal with. It is argued that only a small portion of accounting research published in the last twenty years addresses the problems that business and standard setters encounter. It follows, therefore, that research is needed to address the problems encountered by standard setters and practitioners. One possible way to address this problem is to structure information currently presented in statements differently, so as to make it more accessible to stakeholders.

Currently, the Financial Accounting Standards Board (FASB) and the International Accounting Standards Board (IASB) are working on a project called the *Joint Conceptual Framework Project* (FASB 2007). This project will be conducted in 8 phases of which two phases may have an impact on the classification of accounting information: Phase B – Elements of financial statements and recognition; and Phase E – Presentation and disclosure, including reporting boundaries. The framework proposed in this thesis is independent of, but part of the realm of developments of the Joint Conceptual Framework Project (FASB 2007). Since classification plays an important role in accounting, this joint project further motivates this thesis.

1.3 Accountability versus decision-making

A general perception is that the purpose of financial reports is to report on the company's activities and management's achievements to shareholders, the latter objective often being pursued to demonstrate sound accountability. Although this accountability element of financial reporting does exist, there is a more noteworthy social purpose, namely, supplying quality financial information to make realistic investment and credit decisions (Miller and Bahnson 2002:32). AICPA (1994) states that the decisions of users are greatly influenced by the necessary information obtained from financial statements. The social purposes and decision-making purposes are becoming increasingly relevant and may need to be taken into account when developing a classification framework for accounting information.

Classification of accounting information may be divided into classification for *accountability* and classification for *decision usefulness*. Table 1.2 presents the different steps and principles followed in the classification of accounting information.

Table 1.2 Classification for accountability and decision usefulness

Steps in the classification process	Principles	Classification types
Observation	Historical classification principles	Accountability
Recording	Double entry principles	
Reporting	GAAP principles/practices	
Decision-making	User requirements	Decision usefulness

Next each of the two classification types and their steps portrayed in Table 1.2 are discussed.

1. **Accountability**

- **Observation:** An observation made by an individual is often a subjective activity, and, because of this phenomenon, Quantum theory works towards an "observer-influenced reality" rather than an "observer-created reality". By implication, what was not already potentially present could never be brought into being (Polkinghorne 2002). This means that an observer actually influences reality but cannot create reality. An observer interprets what he or she sees and, thereafter, assigns some semantics to the observation. Classification of economic data takes place as a result of observation, which may be a subjective action. This could lead to information in the financial statements that is not useful, since it may be based on the intentions of the observer, as discussed above.
- **Recording:** Duality, or the double-entry system, is a "logical consequence of the more basic aspect of classification methodology" (Littleton and Zimmerman 1962:26). Duality brings forth a balance or equilibrium in the financial statements, since in the trial balance, for example, the sum of the debits equals the sum of the credits. Also, the balance sheet may be seen as a statement of balances, a result of the cause and the effect of transactions initially recorded.
- **Reporting:** South-African accounting is governed by a set of *practices*, called General Accepted Accounting Practices (GAAP), while in the USA the corresponding body of knowledge is referred to as principles. According to GAAP, the main objective of financial statements, as set out in AC000 (one of the statements in GAAP), is to provide useful information to a diverse range of users for their own specific goals (Sowden-Service 2004). According to

Sowden-Service (2004:1), such information should display the following regarding a company: 1) the financial position of the company (found in the balance sheet), 2) the financial performance (found in the income statement), and 3) the cash flow (found in the cash flow statement). However, as far as the author is aware, no prescribed framework currently exists to classify accounting information; such information is classified into different financial statements following GAAP and the Company Act 1973, and these are rather prescriptive with regards to the disclosure of information in the financial statements.

2. **Decision usefulness:** For financial statements to be useful to users, they need to conform to the needs of the different users. From the list of diverse users in Table 1.1 it certainly appears as if different classifications may be needed for different users of financial statements. This is part of a larger problem based on the observation of reality (refer to the discussion in 'Observation' above). As envisaged by Mattessich (1995), reality can be compared to an onion: a hierarchy with many layers in which reality can be physical or social. Mattessich (1995:203) answers the assertion that "accountants do not represent reality but create it" as follows: accountants do both because reality changes with every event and with every human thought and action. A single generic classification framework of accounting information may, therefore, be inadequate if all the needs of all the users are to be incorporated. A possible solution to this problem is to pool all the requirements and then remove those that conflict with any other requirement, i.e. take a *distributed union* (Potter, Sinclair and Till 1996; Enderton 1977) of all the requirements of all the users and then remove all conflicting requirements from the union. A classification framework for the resulting requirements is then established. Any additional requirements could be catered for in supplements to the financial statements. An example of a distributed union, minus some conflicting requirements, is given in Example 1.1 below.

Example 1.1

Suppose there are three users, say S1, S2 and S3 of a particular financial statement. Each user has a different set of requirements of what information they need from the financial statement in question. Suppose further that the set

of all requirements is given by {R1, R2, R3, R4, R5}, and each user's unique set of requirements is given by:

S1 = {R1, R3, R4}; S2 = {R1, R4, R5}; S3 = {R1, R2, R4, R5}.

Suppose further that requirements R3 and R5 are conflicting in nature, as are R2 and R3, but in a different way. These three requirements can, therefore, not all be catered for simultaneously in a classification structure. However, as proposed above, a first step is to take a distributed union (denoted by ″ below) to cater for all requirements:

Distributed union = $\cup\{ \{R1, R3, R4\}, \{R1, R4, R5\}, \{R1, R2, R4, R5\} \}$

= $\{R1, R3, R4\} \cup \{R1, R4, R5\} \cup \{R1, R2, R4, R5\}$

= $\{R1, R2, R3, R4, R5\}$

Next, all conflicting requirements (i.e. R2, R3 and R5) are removed to arrive at:

$\{R1, R2, R3, R4, R5\} - \{R2, R3, R5\} = \{R1, R4\}$

Therefore, in this example, requirements R1 and R4 will be incorporated.

End of example 1.1

Example 1.1 can be visualised as follows:

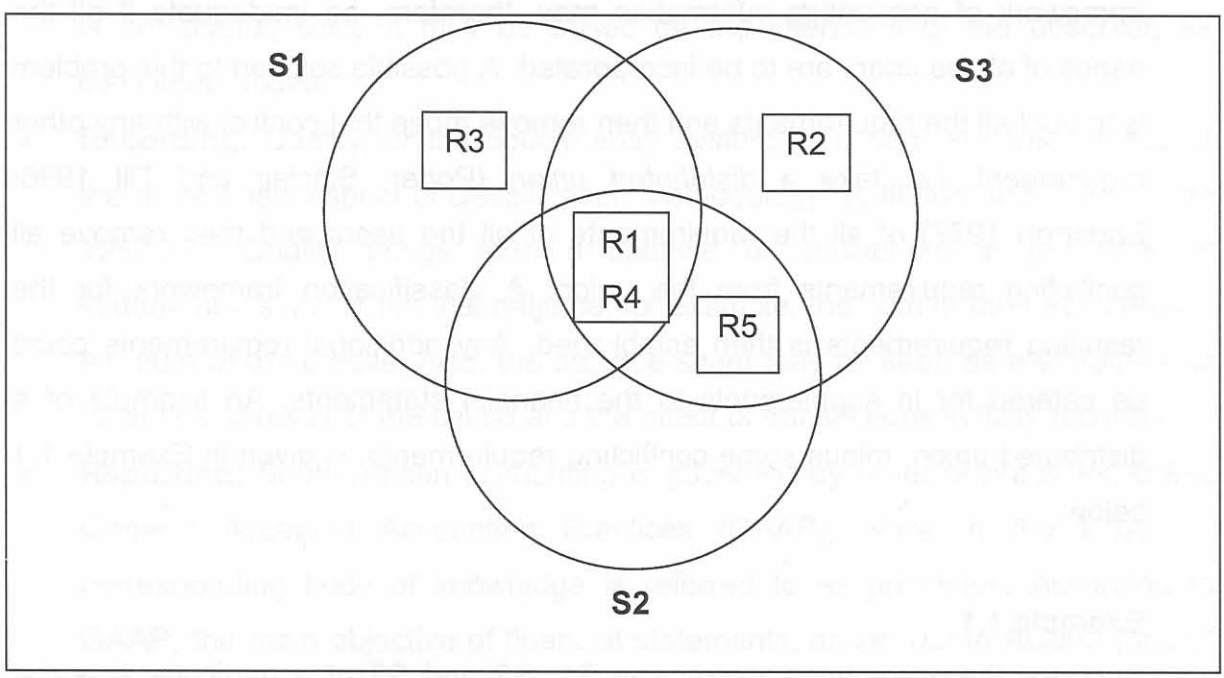


Figure 1.2 A visual representation of user requirements

In the following section the problem presented in this thesis is discussed.

1.4 Statement of the problem

In the current section problems identified in the classification of accounting information are discussed under a number of subheadings.

1.4.1 Useful information not provided by the financial statements

One of the goals of users is to make decisions based on accounting information classified in the financial statements. Goldberg (1964) makes a claim to the effect that the purpose of assisting users of financial reports to make decisions is often not accomplished and this problem evidently does not seem to be acknowledged. The Trueblood Committee (Trueblood 2004:172) state that the "basic objective of financial statements is to provide information useful for making economic decisions". An accountant is, therefore, faced with the task of supplying such users with accounting information that will suit their needs. Naturally the information portrayed in these statements has to be classified in some or other way to satisfy these users, and the problem is to develop a classification framework that will best answer to this need. Incorporating the needs of all the users when developing a classification framework for accounting information may prove to be a very complex activity, and when these needs conflict as in Example 1.1, a distributed union followed by the removal of conflicting requirements (i.e. requirements R2, R3 and R5) is a possible solution.

Accounting is also criticised by economists and analysts for not displaying useful information. According to Lev (1974), economists view the reported financial information in financial statements as irrelevant to decision-makers because there are inconsistencies of a serious nature between accounting and economic evaluation concepts. Lev (2003:520) further states that "it is widely recognized that the current accounting system does not convey relevant and timely information about the value chain (business model)". This may be a call to increase the relevance of the reported information to users, and such endeavour may be addressed through the development of a classification framework for accounting information. Naturally, information that is more relevant to users may better assist them in making more informed decisions.

A further problem regarding the utility of information is that company managers view the capital market (e.g. analysts) as an enemy. Miller and Bahnson (2002:99) state that financial analysts, in a survey, indicated that: "... management will experience great benefits if it changes its approach and begins to see the capital markets as potential partners instead of necessary evils or adversaries". Financial reporting may, therefore, need to be as transparent as possible. The classification of information in such a way that it assists analysts in their task may benefit the company as well as other stakeholders. In this regard the use of the attributes of a transaction may be used to aid the classification process.

1.4.2 Users may be misled

Users may be misled by the information contained in financial statements. For example, users may believe that accountants classify *assets* and *liabilities* based on a particular set of characteristics (attributes) and classification rules, while in practice accountants may be using a totally different set of attributes and rules (Heath 1978). Users ought to be informed which rules accountants are using when classifying financial data, and also need to be assured of the reliability and relevance of financial reports. Establishing reliability and relevance of accounting statements may call for the development of a classification framework. Again the use of a well-defined set of attributes relevant to a transaction could help in the classification of such a transaction.

1.4.3 Failure to adapt to new developments

Accounting is still developing as new transactions emerge. Henderson and Peirson (1994) state that the accounting that was developed during the 13th and 14th centuries currently faces the challenge of new developments in business practices, the law and social attitudes. Accountants are compelled to find new ways to measure new types of transactions and to compile reports within an accounting system that was developed in a different environment from today. New types of transactions include leases, company tax, inter-corporate investments and new financial instruments. According to Henderson and Peirson (1994), opinions on how to handle these new types of transactions have differed in many cases. A proposed classification framework may need to be sensitive to possible future developments. In this sense the use of attributes of a transaction makes the classification thereof more

dynamic and could, therefore, allow the accountant to adapt to changes and new developments.

1.4.4 Current/non-current classification is criticised

The classification of items as *current* and *non-current* is also an area of critique (Gilman 1944, Herrick 1944, Kempner 1960, Moonitz and Jordan 1963, Huizingh 1967, Heath 1978, Kam 1990, Hendriksen and van Breda 1992, Wolk, Dodd and Tearney 2004). The items currently classified together do not originate from the same type of operations. For example, interest receivable and accounts receivable are grouped together as *current assets*. Hendriksen and van Breda (1992:473) state that "because of the difficulties regarding the interpretation of the operating cycle and because of the lack of evidence regarding the relevance of the *current asset* classification to any specific user's needs, many believe that other methods of classifying assets should be investigated". A proposed framework may need to address the classification problem of *current* and *non-current* items. Paying attention to the attributes of a transaction could be a way to address the problem of the classification of *current* and *non-current* items. Furthermore, including time into a proposed classification framework may in a natural way address the problem of *current* and *non-current* items.

As is evident from the discussion in this section, present classification practices in accounting do not supply useful information to the users of such statements, mainly because these structures may distort the information and even mislead the users. Present classifications may also fail to adapt to new developments, resulting in accounting hybrids, i.e. items that do not fit into only one class. Finally, the *current/non-current* classification is also criticised. Since the present classification of accounting information has been criticised from a number of sources, it follows that a classification framework for accounting information is needed.

1.5 Motivation

The motivation for this research is presented in terms of support of the problem statement in Section 1.4 above, and may be divided into three categories: importance; previous and present research; and beneficiaries.

1.5.1 Importance of the research

The motivation for the research in this thesis stems from the fact that many researchers (refer to Table 1.3 below) are of the opinion that the financial statements of a company should supply stakeholders with information that is useful, reliable and relevant to their needs. Currently this is not the case. Goldberg (1964:55) makes the remark that financial statements are sometimes more of an "intellectual puzzle" than a tool to disclose information to the users. Since classification is at the beginning of the accounting chain, culminating in financial statements, it is plausible that a correct classification of accounting information may help to unravel such intellectual puzzles. Users need to be informed in a way that will aid them in their decisions, not in a way that will hinder them in making decisions. Therefore, a classification framework for accounting information which takes the needs of users into account may be required in order to create knowledge and to facilitate the making of decisions based on this knowledge.

1.5.2 Previous and current research on this subject

Currently, there are many researchers (refer to Table 1.3) looking into the problems that surround the classification of accounting information, from the event triggering a transaction (recording) up to the financial statements (reporting). The erroneous classification of information in the well-known case of Enron (Miller and Bahnson 2002) further motivated this line of research.

1.5.2.1 Researchers and the problem areas studied

Various researchers have spent time seeking solutions to some of the classification problems plaguing accounting. To this end Table 1.3 gives an indication of the year, the researcher and the problem studied.

Table 1.3 Previous and current research

Year	Researcher	Problem area studied
1897	Dicksee	Discussed goodwill and its classification.
1929 (Reprinted 1978)	Canning	Discussed the attributes and classification of assets, liabilities and equity.
1932	Herrick	An article on which items should be classified as *current assets*.
1397	Wolf (In Goldberg 2001)	Wolf discussed classification and pointed out that classification is a point of departure for each science.
1944	Herrick	A discussion on the classification of *current assets* and *current liabilities*.
1944	Gilman	A discussion on accounting principles and the current classification.
1948	Blough	An article on the classification of prepaid expenses as *current assets*.
1962	Fitzgerald and Schumer	A study of the general principles governing classification of information with special emphasis on accounting.
1967	Huizingh	Working capital classification is discussed. Suggestions for reclassification are formulated in this work.
1974	Vatter	Called for the fund theory because it "seeks to employ the most flexible and most inclusive bases for compiling and reporting all financial data that are recorded or can be measured in some reasonably objective way" (Vatter 1974:123). He suggested a way of classifying items according to the fund theory.
1978	Heath	*Current/non-current* classification. In his book, Heath discussed the critique of other authors on the *current/non-current* classification.
1994	AICPA	A special committee was formed to assess which information is needed by users of financial statements and to what extent auditors should be involved. This committee suggested reclassification of items into core and non-core.
1994	Henderson and Peirson	Developed a conceptual framework for financial reporting. This framework consists of two parts: part one deals with standards setting and part two with standards regulation. The framework was developed to cater for the development in business practices since Italian accounting was established in the thirteenth and fourteenth centuries. This framework does not have an impact on the classification of accounting information.
2002	Miller and Bahnson	These authors advocate quality financial reporting. They devoted a whole book to the discrepancies in and shortcomings of information in financial statements and how this affects users in their decision-making processes. Information in the financial statements is based on certain classification practices and may, therefore, not supply users with useful information.
2004	Gröjer	Intangible assets and accounting classifications. Gröjer investigated the classification of intangible assets and what "classification theory can teach us about 'good classification'".

Next, consideration is given to who may benefit from the research undertaken in this thesis.

1.5.3 Beneficiaries of this research

The following users of financial reports may benefit from this research:

- *The accounting profession:* As far as the author is aware, there is currently no prescribed classification model for accounting information in general use. Instead a "model" based on past practices is applied, almost traditionally. As shown in Table 1.3 various authors identified problems in current classification structures and in some cases suggested solutions. However, many of these solutions have either been implemented only partially or have not been implemented at all.

- *All the users of financial statements:*
  - *Managers of companies*: More accurate decisions regarding future policy decisions may be made since more relevant information may be supplied when the proposed classification framework is introduced.
  - *Stakeholders of companies*: Additional information may be revealed to users enabling subsequent classification of information by the users themselves.
  - *Present and new investors*: Information may be more readily available for decision-making purposes regarding future investments with the company when the classification framework for accounting information takes all relevant and known attributes of a transaction, event, or happening into consideration at the time of recording (past) and at the time of reporting (present and future).
  - *Economists*: Differences in definitions and classifications between economists and accountants may be reduced.
  - *Investment analysts*: Better guidance may be given to analysts to perform a reclassification. (Expert users of financial information, e.g. analysts, often reclassify accounting information.)

- *Auditors*: Auditors will be able to rely more on the fair presentation of the financial statements and the quality of information supplied when a classification framework for accounting information is developed.

1.6 Hypothesis

The hypothesis of this research is:

> The current classification of accounting information, from the recording phase to the reclassification in the reporting phase, does not supply users of such information with the necessary information for decision-making purposes. In this regard a comprehensive classification framework for accounting information is proposed, with the following properties:
>
> - A well-defined set of attributes will be used, ultimately to classify a transaction into a static framework to aid decision-making.
> - Time will be used to classify a transaction at the time of recording, and later to reclassify it at the time of reporting.
> - The proposed framework will guide the classifier as to how an item finds its way into a static structure.

1.7 Research aims and objectives

The research aims are:

1. To analyse present accounting classification habits and rituals.
2. To establish the problems users face with regard to the classification of accounting information.
3. To investigate the validity of present criticisms on the classification of accounting information.
4. To investigate the problems experienced by compilers of financial statements.
5. To minimise or even eliminate classification for window dressing (creative accounting).
6. To investigate whether the classification for accountability and classification for decision usefulness should be the same or not. The question of whether each

user would classify accounting data and information according to his or her own knowledge structures and objectives will also be explored.

7. To aid auditors in the following three (3) areas as stated by AICPA (1994): i) to report on historical financial statements, ii) to be involved with special purpose reports associated with particular amounts included in the accounting records, and iii) to report on forecasted (projected) financial statements.
8. To propose a classification framework for accounting information in which the use of attributes of a transaction as well as the use of time plays a more prominent role.

The following types of classification are excluded from this research:

- Classification of accounting procedures world-wide.
- Classification and coding of accounting data for information systems.
- Statistical classification.

1.8 Research methodology

A research methodology consists of a set of methods for acquiring, defining, classifying and verifying knowledge (Belkaoui 1987). Two research methods were used in this study:

1. *Literature survey*: A critical analysis of the literature was conducted. Some of the findings are reported on in Section 1.2. The rest of the findings are reported on throughout this thesis.
2. *Empirical research* made up of two components:
    i. *Analysis*: An analysis of present accounting standards and practices was conducted. Chapter 6 covers this activity.
    ii. *Questionnaire*: A questionnaire was sent out to a number of companies, analysts and academics. The outcomes of the questionnaire are also reported on in Chapter 6.

1.8.1 Literature survey

A critical analysis of the relevant literature was conducted. The literature survey started with a history of accounting and classification. Books, articles and the Internet all played a part in this literature survey. The literature survey also included multi-disciplinary literature with regard to classification. Literature from auditing, philosophy, psychology, human information processing (HIP) and quantum physics was consulted.

1.8.2 Empirical research

Empirical research was conducted using two methods. Firstly, financial statements (income statements and balance sheets) of a group of companies were analysed to determine how they classify accounting information as well as how they ought to classify such information. The cash flow statement is prepared from the classification that takes place in the balance sheet and the income statement and is, therefore, not included in the analysis in this thesis. Secondly, a comprehensive questionnaire was prepared and sent out. The results of the analysis and questionnaire are presented in Chapter 6 of this thesis.

1.8.2.1 Analysis

An analysis of how companies currently classify accounting information was conducted. The analysis was performed using the information provided on the McGregor BFA database, which stores all the financial statements of all the JSE-listed companies.

There are currently 379 companies listed on the JSE. In order to select a well represented population of companies, the following procedure, derived from the method proposed by van der Linde (2004) was applied:

An alphabetical list of all the sectors on the stock exchange was obtained and 50% of the companies listed were chosen randomly, using the systematic random sampling method. This resulted in 190 companies being selected. The selection turned out to be too comprehensive and a second population was chosen randomly when 50% of the 190 companies were chosen, hence it left the author with 95 companies. From these, the banking sector (2 companies) was

left out because their reporting rules differ from other companies. In the end the analysis entailed a comparison over a period of 3 years of the classification used in the balance sheets and the income statements of the final 93 companies.

1.8.2.2 Questionnaire

A questionnaire was compiled following a thorough and critical analysis of the literature. The aim of the questionnaire was to validate the changes proposed by the author of this thesis. The questionnaire was sent to all the companies listed on the JSE who have email addresses, as well as academics and analysts.

1.9 Nature and form of results

The aim of this thesis is to develop a classification framework for accounting information. The model for problem solving designed by Mitroff, Betz, Pondy and Sagasti (1974) was used to obtain a solution to the problem of establishing the framework. The Mitroff model was also used by Koornhof (1998) for the development of a framework for the identification and measurement of accounting information on flexibility. The Mitroff model is represented in Figure 1.2.

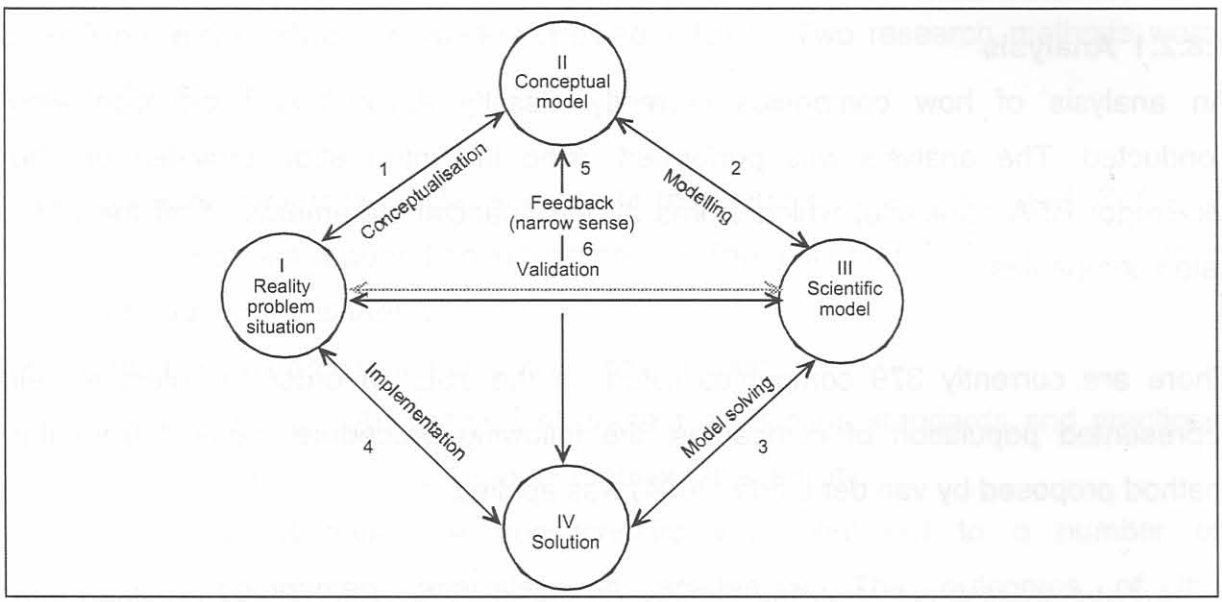


Figure 1.3 A systems view of problem solving

The Mitroff model depicted in Figure 1.2 is circular in nature, since there is no definite starting point. It could start at circle I with the Reality problem situation, indicating the actual problem to be solved. Activity 1 may then be performed to formulate a

Conceptual model in circle II. Following from this, activity 2 may be viewed as the formulation of a scientific model in circle III. The following activity could be activity 6, namely, the validation of the model, or it could be activity 3 which is the construction of a solution corresponding to the model. In activity 6 the correspondence between reality (the problem) and the scientific model may be evaluated. Having constructed a solution, activity 5 or feedback may be applied to find an improved scientific solution to the problem. Lastly activity 4 is the implementation of the solution, thereby completing the cycle.

The different phases of the Mitroff model are discussed next.

Phase I stipulates the identification of a reality problem situation. The problem was identified in the literature and the questionnaire, namely that current classifications of accounting information suffer from a number of shortcomings, e.g. not living up to the expectations of users.

Phase II is the development of a conceptual model of the problem. This defines the problem to be solved in broad terms and specifies any field variables that will be used to define the nature of the problem (Mitroff *et al.* 1974).

Phase III prescribes the building of a scientific model of the problem. In this thesis, amongst other things, it involves defining an abstract model of a new framework for the balance sheet and income statement.

Phase IV gives an implemented solution, i.e. the proposed framework of the scientific model abstracted in **Phase III** above in natural language. For example, in the case of the balance sheet a *normative subframework*, a *decision subframework* and a *static subframework* are proposed in this thesis.

In the following section the chapter layout of the rest of this thesis is described.

1.10 Chapter layout

Chapter 2: *General classification perspectives*. This chapter includes a discussion of the following: classification as a process of the mind; the historical origin of classification; some definitions of classification; basic concepts of classification, in particular, the purpose and properties of classification; the building blocks of classification, namely, relationships, concepts and change; a multi-disciplinary discussion of classification; and the effect of measurement, risk and uncertainty on classification.

Chapter 3: *Accounting classification perspectives*. In Chapter 3 the author considers moral obligations of accounting and the history of accounting classification and practices currently in use. The issues of uncertainty, accounting definitions of classification, properties of accounting classification and the building blocks of classification, namely, relationships as well as the role of change, are addressed. The process of classification, the role of measurement in classification, the information intersection (among the regulators, financial managers and capital markets) and the diverse needs of users are discussed. The chapter concludes with a discussion of the subject of multiple frameworks versus one generic framework.

Chapter 4: *Specific classification problems in financial statements*. This chapter addresses a vast number of general classification problems in financial statements. This is followed by a discussion of various classification problems specific to the balance sheet and the income statement. The view of analysts on accounting information and classification for window dressing are presented.

Chapter 5: *Research methodology*: In Chapter 5 the research methods used in this thesis are discussed, namely, a literature review and empirical research which includes an analysis and the use of a questionnaire.

Chapter 6: *Results of the research*: In this chapter the author reports on the literature review, the results of the questionnaire and the analysis of the financial statements (balance sheets and income statements) of the companies used in this research.

Chapter 7: *Towards a classification framework for accounting information*: Chapter 7 presents the main contribution of this thesis, namely, the development of a classification framework for accounting information.

Chapter 8: *Conclusions and future work*: This chapter analyses what was done in the previous chapters and gives some directions for future work in this area.

The rest of the thesis after Chapter 8 consists of various appendices, a bibliography, and finally an index.

CHAPTER 2 GENERAL CLASSIFICATION PERSPECTIVES

2.1 Introduction

Classification is a process that is common in many disciplines and in everyday life. In essence classification is based on concepts, generally defined as an idea underlying a class of things (Hornby 1981), and on the attributes of such concepts or entities (things). The identification of the attributes of an entity may be viewed as taking some form of measurement to determine the relevant attributes. Equally important in the process of classification is how attributes of entities or objects change over time, indicating that time has to be taken into account in the process of classification. Another important aspect that comes into play is the relationships among the various entities since relationships may lead to the creation of new knowledge.

2.1.1 Goal of this chapter

The aim of this chapter is to discuss general classification perspectives in order to shed some light on classification and some underlying problems. Classification is not only practised in accounting, but is ubiquitous in many areas in life. It follows, therefore, that one needs to investigate classification issues in other disciplines. In particular, research into domain-specific classifications may lead a classifier to a broader understanding of classification principles.

2.1.2 Layout of this chapter

In this chapter classification as a process of the mind and the historical origins of the process of classification are presented in sections 2.2 and 2.3. Some definitions of classification are presented in Section 2.4, followed by basic concepts of classification with specific reference to the purpose and properties of a generic classification in Section 2.5. Some basic building blocks, namely, the role of relationships, concepts and change in classification are addressed in Section 2.6. Various viewpoints of classification in a number of disciplines are examined in Section 2.7. These disciplines are: social sciences (philosophy, psychology and human information processing); knowledge creation; science (logic and quantum physics) and auditing. Towards the end of the chapter a discussion on the role of measurement, risks and uncertainty is presented. A summary concludes the chapter.

A visual representation of Chapter 2 appears in Figure 2.1.

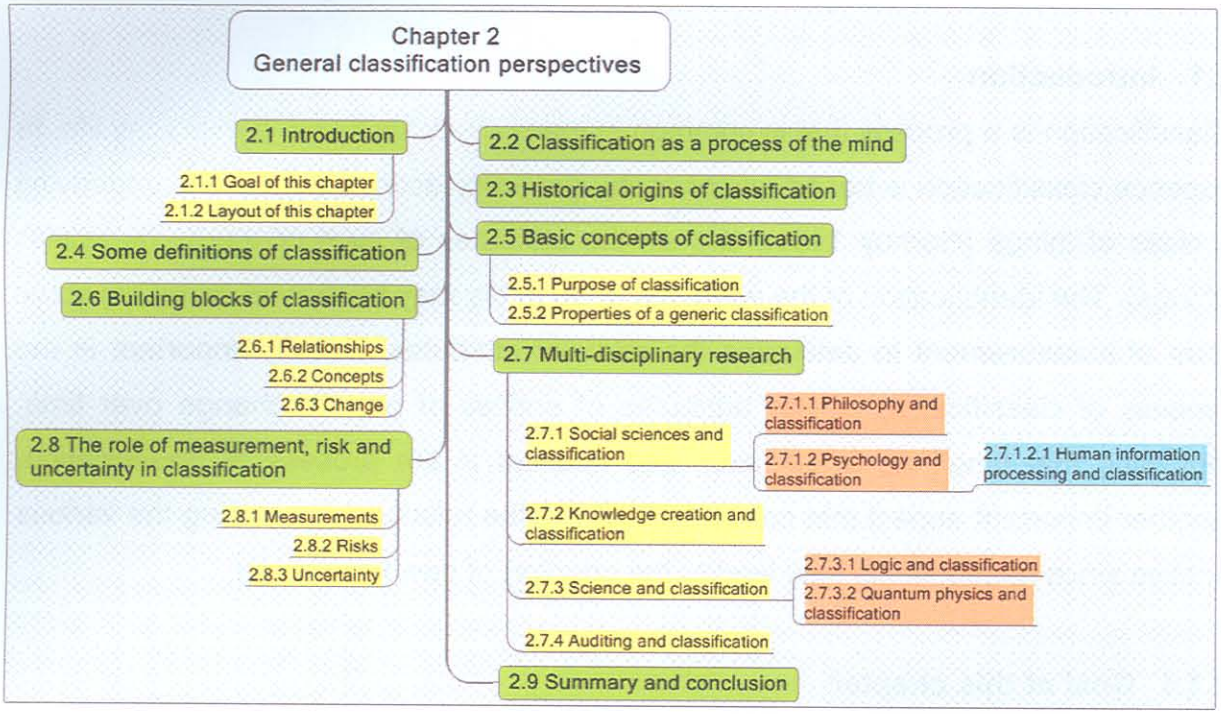


Figure 2.1 A visual representation of the layout of Chapter 2

2.2 Classification as a process of the mind

The grouping of everyday information is a natural activity of the brain of most living beings. Classification is performed by fixing patterns and then fitting such patterns on future events, objects, etc. (De Bono 1985). Capra (2002) states that such organising activity – in other words, classification – performed by living systems is a mental activity. The right hemisphere of the brain is used for visual activities and the grouping of objects and other entities (Johnson 1998). The right hemisphere takes information about an object, groups it and recognises it, as, for instance, a *chair* or a *car*. The left hemisphere of the brain is responsible for conducting analytical activities, e.g. identifying the car as *Juan's car* by recognising, for example, the registration number. The process of classification, therefore, settles in the right hemisphere of the brain.

Stevens (1951:740) reports that in psychology most experiments on "inductive concept formation" are experiments on classification. The people involved in the experiment eventually extract common characteristics among certain stimuli and thereby discover that such stimuli are to be grouped together based on their mutual

properties or attributes. All these stimuli with the same attributes ought to be ranked together under one name. Looking ahead at the rest of this thesis, one can argue that the classification of accounting information should be based on the grouping together of common attributes and establishing relationships to enable the reporting of useful information.

2.3 Historical origins of classification

Classification has its roots in the works of the Greek philosopher Aristotle who lived from 382 to 322 BC (Berkeley 2004; Johnson 2004; Pauw 2004). Aristotle's classification scheme was based on nature, but his basic ideas could equally be applied to other areas. For example, the study of mathematics could be classified into calculus (continuous functions, differentiation, integration, etc.) and discrete mathematics (set theory, relations and functions, etc.) (Ensley and Crawley 2005). Naturally one has to look at the attributes of these objects to decide in which group an object is to be classified.

2.4 Some definitions of classification

Stevens (1951) defines classification as the creation of classes containing objects or events whose characteristics or behaviour can be shown to be equivalent. These classes are often referred to as equivalence classes in discrete mathematics (Ensley and Crawley 2005). Hornby (1981) shares Stevens' definition of classification when he defines it as the process of "arranging into groups". In general, to establish a comprehensive classification framework, all the attributes of every item, concept and event in the system under consideration may need to be identified. Naturally in practice this could be hard to achieve since some attributes may not be known when the classification is first performed. Furthermore, the obligation rests with the classifier to show that the attributes of these objects or events in a particular class are indeed equivalent for each member of the class.

2.5 Basic concepts of classification

In this section some basic concepts of classification are discussed with reference to the purpose of classification as well as the properties of a generic classification.

2.5.1 Purpose of classification

Broadly speaking, the purpose of a classification exercise is to group similar entities or members together in a collective and to give it a unique name. Instead, therefore, of referring to each member of the collective individually, one simply refers to the collective as a whole, armed with the knowledge that all individuals in the collective have the same attributes. As a result, classification is often performed for the purpose of convenience (Paton 1962; Chambers 1966). The demarcation of individuals into classes may, however, be open to criticism if all reasonable purposes for which a newly classified system is to be used afterwards, are not taken into account. For example, in accounting the information in financial statements ultimately serves a different purpose for each stakeholder and such, often conflicting, requirements of stakeholders should be identified when a classification framework for accounting information is conceptualised. A possibility is to calculate a distributed union of the requirements of all such stakeholders, minus the conflicting requirements. Example 1.1 in Chapter 1 illustrates such a scenario.

Classification is often based on the criteria of "social convenience and necessity" instead of the essential attributes of the members under consideration (Hayakawa 1964:215). Such social convenience and necessity requirements may result in a very different classification as would have been the case had the classification been done according to the differences and similarities of the various members. Accounting information is made available to different kinds of users who may all have different social convenience and necessity requirements. This may call for a different classification system. Still, if a single classification framework is to be used, a possible solution to the problem of conflicting requirements is to take a distributed union of all requirements and then remove from the union those that are in conflict with any other requirement.

Next, consideration is given to some properties of a well-classified system, suggested by Nobes and Parker (2002).

2.5.2 Properties of a generic classification

Nobes and Parker (2002) give the following guidelines and properties of a well-classified system:

1. Attributes of the members to be partitioned into classes should be adhered to consistently.
2. A sufficient number of subsets should be available to exhaust a given universe.
3. The classification must be a *partition*, i.e. each and every element must belong to a subset and all subsets will be mutually exclusive in such a way that no element may fall into more than one subset.
4. The specialisation of entities should obey a hierarchical integrity. In this regard an example from Rumbaugh (1996) is in order: the set of all triangles should be classified into the correct generalisation, namely, all geometric shapes.

Adherence to the above guidelines and properties may result in a useful *generic* classification framework by resolving possible contradictions where members could belong to more than one subset (see points 3 and 4 above). If the above guidelines are followed in a classification framework for accounting information, the existence of accounting hybrids (i.e. transactions that have attributes of more than one subset) could be reduced.

2.6 Building blocks of classification

In this section consideration is given to some basic building blocks of classification, namely, relationships, concepts and the role of change. All these play a vital role in developing a useful classification system.

2.6.1 Relationships

Relationships may be viewed as a special kind of glue that binds together two or more entities. Bateson (1980) calls a relationship between entities "the pattern that connects" and urges researchers to start focussing on relationships as the basis of definitions for entities. The definitions given to the various building blocks of a classification system should, therefore, take cognisance of all relevant relationships among the said entities.

When searching for relationships among items one considers common attributes that ultimately define a particular item. Often in this process, attributes may be discovered with relationships to other occurrences and facts, which may lead to the creation of new knowledge. The following example from accounting illustrates this point.

Example 2.1

Suppose a transaction has the properties (Λ indicates a logical *and*):

Continuing operation Λ Regular Λ Entry (real transaction) Λ Immediate Λ Recurring

A transaction which has the five attributes above (i.e. continuing, regular, entry, immediate and recurring) may be classified as an *other expense* which is a subcategory of continuing operations in the income statement. (Note that this classification holds when the transaction is first recorded in the past. For present and future time the transaction may be classified differently). Hence, by identifying the attributes of a transaction, an accountant may be lead to classifying the transaction as (for example) an *other expense*. In essence, therefore, new knowledge has been created.

End of Example 2.1

The point illustrated in Example 2.1 is agreed on by Goldberg (2001:45) when he writes: "The scrutiny of characteristics [attributes] for possible significant relationships is often a useful intellectual instrument". The correct classification of items in the financial statements based on their relationships with other items (as determined by their common attributes) may lead to the creation of new knowledge about the company, as in Example 2.1.

The initial identification of relationships may sometimes be partial since some of these relationships could be deeply hidden or simply unknown, even throughout the entire classification exercise (Capra 2002). Therefore, when classification takes place it is plausible that only specific characteristics and their relationships to each other may be included. A classifier's understanding of the relevant relationships is often based on how he/she perceives reality in the sense described by Prigogine and Stengers (1984:227): "Only our ignorance … prevented us from achieving a complete

description of reality". This ignorance may be based on hidden variables and in classification reality may, therefore, not be revealed in total because of hidden variables or relationships. Lazarsfeld (1958) made a similar observation by claiming that certain characteristics of objects are chosen and relationships are determined between objects because normally only a *strict* subset of all characteristics of objects are studied in full in any science. Turning to the subject domain of this thesis: If the relevant attributes and relationships are not clearly identifiable, the information contained in the financial statements of a company may not be optimally useful.

The search for whether a relationship exists between two object occurrences or variables (by looking at their common attributes) is a way to establish whether two or more phenomena are indeed components of the same system, i.e. whether they are closely linked in the same system (Simon 1978). Gordon (1999:1) shares this view when he states that the process of classification is involved in the exploration of relationships in a "set of objects". This is intended to confirm whether or not the data can be represented reliably in a small number of classes of related objects. However, the identification of relevant attributes would precede the identification of relationships among entities.

It should be noted that relationships were not always viewed as important. In the Newtonian model (Wheatley 1993), researchers focussed only on entities, and relationships among the entities were largely ignored. However, in the new science (a phrase used in this thesis to denote the quantum world) it is appreciated that a more comprehensive understanding of a system is gained only when one observes all relationships among the apparently disconnected parts (Wheatley 1993). It follows that when a classification system is developed, the relationships between the different members should be taken into account. This is said mindful of the fact that any such identification of relationships may yield partial results since relationships could be hidden, as pointed out above. The reason for this state of affairs could be because some of the underlying attributes may be unknown at the time the classification is done.

2.6.2 Concepts

One possible definition of a concept is given by Hornby (1981:174) as "an idea underlying a class of things". Concepts are formulated to specify identifiable characteristics (or phenomena) of items (Belkaoui 1987). Observational concepts are those objects that possess specific characteristics which are directly observable (Hempel 1970). A concept may also be seen as a process whereby various phenomena and precepts are identified, classified and interpreted (Caws 1965). A result of the above definition by Hornby (1981) is that a concept may be regarded as essentially synonymous to the semantic content of one or more attributes of the elements belonging to a class.

2.6.3 Change

Classification systems and knowledge interrelate in various ways. This interrelationship can lead to a long linkage of classification systems and knowledge. Sometimes knowledge will change and the underlying classification may have to be adjusted since it may no longer be adequate. In some instances classification may also generate new knowledge (Kwasnik 1999). For example, suppose the cost of stationary for a head office and all regional offices is initially attributed to the budget of the head office. As a result the head office may show a loss while the regions may appear to run at a profit. Suppose further that management decides to embark on a new strategy for allocating cost, based on the activities responsible for the generation of such costs (e.g. an Activity-Based Costing (ABC) model). Subsequently the total cost of stationary may be moved from the head office and split over the regions. As a result the head office could suddenly start showing a profit instead of a loss, resulting in the new knowledge that the head office is actually running at a profit instead of a loss. Refer also to Example 2.1 in this regard.

A great deal of complexity was introduced by the changes that took place during the latter part of the 20th century and the beginning of the 21st century. These changes took place mainly in information technology (IT) and the industrial society (Capra 2002), resulting in people feeling uneasy about change. This uneasiness usually leads to uncertainty in the minds of those affected by a change, often leading to a resistance against such change. Change normally influences communications, energy, healthcare, transportation, economics, entertainment, manufacturing and

warfare (Pressman 2005). Any classification system should be flexible enough to take into account future changes in the system under consideration.

2.7 Multi-disciplinary research

Much about classification may be learned from multi-disciplinary research. Social scientists base their research of businesses on interdisciplinary research, and also make use of multi-disciplinary research, using instruments from more than one discipline (Strother 1962). A discussion of some of this multi-disciplinary research is presented below.

2.7.1 Social sciences and classification

Important subject areas of the social sciences are philosophy and psychology, including (amongst other things) human information processing.

2.7.1.1 Philosophy and classification

Classification and definition are related to each other in the sense that a sensible classification can only be done once correct definitions of the objects to be classified have been given. Such definitions naturally rely on the attributes of the objects under consideration. Classification can be seen as 1) the formation and 2) the location of classes. The location of a class implies that such a class has already been formed (i.e. formation $\Rightarrow$ location, where $\Rightarrow$ denotes logical implication (Ryan, Scapens and Theobald 1992)), but formation can stand alone. Both processes are concerned with indicating similarities and differences among the items to be classified. Location results in the aspect of gradation of information into higher and lower levels, a principle already recognised by Davidson (1887). During classification the similarities and differences of members are taken into account to establish different classes and subclasses. The formation of classes and subclasses should also form part of a classification system for accounting information, e.g. the class of all *Assets* is made up of two subclasses, one of which is *current assets* (see Appendix I). The process of classification in accounting needs to summarise information without losing meaning and has to take relationships among members into account to create the said subclasses.

According to Pauw (2004), accountants are faced with the following questions (amongst others): Is a class a concept, and which rule (i.e. concept) ought to be applied to transactions to place them into classes? This leads to some form of circular argument. In order to address this, the idea of an initial measurement to establish attributes of items prior to classification is proposed in this thesis. Therefore, when a transaction takes place, it is classified according to its attributes. If some of the attributes are not known, a preliminary classification may be done for the transaction. As time passes, however, some of these attributes may become known, leading to a reclassification of the transaction.

Classification is a process of developing groups of (often) varying sizes. Groups with a large number of members tend to lessen the significance conveyed by each member in comparison to a class with a smaller number of elements. The effectiveness of the process of classification lies in the following (Davidson 1887):

1. *Masses of data that is unmanageable and incomprehensible are grouped into classes*. Hence classification becomes an aid to creating knowledge in the sense that the original large group of data is partitioned into different classes, each with a particular purpose, thereby creating information from unstructured data.
2. *Classification alleviates a complexity problem for the human mind.* It is easier to recall the classes formed instead of all the individual members before classification.
3. *Classification facilitates the detection and presentation of "laws of coexistence".* Through the attributes, relationships between members and between classes are discovered and displayed. For example, in accounting, the attributes of a transaction allow it to be classified in the same way as a different transaction with similar attributes.

When grouping items together there should be a "light-giving principle" which leads to a satisfactory classification, otherwise the classification won't be of "any scientific value" (Davidson 1887:239). Unfortunately, classification is much more complex than this simple rule suggests, hence Davidson (1887) continues by arguing that, in order to supply the largest amount of information, classification should be based on the

largest number of related characteristics or attributes. This supports the notion of forming a class of members with the largest number of similar attributes, as long as the attributes in which these members differ are not crucial.

2.7.1.2 Psychology and classification

Psychology offers us vast insights into the behaviour of individuals and since business activities are performed by humans, it follows that psychology has an effect on all areas of accounting practice and theory (Prince 1964). Goldberg (2001:42-43) builds further on this view of human behaviour when he describes classification as a "reflection and an expression of a human attitude; it is a human invention, an artefact as much as any physical tool or instrument, but an artefact of and for the mind". It is plausible, therefore, that classification in accounting may indeed be influenced by human behaviour which may result in different classification frameworks for accounting information.

2.7.1.2.1 Human Information Processing and classification

A growing amount of research is being done using theories and models from the psychology of human information processing (HIP) and, in particular, the science of making decisions (Libby and Lewis 1977). This is of particular interest to the accounting profession since accountants are increasingly faced with decision-making processes (Libby and Lewis 1977). The ability to make quality decisions in accounting is a function of the quality of the underlying classification system used to classify information in financial statements; if the classification system delivers good quality information which is useful, quality decisions may be made.

HIP research has revealed that the ability of humans to process large amounts of information is rather restricted. Individuals make use of a selective and stepwise information processing system (Schroeder, Clark and Cathey 2005:117):

1. *"An individual's perception of information is quite selective".* An individual's perception will be based on their anticipation of what they expect to perceive since they are capable of understanding only a selective part of their surroundings.

2. *"Since individuals make decisions on the basis of a small part of the total information available, they do not have the capacity to make optimal decisions".* If individuals use only a part of the information available to them, their decisions may be subjective since not all the information that may be relevant is used.
3. *"Since individuals are incapable of integrating a great deal of information, they process information in a sequential fashion".* A classification framework that allows an accountant to take the classification of a transaction through a sequence of steps, instead of a set of concurrent actions, may be the way to design a useful classification system for accounting information. Following a sequence of steps is indeed the process advocated in Chapter 7 where a framework for the classification of accounting information is developed.

The tendency of the Financial Accounting Standards Board (FASB) and the SEC (Securities and Exchange Commission) to expect increasingly more information to be disclosed may have the opposite effect of what is planned if the tentative list of conclusions from HIP research above is accurate (Schroeder *et al.* 2005). This viewpoint had already been envisaged by Arthur Anderson & Co. (1976) when they suggested that a hierarchy of information providing users with the amount of information they need, would give only a partial solution to information overload brought about by expanded disclosure. It is important to guard against information overload when a classification system is developed. Rather, a classification framework that allows an accountant to classify a transaction through a sequence of steps, and thereby decrease information overload as a whole, may very well result in a more useful classification of accounting information.

In the following section knowledge creation through classification, i.e. the transformation of data into knowledge as articulated by Kwasnik (1999) is discussed.

2.7.2 Knowledge creation and classification

Knowledge representation and knowledge discovery are based on classification. The process of classification is approached from different sides and classification systems are constructed in different ways. Each type of classification process has its own unique goals and each classification system has its own unique structural properties, strengths and weaknesses (Kwasnik 1999:2). Classifications can be multifaceted or

straightforward, and they can convey much information or only a little (Kwasnik 1999:17). Ultimately, therefore, the classification process may be viewed as a knowledge creating process in accounting.

The following corollary is a direct result of the above discussions on classification:

Corollary 2.1: The process of classification tends to transform a pool of unstructured *data* into a collection of classes such that each class contains useful *information* rather than unstructured data. In essence, therefore, classification results in the creation of new knowledge.

Corollary 2.1 is stated in general terms. In Chapter 3, however, it will be instantiated for the case of accounting information.

2.7.3 Science and classification

The beginning of a scientific activity may be looked upon as the description of phenomena where, after grouping, classification and correlation occur (Simon 1978). Sokal (1974) argues that the purpose of a correct classification is to explain objects in such a manner that their "true" relationships are revealed. The primary objective of classification is to describe a structure in terms of attributes associated with objects and to display the relationships of the essential objects to each other. The purpose is also to express the relationships in easier terms to facilitate the making of general statements about classes and their objects. When developing a classification framework for accounting information, relevant relationships between members and also between classes and subclasses may be displayed to reduce the complexity of the resulting classification system.

2.7.3.1 Logic and classification

The word *logic* stems from Classical Greek "logos". Originally it meant *the word*, or *what is spoken,* but nowadays it means *thought* or *reason* (Wikipedia 2006). It is the study of criteria for the assessment of arguments. Being a formal science, logic investigates and classifies structures (of statements and arguments) through the use of formal systems of inferences. The notation used could be natural language (Ryan *et al.* 1992) or a formal mathematical notation (Hamilton 1991). A fundamental

principle of mathematical logic is that the establishment of classes may be unlimited when based on differences or different attributes (Mill 1862). This may lead to a very complex classification system and, although a classification framework for accounting information may need to take all relevant and known attributes of members into consideration when establishing classes and subclasses, care should be taken not to make the resulting classification too complex. To this end a sequential classification framework may help to cut down on the complexity of the resulting classification.

Copi and Cohen (1990) claim that giving a description of an item is the same process as classifying the item into a class. For example, "to describe a given animal as carnivorous is to classify it as a carnivore; to classify it as a reptile is to describe it as reptilian. To describe any object as having a certain attribute is to classify it as a member of the class of objects having that attribute" (Copi and Cohen 1990:449). However, there is a danger in the above gross equivalence between description and classification drawn by Copi and Cohen: a description of an item is necessarily unique; otherwise one item could not be distinguished from the next. Hence, if description equates to classification, it means that each and every resulting class has one element only, resulting in a situation which does not add any new knowledge to the system, i.e. it contradicts Corollary 2.1 above.

2.7.3.2 Quantum physics and classification

A fundamental law of Newtonian physics states that an object remains at rest or in motion unless an external force of sufficient magnitude works in on it, in which case its state of rest or motion may be altered. Therefore, a relationship exists between an object and a force working in on it. This first law of Newtonian physics still applies in quantum physics (Wheatley 1993). A similar relationship exists in accounting in the sense that a transaction (the external force of sufficient magnitude) may have a cause and an effect (e.g. selling a product for cash) on some accounting entities. It may also have a cause but no effect (e.g. selling a product on credit). In this case the external force has an insufficient magnitude to bring about change. Lastly a transaction may have neither a cause nor an effect, e.g. there is no party external to the company involved. An example is providing for depreciation on an asset.

2.7.4 Auditing and classification

Qualitative conditions that ought to be included where the certainty of one or more assertions cannot be determined can be divided into 1) express and 2) implied conditions. The express conditions are stated explicitly whereas implied conditions are those which are inferred by the classifications and arrangements of financial statements (Mautz and Sharaf 1961). It follows that where there is uncertainty concerning an assertion in the financial statements, the implied conditions may need to be clearly revealed by the classification framework for accounting information, possibly by providing information additional to the financial statements.

The following are some viewpoints from auditing based on classifications in the financial statements (Mautz and Sharaf 1961):

- *Current liabilities grouped together imply they share at least one characteristic.* When classifying *current* liabilities, they need to have at least one attribute that binds them together.
- *Contingent liabilities are classified in a footnote of the balance sheet, implying they have a different likelihood than other items which appear in the statement itself.* Those liabilities that are in conflict with others will not be included in the distributed union minus the conflicting requirements (refer Example 1.1). These conflicting requirements may need to be mentioned as additional information to the financial statements.
- *Expenses and revenues are classified in the income statement which implies that they have qualities that may or may not be articulated in their titles.* Classification of expenses and revenues may need to be revised to make sure that their qualities relate to their titles.

The way in which financial statements are presented, in other words, the way in which information is classified in the financial statements, may withhold useful information from users or mislead them, even though the data is reliable. The presentation of information in the financial statements is based on balance sheet classifications, the way in which unusual gains and losses are classified in the income statement, the disclosure of *contingent liabilities*, the valuation methods in the balance sheet and other similar matters (Mautz and Sharaf 1961). In order to supply

useful information to users of financial statements that does not mislead them, a classification framework for accounting information is needed. For example, currently Research and Development (R&D) expenses are written off in the year they are incurred. However, future benefits may be realised by an R&D exercise. Hence, users may be misled by current accounting practices relating to R&D.

2.8 The role of measurement, risk and uncertainty in classification

In this section issues pertaining to measurements are discussed. Consideration is also given to possible risks and uncertainties involving such measurements.

2.8.1 Measurements

Traditionally *measurement* is described as establishing a measure which yields a *numeric* value as the final answer. This view is echoed by Pressman (2005:466) as he claims that a measure provides "a quantitative indication of the extent, amount, dimension, capacity or size of some attribute of a product or process". However, an enhanced view of measurement is put forward by Riahi-Belkaoui (2004:42): "It is generally considered that accounting is a measurement as well as a communication discipline. By measurement is meant 'the assignment of numerals to objects or events according to rules'. The first step in accounting is to identify and select these objects, activities or events and their *attributes* that are deemed relevant to users before actual measurement takes place". This quote from Riahi-Belkaoui (2004) is significant since it implies that there is an initial step prior to taking any measurement (e.g. the identification of attributes). This idea of a "prior measurement" is taken further in Chapter 3.

2.8.2 Risks

The *risk* involved in the process of discovering measures which have many different attributes is that, unavoidably, the measure will have to satisfy aims that are contradictory (Pressman 2005). This problem is rather similar to the problem of having to decide among contradictory requirements from stakeholders in the process of establishing a classification. In accounting, measures with many characteristics may also be faced with the challenge of attempting to satisfy conflicting measurement needs. An example occurs in the classification of *current/non-current* items when items are grouped together but they are measured differently, for

example, inventory is presented at historical cost, and debtors at cost plus unrealised profit.

2.8.3 Uncertainty

The issue of *uncertainty* is often approached from the well-known uncertainty principle stated by Heisenberg (Wheatley 1993). Heisenberg's *Uncertainty Principle* from Physics states that an observer can measure and get a fix on the *position* of a particle (e.g. an electron in the electron cloud surrounding the nucleus of an atom), or can get a measure of the momentum and thereby observe the *wave* of the same particle, but both these attributes cannot be measured simultaneously (Wheatley 1993). Therefore, any system which displays an analogy with the principles of position and momentum in quantum physics, e.g. a system in which measurement and observation are at stake may very well be influenced by the same uncertainty principle.

Classifying objects into classes necessarily brings about some uncertainty as to the demarcation of the partitions (i.e. classes). This problem is articulated by Reznik and Pham (2001:972) when they write: "Uncertainty is the main challenge for the fusion of a variety of information, both in how to reduce the degree of uncertainty and in how to describe the uncertainty that inevitably remains. The problem of estimating uncertainty (or reliability, imperfectness, impreciseness) of the information source and uncertainty of the information after its propagation and fusion with other information streams has become very important for decision-making in different IT and engineering applications, especially in system design". In the accounting arena, therefore, it follows that two different accountants may indeed produce two different classifications of accounting information even if they have to classify the information for the same purpose, e.g. decision usefulness. As before, the only viable option in the case of such disagreement appears to be the removal of conflicting requirements from a distributed union of all requirements as illustrated in Example 1.1.

2.9 Summary and conclusion

In this chapter some classification perspectives from a general point of view were addressed. As a process of the mind, classification is located in the right hemisphere of the brain where the grouping of items takes place. The historical origin of

classification has its roots in the works of the Greek philosopher Aristotle (382 to 322 BC) whose classification system was based on nature. Classification is defined as the process of placing items with similar attributes and relationships in the same class. Items that are placed in the same class may still have fundamental differences, according to which they may be further defined, i.e. a specialisation of the class into various subclasses. A discussion based on the concepts of classification was divided into the purpose of classification and the properties of a generic classification.

The role of relationships in classification was also discussed. Relationships that exist among classes stem from the attributes of objects that belong to a class. It was found that concepts should be formulated to specify identifiable characteristics or phenomena. Classification and change are interrelated; when the one changes the other will follow and has to be adjusted. Multi-disciplinary research has shed some light on classification in general. Uncertainty coupled with subsequent risks may affect classification and the information portrayed in the classification.

A final, important conclusion of this chapter is that classification is often performed to create knowledge and thereby transform an unstructured collection of data into a number of structured classes, each class containing useful information. This idea is captured in Corollary 2.1.

While the current chapter addressed a number of generic issues in classification, the next chapter addresses a specialisation area of classification, namely, the classification of accounting information, which is the topic of this thesis.

CHAPTER 3 ACCOUNTING CLASSIFICATION PERSPECTIVES

3.1 Introduction

In the previous chapter the utility of classification to create knowledge and promote the communication of relevant information in the physical and social sciences was motivated. In this chapter the research reported on in Chapter 2 is instantiated to accounting and the role of classification in accounting is investigated. Investors and other users of financial statements need interpretable summaries of financial information that can be understood and analysed for decision-making purposes. These summaries are compiled through the classification of the resources and commitments of a company into suitable categories (Hendriksen and van Breda 1992). It follows that the classification of accounting information is an important activity to aid in submitting useful financial information to all stakeholders of a company to enable stakeholders to make informed decisions.

3.1.1 Goal of this chapter

The goal of this chapter is to focus on the perspectives of a classification framework for accounting information. The steps for classifying accounting information are introduced and the role of measurement prior to the classification of accounting information is highlighted. Some pointers for developing a framework for the classification of accounting information are presented.

3.1.2 Layout of this chapter

The layout of this chapter is as follows: a discussion of the moral obligations of accounting appears in Section 3.2 and a brief history of classification in accounting is presented in Section 3.3. The role of uncertainty that surrounds the financial statements and its effect on users are discussed in Section 3.4. In Section 3.5 classification is defined from an accounting perspective, followed by the properties of a classification framework for accounting information in Section 3.6. Some of the building blocks of classification, namely, relationships and the role of change are the subject of Section 3.7. An explanation of the process of classification, particularly the steps in the classification of accounting information, is given in Section 3.8. This is followed by a discussion of measurement and its relationship to

classification in Section 3.9. The information intersection between users of financial statements, compilers thereof and standard setters is covered in Section 3.10, and is followed by an analysis of the diverse needs of different users of financial statements in Section 3.11. Lastly, a discussion of multiple frameworks versus a generic framework is given in Section 3.12. A summary concludes the chapter.

The layout of this chapter is depicted in Figure 3.1.

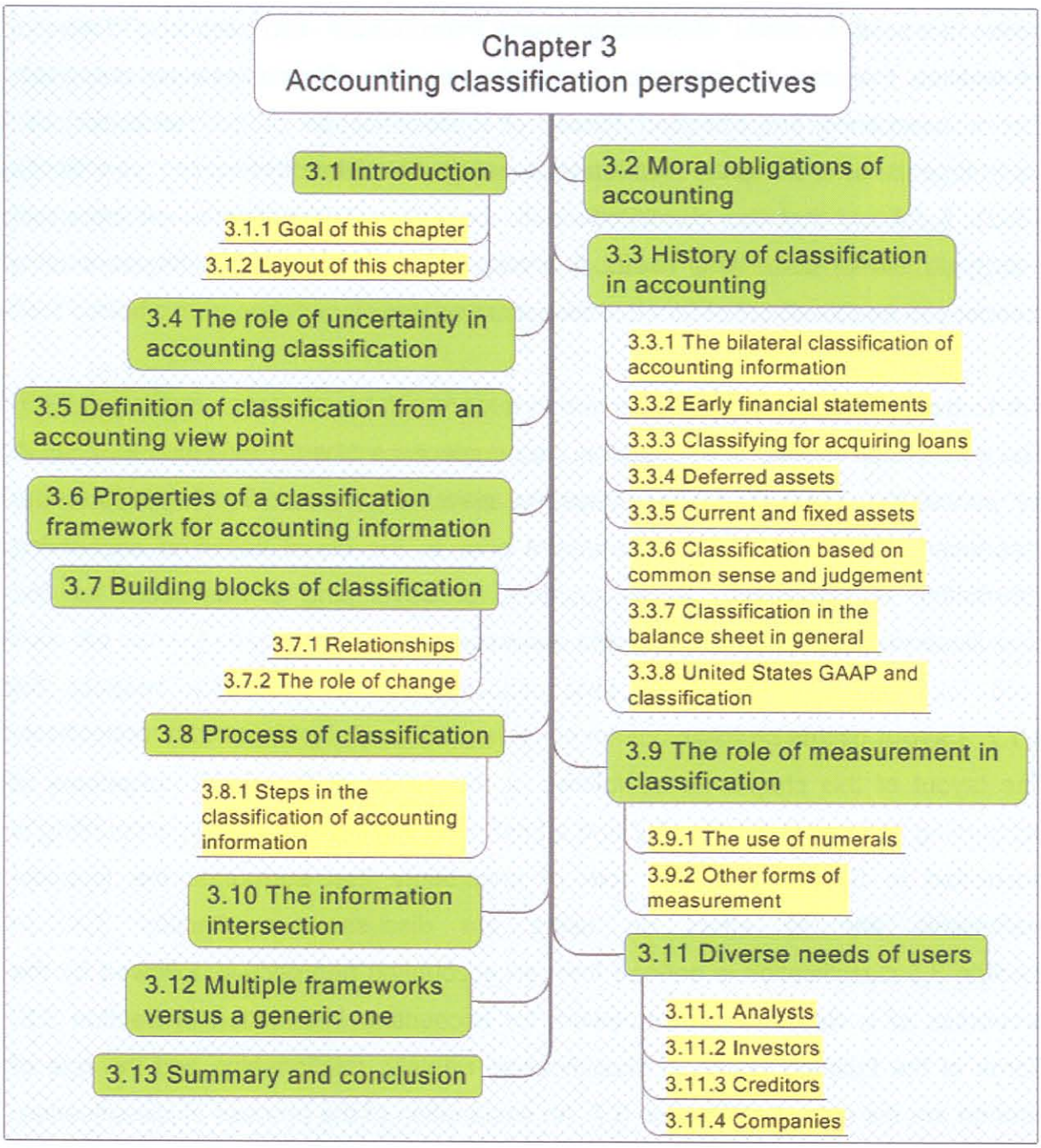


Figure 3.1 A visual representation of the layout of Chapter 3

3.2 Moral obligations of accounting

Accountants deliver a social service to society through direct classification and analytical reclassification of the facts of transactions. "Obviously a moral obligation rests on accounting to produce figures and reports that will avoid deception as much as possible. The principles of accounting and auditing are directed toward that end" (Littleton 1958:14-15). Users who are not directly in contact with the business must rely on indirect trustworthy information supplied by management and accountants about the business in order to understand the business. There is a moral obligation that rests on accounting and those who practice it to supply information in terms of figures (i.e. numeric values) and reports that are not deceptive, i.e. the classification system in use has to produce useful and reliable information.

Riahi-Belkaoui (2004) states that conventional financial accounting bases the effect of a transaction simply on the interaction between two or more entities and practically ignores exchanges between a company and its social environment. If social effects are not taken into account, but only a measurement of economic consequences, such as when cause-effect relationships are evaluated, the measurement is inadequate (Mobley 1970). Society is part of a structure, imposed by the technology of an economic system, which influences the economic activities of society and its social relationships and welfare. A classification framework that is useful and accurately portrays accounting information fulfils an important moral duty to any society that uses such information.

3.3 History of classification in accounting

According to De Roover (1938), the classification of a transaction started as a single entry in a book. The single entry consisted only of the name(s) of the person(s) involved in the transaction. Later, all transactions relating to one person were grouped together. The next step in classification was the division of the books into accounts receivable and accounts payable. If the space left for debits or credits was too small, debits and credits ran into each other. Therefore, a subsequent step was to keep debits in the front of the ledger and credits at the back. In 1277 a company of Sienese merchants kept six or seven books, e.g. a ledger, a cash book, a book of capitals, etc (De Roover 1938).

Later on a bilateral classification system, which proved to be very useful to early bankers, was developed. Loans and their respective repayments were written in the front of the book. Loans were written on the left-hand page of the book while their respective repayments were written on the right-hand page of the same book. Therefore, oppositeness was clearly distinguished or classified. All deposits were written at the back of the book. This all happened before the double-entry system was developed (Littleton and Zimmerman 1962). During the 15th century, the use of double-entry bookkeeping spread rapidly and led to improved methods of classification (De Roover 1938). Some books in the accounting process were discarded, thereby simplifying the classification process. Note, however, that care must be taken not to oversimplify the classification of accounting information, a process which may be complex in nature.

According to Yamey (1964) the double-entry system only provides a framework for the classification (ordering) of data. It does not provide guidelines of the range of data to be grouped (classified) or how data should be re-ordered. The purpose of a classification framework for accounting information ought to guide the classifier of such data step by step to enable correct classification.

3.3.1 The bilateral classification of accounting information

Before the bilateral classification category was used, a description of what took place was written in the ledger. The technical terms, debit and credit, or oppositeness, were used for opposite sides of an account (Littleton and Zimmerman 1962). The debits and credits were probably two of the first opposites in accounting. Nowadays there are many, as shown in Table 7.3 of Chapter 7. Classifying a transaction as a debit or a credit is normally the very first step in the classification of accounting data.

When classifying transactions or events the fundamental accounting equation 3.1

$$\text{Assets} = \text{Liabilities} + \text{Owner's equity} \qquad (3.1)$$

which defines the classificational position of a company, is maintained through double-entry accounting. Naturally debits and credits portray two different disjoint classes (Stickney, Brown and Wahlen 2004; Riahi-Belkaoui 2004). The bilateral

classification or double-entry system, as it is known, is needed to capture change in the financial statements.

Next an account of certain items as presented in the literature on the history of accounting is given, based on the development of a classification framework for accounting information.

3.3.2 Early financial statements

Recent research revealed the oldest known classified balance sheet dated May 1, 1782 from the English East India Company. This financial statement predates the model balance sheet as prescribed by the Companies Act of 1856 (Baladouni 1990). Baladouni reports that at a stockholders' meeting in 1782, a committee appointed by them realised that an unclassified balance sheet did not provide useful information to the users, and even misled them. The Committee subsequently decided to develop a classified balance sheet for their company.

Table 3.1 shows some of the early classification groups from the English East India Company (Baladouni 1990):

Table 3.1 Early classification groups

Classification	Explanation
Effective property	Most productive "quick stock" Cash or what is readily convertible to cash Short-term and long-term
Floating property	Merchandise in transit Could not readily be converted into cash Subject to risks (piracy) and uncertainties
Dubious property	Credits outstanding – rents due Doubtful credits – hospital expenses, expedition to Manilla and subsistence Variety of articles – might occasionally be sold to European or native inhabitants
Dead stock	East-India House, warehouses, fortifications, other buildings, ships, sloops and vessels
A note on the stockholder's equity	Stockholder's investment previously stated as a liability, now included in balancing figure Distinction between creditors and stockholders made clearer

Adapted from Baladouni (1990)

The difference between effective and floating property in the above column on classification is based on cash and whether the property is readily convertible into cash or not. Therefore, since their characteristics differ, their respective classifications ought to differ as well. Any proposed classification framework for accounting information may benefit by taking note of the groupings in these early classification systems.

Fitzgerald (1938a:250) reports that, during the early years of accounting, some accounting "services" started to print statements in a standard form. These standard forms were in essence templates that had to be filled in, hence they did not allow for exceptions or deviations in the format. Fitzgerald (1938a) also writes that accountants who later examined and commented on these standardised statements were well aware of the vastly incorrect results portrayed. The problem of a classification reflecting incorrect results in financial statements certainly reveals a serious shortcoming in the classification system used in the early 20th century. It is plausible that such shortcomings may still hold true currently, i.e. the early 21st century. Although modern accountants do not use standardised printed income statements and balance sheets any more, they do use a prescribed format and sometimes need to force an item into a category because of the lack of a more suitable category.

3.3.3 Classifying for acquiring loans

According to Esquerre (1927), the companies of his era prepared their balance sheets on the assumption that these would be used for the acquisition of a loan from a bank. Because of the belief during the 1920s that banks focus on the security of liquid assets, the efforts to compile financial statements were based on this assumption. Hector (1962) agrees with Esquerre (1927), and furthermore came to the conclusion that accounting principles were further developed and influenced by these beliefs. Huizingh (1967) wrote that financial records during this period were prepared for management, particularly in order to facilitate decision-making about short-term financing in the banking industry.

3.3.4 Deferred assets

Brewster (1924) introduced time into the accounting classification debate. He proposed the description of *deferred assets*, to be viewed as specific payments made which result in a future benefit or specific prepaid fixed charges, for instance taxes, interest and insurance premiums. Schroeder *et al.* (2005) argues that prepaid expenses do not represent *current assets* because they will not be converted into cash, but would rather require the use of *current assets*. The use of the term *deferred assets* may be a way to help alleviate the problem of the *current/non-current asset* classification by using it as a different category in financial statements.

3.3.5 Current and fixed assets

According to Foulke (1961), a survey conducted when companies started to use the *current assets* and *current liabilities* classification revealed the following:

Table 3.2 The start of the *current/non-current* classification

Company	Year
Haskins & Sells	1898
Pogson, Peloubet & Co.	1905
Peat, Marwick, Mitchel & Co.	1906
Niles and Niles	1907
Leslie, Banks & Company	1910
F. W. Lafrentz & Co.	Before 1914

Foulke (1961:189)

The use of the *current/non-current* classification, according to Foulke (1961), dates back as far as 1898. In the almost 20 years from 1898 to 1914, this classification became an established practice and is currently still in use, even though it is rather dated. Owing to the age of this practice, the utility of this classification in modern times may have to be evaluated.

Liquidity largely dominated classification issues early in the 1900s (Heath 1978). Assets that would normally be converted into cash within a year after the financial year-end were classified as *current*, while those assets that could possibly be converted after one year would be classified as non-*current*. According to Huizingh

(1967), the classification of assets by 1920 was based principally on their relative liquidity, i.e. the ability to be converted into cash in the short term.

The liquidity classification was not developed by an official group and then embraced by the majority of accountants; rather it evolved slowly (Heath 1978). During the 1920s, various methods were used to describe categories for assets. The term *quick assets* was introduced as a synonym for *current assets* and represented cash, receivables and marketable securities. In other circumstances, *current assets* were called *circulating, liquid and floating assets* according to Heath (1978). Assets were also classified into the categories fixed, *current* and deferred.

Up to the beginning of 1930, the notion of *current assets* and working capital had been the subject of many modifications. Huizingh (1967) writes that reporting practice varied in the early 1930s, for example, the way the make-up of asset groups was presented differed from one financial report to the next. Emphasis was placed on the following (Huizingh 1967:93):

- *Liquidity and circulation:* Classification according to the liquidity and circulation of assets and liabilities is still in use today.
- *Continuity and liquidation:* Classifying operations in the income statement as continuing and discontinued operations is still used in practice. Any proposed classification framework for accounting information should preserve this property of the income statement.
- *Costs and realisable values:* Valuation methods of inventory are part of the classification system used to classify inventory as *current*.

Herrick (1944:51) researched the practice of classifying items as *current assets* and *current liabilities*. His main criticism of this classification was based on the one-year-rule, which he found to be "arbitrary" and "inflexible". Herrick's research was used in the Accounting Research Bulletin (ARB) no. 30, issued in 1947 (Heath 1978), as the only comprehensive pronouncement on *current/non-current* balance sheet classification ever issued by an authoritative body in the United States of America (USA). One of the recommendations of ARB no. 30 was that prepaid expenses be treated as *current assets*. This was criticised by many although it was "unanimously

adopted by the twenty-one distinguished members of the committee" (Editor 1948:273). This classification has been accepted over the years, but Heath (1978) reports that the bulletin has not been successful.

The *one-year rule* is a rule in terms of which a distinction is made between an item classified as *current* or *non-current* according to ARB 43 (Wolk *et al.* 2004). According to the one-year rule, a *current* item will realise within one year while a non-*current* item will realise only after 12 months. If, for example, a debtor is classified as a *current asset* it is because the debtor will pay before the end of the year following the financial year-end. Herrick (1954) criticised the *current/non-current* classification mainly because of this *one-year rule*. This rule originated during a time when the business conducted in a particular year was looked upon as being independent of the previous year as well as the following year. He argued that the *one-year rule* was not applied consistently, since the period of inventory frequently exceeds one year, but the whole amount is included in the statements as *current*, i.e. the business of a particular year in fact depends on that of the previous or following year. Kam (1990:70) also states that the *one-year rule* "provokes numerous questions". Operating cycles of companies vary in length and this phenomenon brings the *one-year rule* into discredit.

3.3.6 Classification based on common sense and judgement

During the industrial revolution classification was a relatively simple problem. Grady (1948) writes that common sense and business judgement were used to solve the problems of how to distinguish between capital, expense and income realisation. Accounting is now associated with the recording of transactions and the practising of judgement on how to deal with diminished items. Naturally the use of careful judgement to deliver useful information should still be exercised when recording or classifying transactions. Throughout this thesis the terms income and revenue; as well as cost and expense are used intermittently as the terms are used in the time period they were discussed.

3.3.7 Classification in the balance sheet in general

Although Heath (1978) claims that balance sheet classification started much earlier in the USA than in the United Kingdom (UK), owing to differences in accounting and

auditing practices, the use of balance sheet classification prior to 1900 in the USA was limited in statements. Treatment of this topic was also somewhat absent from textbooks during this period. During the first two decades of the 20th century, the grouping of assets into categories based on common attributes came very close to being adopted as a *universally accepted reporting technique* (Huizingh 1967:46). In present practice assets are still grouped into categories based on their common attributes, but the groups may not have been adjusted to accommodate new types of assets with other attributes, for example, deferred taxation.

This ends the introduction to the history of classification in accounting and some criticisms of early classification systems. In the remainder of this chapter a closer look at some definitions of classification in the accounting context are taken and existing problems in the classification of accounting information are considered. First on the list is a discussion of the disadvantages of having uncertainty in financial statements.

3.3.8 United states GAAP and classification

The following developments in the US GAAP had an influence on classification (Zeff 2003):

- 1940: The Paton and Littleton Monograph popularised the matching principle which stipulates the classification of costs and revenues, as well as the classification of assets and liabilities.
- 1947: ARB32 favours the classification of *unusual* and *extraordinary* items after net income. Note that the use of extraordinary items has been discontinued by standard setters and therefore not addressed in the final proposed framework of the income statement in this thesis.
- 1964: Opinion 5 established criteria for the capitalisation of financing leases by lessees.
- 1966: Opinion 8 established that pension liabilities during the period of service of an employee should be classified in the balance sheet.
- 1973: The Trueblood Committee advocates the *decision usefulness* approach which may have an effect on the classification of accounting information.

- 1974/75: Statement of Financial Accounting Standards (SFAS) 2 on accounting for Research and Development costs was issued.
- 1975: SFAS 12 was issued on the accounting for marketable securities.
- 1990: SFAS 106 was issued on the accounting for post-retirement health care costs as a liability.
- 1993: SFAS 115 was issued on accounting for investments in certain equity and debt securities.
- 1995: SFAS 123 was issued on accounting for employee share options.
- 1997: SFAS 130 was issued on disclosing gains and losses not yet recognised in the statement of comprehensive income.
- 2002: SFAS 142 was issued on accounting for goodwill and other intangibles.
- 2004: FASB issued an exposure draft on share-based payments.

3.4 The role of uncertainty in accounting classification

Financial reporting should minimise uncertainty in statements and ought to present high-quality information to users to allow for the making of sound decisions. There is a chain reaction when financial statements are surrounded by uncertainty. Miller and Bahnson (2002) provide the following deductions in this regard:

1. More complete information supplied in financial statements will lead to less uncertainty.
2. Less uncertainty will reduce the risk for users of financial statements.
3. Reduced risk results in users that are satisfied with a lower Rate of Return (RoR).
4. A lower RoR for users means lower cost of capital for the company and higher share prices.

Objective no. 7 of the Trueblood Committee Report (Trueblood 2004:173) proposes that "assets and liabilities should be grouped or segregated by the relative uncertainty of the amount and timing of prospective realization or liquidation". Although the Trueblood Committee set their objectives in 1971, presently uncertainty about information portrayed in the financial statements may still remain. Assets and liabilities are recorded as a debit or credit at a specific date. Assuming that the

uncertainty surrounding the amount and time of realisation is based on how far the item is from cash, then, as a result, uncertainty may decrease as the time of realisation draws nearer. Therefore, assets and liabilities may be classified according to probabilities based on the uncertainty surrounding the amount and time of realisation.

The Trueblood Committee (Trueblood 2004:172) suggests in objective no. 3 that one of the purposes of financial statements is to "provide information useful to investors and creditors for predicting, comparing, and evaluating potential cash flows to them in terms of amount, timing, and related uncertainty". If one assumes that better quality information leads to more accurate predictions, it is imperative that users need access to high quality information. Since prediction is a future activity and comparing is a past activity, information could be classified according to time frames. Hence, the classification of cash flows, revealing the amount, timing and related uncertainty, may lead to better quality information being provided to users.

From the above reasoning and the extracts of the Trueblood report it follows that uncertainty may be reduced through the use of a good quality classification framework for accounting information. In the long run companies may benefit in the form of lower costs and higher stock prices (Miller and Bahnson 2002).

In the next section some definitions of the classification of accounting information are considered.

3.5 Definition of classification from an accounting view point

Littleton (1958) and Dye (2002) both agree that a fundamental purpose of accounting is to classify the financial facts of a company into groups or categories with the implicit assumption that the criteria for establishing such groups should be determined beforehand. This specialised view of accounting classification agrees with the generic description of classification in Section 2.4 of Chapter 2, namely, that generic classification is the process of "arranging into groups" (Hornby 1981:152).

An extended definition of accounting classification is given by the National Association of Accountants (NAA 1959) as the process of placing items with the

same characteristics and relationships in the same classes. The NAA (1959) definition may be seen as an extension of the above definitions in the sense that relationships between items are brought into the picture. Relationships are ubiquitous in accounting and play a vital role in the classification of accounting information as these may lead to the creation of new knowledge.

Fox (1992) views accounting classification as the process of separating information into entities (i.e. classes). Each entity may be looked upon as an aggregation of a number of attributes having various values to allow for an unambiguous recording of information. For example, the entity assets could be the aggregation of the attributes *core, current, restricted* and *entry*. If the attributes of each entity are clearly laid out, transactions may be classified to supply useful information.

It is evident from the above historical discussion that the classification of accounting information is a very old problem, hence many of the references used in this thesis are dated. Some references, however, are much newer and this provides further justification of the claim that the classification of accounting information is due for a revision. Many of the problems which were identified with classification in earlier decades have still not been addressed.

3.6 Properties of a classification framework for accounting information

The properties and guidelines proposed by Nobes and Parker (2002) in Section 2.5.2 of Chapter 2 are for a generic classification system and can be augmented by requirements specific to the classification of accounting information. In this regard Fitzgerald (1938a:252-254) suggests the following properties inherent to classification in accounting:

1. "*The form in which the final financial statements and operating systems are to be prepared should govern and determine the classification*". Fitzgerald (1938a) effectively calls for a bottom-up approach to classification in his quote. This means that an accountant should start with the leaves of a static tree structure (an example of such a structure is given in Appendix I) and then attempt to fit a transaction into the structure by moving up the tree, level by level. However, in this thesis the author argues that one should follow more of a top-down

approach in the sense that the accountant still starts with a transaction but rather determines the attributes of the transaction. Once the attributes of a transaction known at the time of recording have been identified, the transaction is placed into a class as determined by its attributes. As time passes, more attributes may be revealed with regards to the transaction and a reclassification at the time of reporting may be warranted. For example, a transaction originally classified as a cost at the time of recording may be reclassified as a deferred asset at the time of reporting, based on new attributes which indicate that future benefits will be derived from the initial cash outlay. A top-down process of classification is developed in the rest of this thesis.

2. "*The classification should be exhaustive and the groups and items in the classification should be mutually exclusive*". This quote agrees with point 3 in the Nobes and Parker (2002) guidelines presented in Section 2.5.2. Groups and items in the resulting classification should form a partition, i.e. any two classes should have an empty intersection and each and every item should belong to a class. Accounting, however, has some hybrids (e.g. deferred taxation) as a result of new kinds of transactions that cannot fit into the definitions currently in use. Nevertheless, accounting evolves continuously and definitions should change accordingly to keep up with new kinds of transactions. Identification and classification in accounting should, therefore, not be static, but part of an ongoing process.
3. "*The classification should be flexible*". The classification should be adaptable with a view to future developments. For example, the process of placing a new kind of transaction into a class should be facilitated by the structure. Again this ties up with point 2 in Section 2.5.2, namely, that a sufficient number of subsets should be available to exhaust a given universe.
4. "*The grouping of the balance sheet accounts should clearly distinguish between the various classes of assets and liabilities*". The different assets and liabilities in the balance sheet should be clearly separated into groups. Current accounting practice already adheres in part to this principle. Assets and liabilities are currently divided into *current* and *non-current* groups. This classification is part of much debate (refer Section 4.3.1.1) as certain items, for instance deferred taxation, do not fit into any one of these classes entirely and assets and liabilities which may have deferred effects are not classified

separately. It therefore follows that a clearer segregation of assets and liabilities into groups may be needed.

5. "*The grouping of revenue accounts should correspond with the organisation structure*". Revenue accounts may be divided into 1) capital profits and 2) income. The statutes of companies give an indication of the core business of a company, therefore, revenue can be divided into core and non-core accounts. For example, a financing company may classify interest received as core revenue based on their statutes while another company may be required to classify their interest received as non-core earnings. Hence, this property may not be universally applicable among all companies since company structures differ from one company to the next.
6. "*The subdivision of revenue account groups should be governed by the needs of management for information as a means of control*". Since management's needs may differ from one company to the next, different classifications of revenue would be in force in different companies. Note, however, that the subdivision of revenue is a classification issue internal to the company and is not seen by users who are external to the company. Hence a different classification is used for the representation of information to external stakeholders.
7. "*Though the needs of management are the prime consideration, the classification of revenue accounts should be so arranged as to facilitate preparation of returns required for taxation or other governmental purposes*". Revenue accounts should be structured and subdivided so as to facilitate the various requests from government with regards to taxation and other returns. Note how this requirement may conflict with the previous one since management and government may require different hierarchical subdivisions. Because of this difference, currently an additional income statement and balance sheet are often drawn up for the specific purpose of taxation legislation. The current requirement refers to different classifications for different uses, which may be difficult to achieve in view of the diverse needs of users. In this thesis a distributed union of all the requirements of users minus any contradictory requirements is proposed to solve part of the problem (refer Example 1.1). In the beginning stages of the *current/non-current* classification,

mainly the views and requirements of bankers were acknowledged (Heath 1978), which might not have satisfied the needs of other users.

8. *"Wherever possible, the classification of costs and expenses should distinguish between fixed charges and variable costs"*. In cost accounting there are various ways in which costs may be classified, for example, prevention costs, assessment costs, internal failure costs and external failure costs, to name but a few. The classification of costs, however, is based on the costing preferences of a company and may therefore differ from company to company. The phrase "different costs for different purposes" is an example of "different classifications for different purposes".
9. *"Each account in the classification should be given a title which is adequately descriptive of its purpose and of the character of the information which it contains"*. Account names should be sufficiently descriptive to adequately convey the content, attributes and purpose thereof. These descriptive account names should aid the capture clerk of a company to classify the transactions correctly. This guideline corresponds with an important HCI (Human Computer Interaction) guideline put forward by Dix, Finlay, Abowd, and Beale (1998) under the label *Consistency and standards*:

> Users [capture clerk] should not have to wonder whether different words, situations or actions mean the same thing. Follow platform [established accounting] conventions.

An application of the above Fitzgerald (1938a) guidelines, except for guideline 1 (since it proposes a bottom-up approach while a top-down approach is proposed in this thesis) could result in a useful classification framework for *accounting* information. Resolving possible contradictions where members could belong to more than one subset (guideline 2 above) may effectively address the problem of accounting hybrids, e.g. deferred taxation.

The following section contains a discussion of the building blocks of classification.

3.7 Building blocks of classification

Two conceptual building blocks are discussed, namely, relationships and the role of change.

3.7.1 Relationships

When classification takes place, some relationships are hidden at least initially, while others are highlighted. This may lead to the furthering of some objectives at the expense of others. Although classification has this down side, the classification of assets and liabilities is necessary to enable meaningful financial reporting (Hendriksen and van Breda 1992). According to ASOBAT (A Statement of Basic Accounting Theory) (Wolk *et al.* 2004: 169) one of the guidelines for the communication of accounting information is the disclosure of significant relationships. ASOBAT also emphasise that through aggregation of data useful information may be hidden in the summarised figures in the financial statements and, therefore, recommends that the significant relationships should be disclosed. Hence, to classify information meaningfully, all relevant relationships need to be taken into account.

Interrelationships and classification are both very significant terms in accounting (Littleton 1958). Accounting has four major account groups namely, liabilities (including equity), assets, expenses and revenues (income), whose interrelationships can be traced back to early Italian accounting. These four account groups may be seen as the "nucleus of accounting" (Littleton and Zimmerman 1962:43). These groups are related even before a transaction takes place, owing to the interrelationship of managerial decisions and economic actions that flow forward (into the future) from these decisions. Any accounting classification system addressing these interrelationships should, therefore, address temporal (i.e. past, present and future) considerations. The classification of transactions into accounting groups may influence managerial decisions as well as economic actions and vice versa.

Figure 3.2 synthesises a natural language discussion by Littleton and Zimmerman (1962) of the interrelationships between account groups.

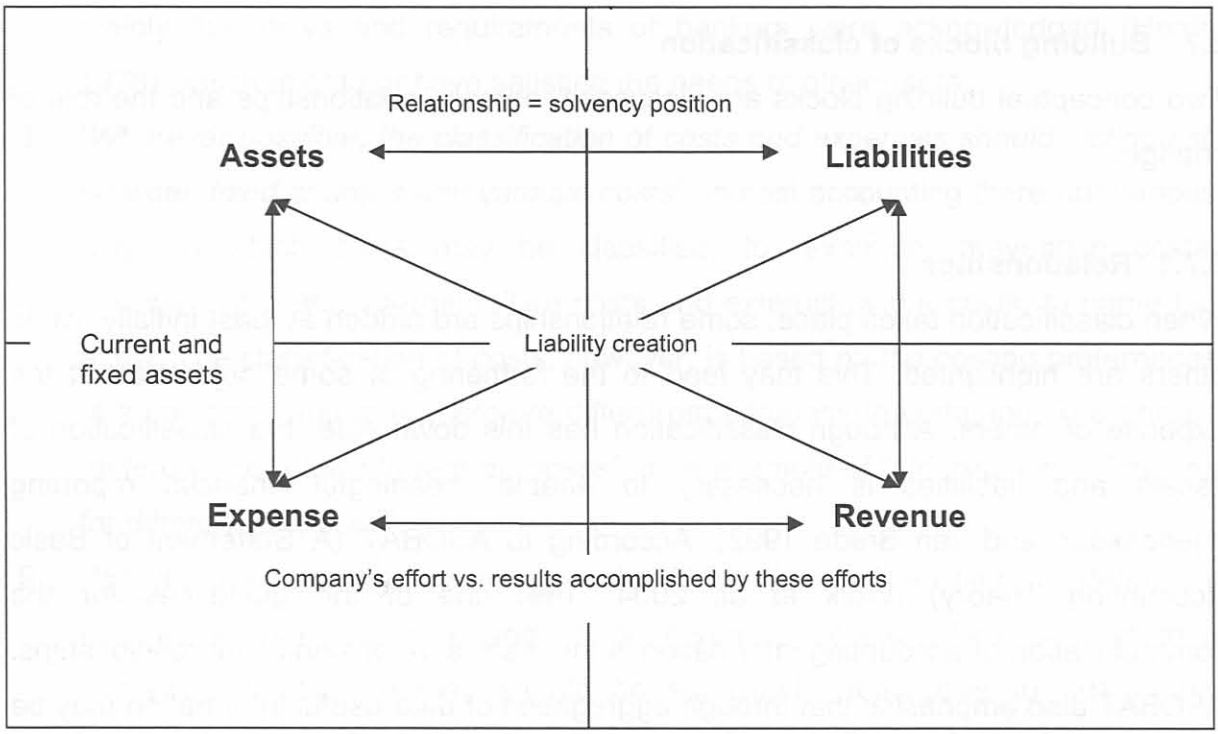


Figure 3.2 Account groups and relationships (Adapted from Littleton and Zimmerman (1962))

In line with Corollary 2.1, interrelationships between account categories create knowledge, as supported by Littleton and Zimmerman (1962:45) when they claim that "records merely provide data. Accounting makes its major contribution through logical interrelationships among account categories". Hence drawing interrelations between two or more data objects adds new knowledge since it changes data into information. Therefore, classifying accounting data into categories using understandable interrelationships is essential for the interpretation of accounting information portrayed in financial statements.

Following on the discussion in this subsection, Corollary 2.1 in subsection 2.7.2 may be instantiated for accounting as follows:

Corollary 3.1: The process of classification for accounting information transforms a pool of unstructured accounting *data* into a collection of classes and subclasses such that each class contains useful accounting *information* rather than unstructured data. In essence, therefore, classification results in the creation of new accounting knowledge.

3.7.2 The role of change

Change has an influence on accounting information and the usefulness of the financial statements portraying accounting information. Lev and Zarowin (2003:494) state that "the increasing rate of change experienced by business enterprises, coupled with biased and delayed recognition of change by the accounting system, is a major reason for the documented decline in the usefulness of financial information". According to Lev and Zarowin (2003), R&D is often the primary driving force behind change in companies as it leads to the creation of new products and improved manufacturing processes. Naturally, changes in terminology and accompanying systems also take place as a result of R&D. As change takes place, the classification framework for accounting information may need to keep up with this change in order to report useful information.

Increased competition and rapid changes in technology lead to changes in the information needs of stakeholders. Companies have to adapt their information systems and the types of information they use to manage their company (AICPA 1994). There is an increasing risk that financial reporting may lag behind when changes take place very rapidly, resulting in a failure to provide the relevant information that users need to make informed decisions. The AICPA committee makes a clear statement about this threat: "Today, more than ever, business reporting must keep up with the changing needs of users or it will lose its relevance" (AICPA 1994:2). It is, therefore, important to stay in touch with the needs of users when standard setters develop new standards for the reporting of financial information, and these needs should be taken into account when a classification framework for accounting information is developed.

3.8 Process of classification

Classification in accounting may be viewed ultimately as the efficient filling of pigeonholes (i.e. accounts). Double-entry came into existence when it was noticed that something could not be taken out of one account without moving it to another account (De Roover 1938). Since the inception of double-entry bookkeeping, the classification of quantitative data has been a fundamental aspect of bookkeeping in practice (Huizingh 1967; De Roover 1938). According to Most (1982), early writers on accounting tried a logical order to classify ledger accounts. Goldberg (2001) wrote

much about the accounting classification process, and currently classification is practised in the workplace mainly as the sorting of items for recording in the ledger and subsequent reporting in the financial statements.

In the following subsections a number of high-level procedures to establish a classification framework for accounting information are examined and an algorithm is defined on the strength of these procedures. An initial version of the algorithm is developed first and is refined thereafter.

3.8.1 Steps in the classification of accounting information

In accounting, classification starts as soon as a transaction or an event takes place. In the final analysis accounts are categories into which similar data is grouped together and is also the mechanism through which dissimilar data is separated meaningfully. Furthermore, the classification of a transaction or event as a debit or credit reflects the bilateral character of classification (Littleton and Zimmerman 1962). Normally after the first classification phase of a transaction (i.e. at recording), further classification phases take place, culminating in the final classification as depicted in the Corporate Annual Reports of the company (i.e. reporting).

The above discussion seems to suggest that the first step in the classification of an accounting event (e.g. a transaction) is to determine the account to be used at recording. However, in this thesis it is argued that, instead, the identification of the known attributes of a transaction at the time of recording ought to be the first step, whereafter the transaction is classified as an asset, or a liability, etc., and reclassified as time and attributes change. But, implicitly, the classification exercise also determines the general ledger account(s) into which the transaction will be recorded. For example, a transaction may be classified as a cost in the financial statements, while the actual general ledger account used could be Water and Electricity.

Goldberg (2001) claims that classification is achieved through the recognition of common characteristics (i.e. attributes) and this activity, performed almost automatically by all living beings, becomes faster with continued practice. The characteristics of individual members can be tested through observation and measurement for compliance with criteria for possible inclusion into a class. These

claims seem to suggest that classification is a somewhat subjective activity since it is dependent on the interpretations of an observer (the accountant). Observation and measurement may, therefore, be key elements in the development of a classification framework for accounting information.

When developing a classification framework, the researcher first needs to become familiar with the present-day practice. According to Kaplan (1986), the classification is then based on what appears to be the significant proportions of the phenomena researched. Further methodical observation should follow and the classification framework should guide the researcher as to what to observe and how to categorise the necessary observations. Observation plays an essential part in the development of a classification framework for accounting information. In this regard the identification of attributes is also subject to the interpretations of an observer.

The classification of accounting information may be performed as a sequence of steps. Goldberg (1964) proposes three basic steps to classify accounting information:

1. **Recording:** Collect and sort data into appropriate categories.
2. **Measurement:** Apply a common unit of measurement to the categories.
3. **Summation and comparison:** Group relevant data together.

In step 1 the classification of data into appropriate categories takes place at the beginning of the accounting cycle (i.e. recording of a transaction or event), and in step 2 it is recommended that a common unit is used to measure the items in a category. In step 3, with the summation of relevant data, classification takes place at the end of the accounting cycle (i.e. reporting).

Accounting has a certain underlying methodology. To this end Littleton and Zimmerman (1962) propose the following pattern of accounting methodology (note that a sequence of steps to classify accounting information may be inferred from this methodology):

1. **Recording** of transactions.
2. **Establishing** of procedures to group transactions into account categories.
3. **Defining** of categories.
4. **Grouping** of transaction data into account categories.
5. **Establishing** of procedures for the grouping of account balances into interpretative summaries.

This view of an accounting methodology supports Goldberg's (1964) 3-step procedure above in the sense that the more elaborate steps 1, 2, 3 and 4 of Littleton and Zimmerman are captured in Goldberg's step 1. Goldberg includes measurement in step 2 of his algorithm, while both procedures prescribe the summation of information into financial reports.

From the definitions of classification in Section 2.4 and Section 3.5, the properties of a good classification proposed by Nobes and Parker (2002) in Section 2.5.2 and Fitzgerald (1938b) in Section 3.6, and the two procedures in this section by Goldberg (1964) and Littleton and Zimmerman (1962), the following algorithm is synthesised to partition members into classes:

Begin

1. Determine the purpose of the proposed classification, be it to group items with similar features together, or to adhere to requirements of social convenience and necessity
2. Identify the different attributes (characteristics) of the various elements or transactions under consideration and the relationships among the attributes
3. Identify relationships among possible classes
4. Partition the elements or transactions into different classes, adhering to the purpose of the classification system. Such partitioning should facilitate the

placement of new members not yet in the system as well as predicting the attributes of a current member based on its location in a particular class.

End

Algorithm 3.1 Classification of members into classes – preliminary version

Picking up on step 4 above, the criteria or attributes used to partition elements into classes should be communicated to all stakeholders, since if a user is under the wrong impression as to which set of criteria was used, the usefulness of the classification is reduced and may be misleading to stakeholders. In fact, "the communication of attributes to users is one of the principle functions of nearly all forms of classification" (Heath 1978:60-61). Hence attributes should be clearly communicated in any proposed classification framework for accounting information.

Goldberg's (2001) classification system manifests in accounting in the sense that accounting transactions (i.e. members) are added together or aggregated to classify them into accounts, and finally accounts are aggregated into financial statements. This points to a hidden danger often overlooked in classification: aggregation may result in the reduction of information on a detailed level to enable the creation of more useful information at a strategic or management level (Fox 1992). One may, therefore, lose information (Wheatley 1993) in the process of moving from transactions (considerable detail) to financial statements (less detail). However this abstraction away from detail should not be at the expense of any stakeholder of a company. It is plausible that the final structure of the classes depends on the definitions of individuals, since with another set of definitions a different structure may result. Nevertheless, in the final analysis Corollary 3.1 should be the guiding principle in moving between different levels of accounting detail.

An important sub-activity of classification is to partition a class into subclasses (Goldberg 1964; Chambers 1966; Goldberg 2001). Sub-classing is often driven by considering redefinitions of individual members, taking their attributes into account. Naturally, such definitions should be in line with generally accepted norms. For example, a generally accepted definition of a *current asset* is: "an asset which is expected to be realised within one year of balance sheet date, or during the normal operating cycle of the undertaking" (Cilliers, Mans, Grobbelaar, Stegmann, van

Schalkwyk and Wesson 2004:98). Note how this definition first of all calls for the incorporation of time into the classification model – an activity largely absent from current classification models. Secondly the definition calls for a higher-level definition, namely, that of an *asset*.

The idea of sub-classing is also mentioned by the NAA (1959) as they point out that members in the same class are allowed to have fundamental differences according to which they may be further divided into subclasses.

The above ideas on sub-classing lead to a refinement of algorithm 3.1 as follows:

Begin

1. Determine the purpose of the proposed classification, be it to group items with similar features together, or to adhere to requirements of social convenience and necessity
2. Identify the different attributes (characteristics) of the various elements or transactions under consideration and the relationships among the attributes;
3. Identify relationships among possible classes
4. Partition the elements or transactions into different classes, adhering to the purpose of the classification system. Such partitioning should facilitate the placement of new members not yet in the system as well as predicting the attributes of a current member based on its location in a particular class
5. Consider partitioning classes into subclasses through possible redefinitions of members in a class.

End

Algorithm 3.2 Classification of members into classes – incorporating subclasses

Algorithm 3.2 is rather generic and high level, but in Chapter 7 it is refined in order to define a proposed classification framework for accounting information.

3.9 The role of measurement in classification

Measurement plays an important role in the classification of accounting information.

3.9.1 The use of numerals

I often say that when you can measure what you are speaking about and express it in *numbers*, you know something about it, but when you cannot measure it, when you cannot express it in numbers, your knowledge is of a meagre and unsatisfactory kind.

Lord Kelvin (1883)

The above quote by Lord Kelvin suggests that measurement improves ones knowledge of an object being measured in the sense that it adds to the information content of the object. Some authors state that observations become more precise with the improvement brought about by measurement. Chambers (1964) writes that one first has to define an attribute and its owning item precisely before such an attribute can be measured. In a similar vein, Kerr (1966) states that the difference between what a given concept denotes and the method of measuring the concept should be clearly distinguished before measurement takes place. For example, if one tries to measure profit without knowing what profit is, it can hardly be measured. Measurement from this point of view involves the distinguishing, ordering and comparing of objects (Most 1982). Hence, the attributes of what is to be measured need to be identified.

Bierman (1963) and Sterling (1970) view accounting as a process of measuring and the communication of information. Accountants are responsible for the measuring of objects and the communication of this measurement to decision-makers. Goldberg (1955) claims that measurement underlies the principle functions of accounting, namely, recording, reporting and interpreting. Hence, an accountant needs to establish concepts which are capable of being measured.

Stevens (1946; 1958) writes that the assignment of numbers to objects or events is based on one or more rules which in turn may be based on some common

properties. To this end Table 3.3 indicates some properties and the utility of using numerals in measuring these properties.

Table 3.3 Properties and the uses of numerals in measurement

Property	Use in measurement
Identity	Numbers may serve as labels to identify items or classes, e.g. an order placed by a customer could be labelled Order #1.
Order	Numbers may serve to reflect the rank order of items. An example is to sort accounts receivable in decreasing order of outstanding amounts.
Intervals	Numbers may serve to reflect differences among items. An example is an age analysis of accounts receivable.
Ratios	Numbers may serve to reflect ratios among items, e.g. the percentage profit.

Adapted from Stevens (1958)

The measurement basis as well as the classification of *current assets* was criticised more than 60 years ago by Gilman (1944). He argued that the total of *current assets* is made up out of dissimilar elements and dissimilar values and is, therefore, not uniform. When analysing the financial statements of a company the difference in measurement basis, especially of assets, may lead to *evaluation errors*. As Schroeder *et al.* (2005:216) explained, adding items with a different measurement basis together is much like adding the emotional intelligence of a person to his/her speed around an oval track. Investors need to be conscious of measurement bases that differ to enable them to evaluate the financial position of a company accurately. Table 3.4 below shows the different measurement bases of assets.

Table 3.4 Assets and different measurement bases

Asset	Measurement basis
Cash	Current value
Accounts receivable	Expected future value (Cost plus unrealised profit)
Marketable securities	Fair value or amortised cost
Inventory	Current or past value
Investments	Fair value or amortised cost
Property, plant and equipment	Cost less depreciation

Adapted from Schroeder *et al.* (2005)

A finer classification leading to subclasses and sub-subclasses may be needed to ensure that, for example, items measured at cost will not be compared and classified together with items measured at market value. A sufficiently fine classification will prevent such operations from taking place.

An enriched form of measurement in terms of numerals is proposed by ASOBAT (Wolk *et al*. 2004:168) in suggesting that accounting should not be restricted to the use of single numbers, but ranges and multiple valuation bases in columnar arrangements. By supplying more information one may well be able to satisfy the needs of heterogeneous user groups. For example, in the notes to the financial statements, the value of inventory may well be portrayed in a table with different columns showing the first-in-first-out (FIFO), last-in-first-out (LIFO), weighted average, etc. value of inventory. Another suggestion may be to portray the value of raw materials, work-in-process, finished goods, and so forth in a table. This suggestion of ASOBAT may alleviate the problem of classifying non-homogenous items together.

According to Anton (1964:9), the process of measurement to determine a numeral as outcome consists of the following five parts:

1. *A decision to measure*. In the classification of accounting information it entails taking a valuation of, for example, an entry in the first column of Table 3.4 above.
2. *Setting the measurement scale or scales*, i.e. calibrate the scales to be used to arrive at sensible numeric values.
3. *Determination or preparation of the state*, i.e. initialise the environment in which the measurement is to take place before moving on to step 4 below.
4. *Assignment – "a number appears"*. An example could be to determine the amount of cash in the bank.
5. *Use of the measurement*. The primary measurement is performed to set the stage for the subsequent classification.

The above five components effectively address a measurement in which the deliverable is one or more numerals, i.e. numeric values. In the next section another

form of measurement is discussed which is in essence a pre-measurement in the sense that, before something is measured, it first has to be identified.

3.9.2 Other forms of measurement

Measurement is an activity which may be performed *before* a classification exercise as well as after such an exercise. Measurement before classification is aptly described by Sterling (1979) when he states that after a measurement has been performed, the accountant must decide which one or collection of which measurable attributes are going to be accounted for. After such an *initial* measurement to determine which attributes are to be included in the model, the said attributes and their owning items may then be classified into classes.

A view of measurement by Riahi-Belkaoui (2004:42) was given in Section 2.8.1 and is repeated here for ease of reference: "It is generally considered that accounting is a measurement as well as a communication discipline. By measurement is meant 'the assignment of numerals to objects or events according to rules'. The first step in accounting is to identify and select these objects, activities or events and their *attributes* that are deemed relevant to users before actual measurement takes place". The above view of measurement is significant since it implies that there is an initial step prior to taking a traditional measurement (as did Sterling (1979) above). This prior step is the identification of objects, events, attributes and so forth. In this thesis the emphasis will be on the identification of the attributes of a transaction prior to any measurement taking place.

The discussion in this subsection so far leads to the following observation:

Corollary 3.2: Classification in accounting necessitates performing an initial measurement, to arrive at attributes for describing a transaction to be classified uniquely.

The work in this thesis addresses a first round of measurements, i.e. the identification of attributes of a transaction to subsequently allow such a transaction to partake in a classification exercise, and in the process to determine whether it has past, present or future effects. Taking an initial measurement is, amongst other things, the topic of

Chapter 7. In particular, classification issues concerning the balance sheet and the income statement are addressed. The second round of measurements, effectively discussed in subsection 3.9.1 is beyond the scope of this thesis.

The following section takes a look at the information intersection among compilers of financial statements, users and GAAP.

3.10 The information intersection

Accountants are faced with the problem of thoroughly comprehending the procedures that are used in the making of decisions as well as the consequences of such decisions. Goldberg (2001) made this statement with the view that the accountant should be able to guide and educate users of financial statements to enable them to make informed decisions based on the information classified and reported in the financial statements.

When financial transactions are recorded and financial statements are compiled, managers, standard setters and the capital markets each have rather unique requirements of the information. Miller and Bahnson (2002) displayed the intersection of information required and the information willingly reported in the form of three Venn diagrams. Figure 3.3 shows various intersections among the three groups, namely, managers, GAAP and the capital markets. On the left hand side, the current situation is portrayed, while the right hand side portrays a more favourable situation, as explained below.

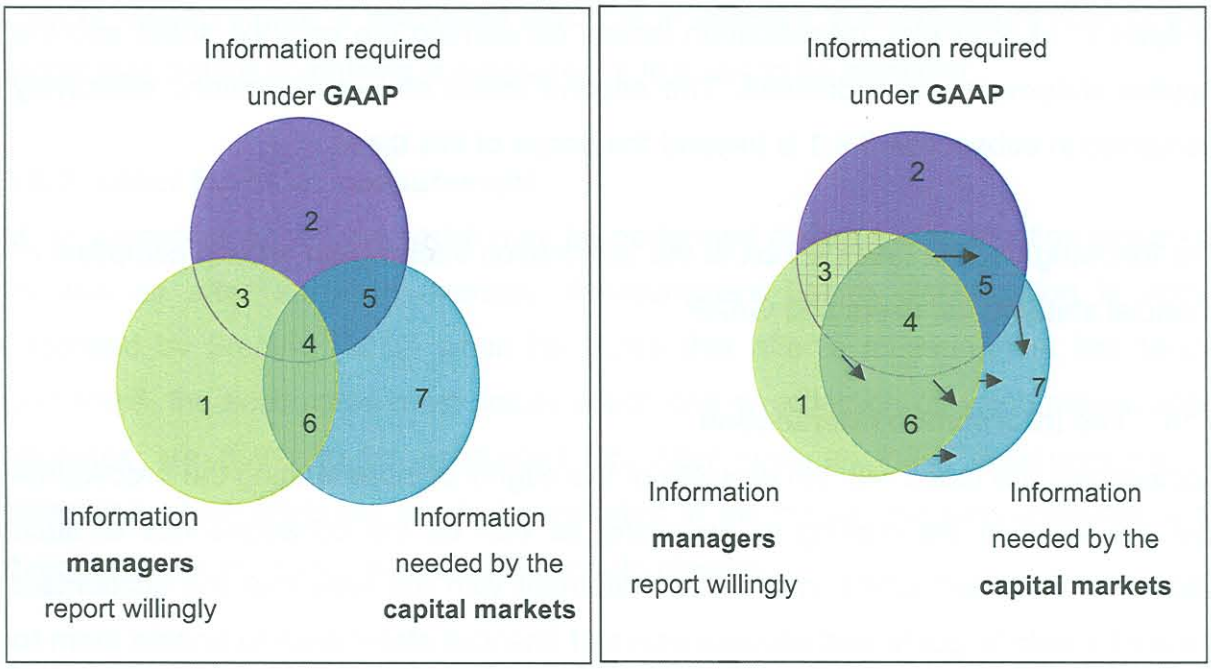


Figure 3.3 Intersection of information as portrayed by Miller and Bahnson (2002:89-91)

The viewpoint of Miller and Bahnson (2002) is that when more applicable information is portrayed, the uncertainty surrounding decision-making as felt by the markets will decrease. The classification of information may need to be in such a manner as to optimally satisfy the information intersection, namely areas 4 and 6. The information is divided into seven subareas and is explained in Table 3.5.

Table 3.5 Explanation of Figure 3.3

Areas	Needed by market	Required by GAAP	Reported willingly	Wasted effort and money
Area 1	No	No	Yes	Yes (managers)
Area 2	No	Yes	No	Yes (managers and standard setters)
Area 3	No	Yes	Yes	Yes (managers and standard setters)
Area 4	Yes	Yes	Yes/No	No
Area 5	Yes	Yes	No	No
Area 6	Yes	No	Yes	No
Area 7	Yes	No	No	Yes (capital markets)

Adapted from Miller and Bahnson (2002:90)

If quality financial reporting can provide more useful information to the markets, the effort and money wasted should decrease. Standard setters are responsible for the increase in information contained in areas 4 and 5, and they need to incorporate

users' needs when developing standards. Area 7 will also decrease in size, helping the capital markets to rely on more reliable information with less uncertainty (Miller and Bahnson 2002). Standards setters should take note of users' needs as this may result in supplying useful information to the users for decision-making.

According to the Special Committee on Financial Reporting (simply called *the Committee*) formed by AICPA (1994), users agree that financial reporting has a definite place and is useful. They do, however, feel that the current framework for reporting should be improved on, and they are critical of some aspects in the reporting of financial information. The financial reporting is based on the classification of accounting information. Therefore, the development of a classification framework based on users' requirements may supply users with much needed information. Such a framework could, for example, distinguish between core and non-core activities, which is a requirement of users, extracted from the report of the AICPA committee (AICPA 1994), and is recommended in the framework proposed in Chapter 7.

In the next section the diversity of the many stakeholders of accounting information is discussed. The development of a classification framework for accounting information may be rather complex because of the necessity of adhering to the often conflicting needs of different stakeholders (see for example points 6 and 7 in Section 3.6 above).

3.11 Diverse needs of users

Users of financial statements have a perpetual need for information. The information they require may be divided into 3 groups: 1) essential information, 2) helpful information and 3) interesting information (AICPA 1994). Hence, only the first two groups need to be addressed when developing a classification framework, as interesting information may not be essential information.

The information needed by users depends on the approach to be followed, the instrument to be evaluated, the businesses and circumstances of a company and the personal preferences of the individual user (AICPA 1994). Hendriksen and van Breda (1992) expand on this dilemma by pointing out that users have different accounting and company backgrounds as well. When classification and summarising occurs,

information and relationships may be omitted that may be valuable to certain users or groups of users. Developers of classification guidelines, therefore, need to take note of the information needs of all the users of financial statements.

Since the purpose for which accounting information is used varies among users of financial statements, AICPA (1994) proposed nine categories of users and their actions. These categories are summarised in Table 3.6.

Table 3.6 Classification of users and their activities

Categories of users	User activity	Type of use
Investors	Investment decisions	Decisions
Creditors	Credit decisions	
Management and board members	Decisions about managing the business	
Employee groups	Understand compensation policies	Comprehension
Competitors	Assess competitive strengths, weaknesses and business strategy	Assessments/Evaluations
Regulators	Assess compliance with regulations	
Users concerned with social causes	Assess a company's involvement in social areas	
Academics	Provide data for research	Provisions
Press	Provide data for articles	

Adapted from AICPA (1994)

Table 3.6 emphasises the diverse needs of users of financial statements. It indicates that different classifications for different users may be needed. One way to arrive at a comprehensive list of user requirements is to embark on a JAD (Joint Application Development) workshop. During such a workshop all stakeholders are consulted as to what their needs are and ideas are brainstormed among accountants, standard setters, users, etc. JAD is discussed in a number of texts, such as Wood and Silver (1995). During such a JAD workshop, a distributed union of all the necessary requirements less the conflicting requirements may be constructed and a framework could be built around the resultant requirements. Conflicting requirements can be reported on as additional information to the financial statements of a company. It

follows that more of users' needs will be addressed in such a classification framework for accounting information.

In developing a classification framework for accounting information, the supply of financial and non-financial data (e.g. unit of products, number of employees, etc.) and the provision of forward-looking information to users could be enabled (AICPA 1994). In 1971 the Trueblood Committee (Trueblood 2004) called for the reporting of information for prediction purposes and the inclusion of financial forecasts if it enhances the reliability of users' predictions. It may be deduced from AICPA (1994) and Wolk *et al.* (2004) that additional information could be supplied in the financial statements based on management's predictions of the future. Another way may be to classify information according to past, present and future transactions and events. A proposed classification framework for accounting is expected to classify accounting information in a manner that would ease the task of the user, by taking user requirements into consideration.

A further problem is that the needs of users change with time and financial reporting has to respond to these changes. AICPA (1994) suggested that financial reporting should be adjusted to incorporate the changing needs of users by following three guidelines:

1. *More information with a forward-looking perspective should be provided. This includes the plans of management, opportunities, risks and uncertainties surrounding measurement.* In 1971 this call was also made by the Trueblood Committee (Trueblood 2004). Users generally prefer to make their own forecasts and this may enable a user to do exactly that. The proposed classification framework for accounting information should, therefore, incorporate a temporal component. In the classification framework proposed in Chapter 7, the notion of time (past, present and future) is incorporated.
2. *The focus should be more on factors creating longer term value.* This may be a call for investing in R&D initiatives that may yield future benefits in the long term. Correct classification of R&D is, therefore, of crucial importance, calling for a classification framework for accounting information.

3. *Information reported externally should be aligned with information reported internally*. This is a call for aligning the information used by management internal to a company with the information published in the financial statements. A classification framework for accounting information, taking the needs of management and other external users into account through a JAD workshop, is a possible way to facilitate this process.

As noted in guideline 1 above, the suggestions of the Trueblood Committee (made in 1971) have not been implemented at the time of writing this thesis and, therefore, AICPA made another call in 1994 for the supply of information with a forward-looking perspective, for instance, management's forecasts. The suggestion to focus on the ever-changing environment of accounting may need the development of a classification framework for accounting information that is flexible.

Next the needs of some specific users of accounting information are discussed.

3.11.1 Analysts

Analysts need specialised financial information, for example, information about the financial well-being as well as the future of the company (Kerr 1966). Stickney *et al.* (2004) give the principal activity of the financial analyst as the extracting of information from the financial statements in order to estimate the company's value and to make sound investment decisions. Analysts may need additional technical information from the financial statements to evaluate the performance of a company and to make useful decisions, and this may be supplied as supplements to the financial statements.

It is the practice of many experienced users of financial statements to reclassify the given assets and liabilities according to their own ideas of what *current* should entail (Heath 1978). This reclassification may be based on an inherent dissatisfaction with certain classification practices in accounting and may, therefore, suggest the development of a classification framework for accounting information taking the common needs of users into account.

Analysts furthermore need information based on market value which has to be measured in line with the discussions in Section 3.9 above. This need is captured in the following two quotations from Knutson (1993:39):

> "It is axiomatic that it is better to know what something is worth now than what it was worth at some moment in the past".

> "There is no financial analyst who would not want to know the market value of individual assets and liabilities".

The idea of different valuation methods is the cause of much controversy and could be solved in a classification framework for accounting information when analysts' views are taken into account. One way to achieve this is to classify the various valuation methods and their values in the notes of the financial statements in a table, thereby enabling the analyst to compare the value of inventory in different companies based on a uniform method. However, addressing this problem forms part of a second round of measurements which is beyond the scope of this work.

3.11.2 Investors

The information needs of investors differ from that of analysts. Littleton (1958) affirms this point and claims that investors are, unlike analysts, normally non-technical people. The main objective of an investor is to discover more about a company's absolute and relative value and their equity securities (AICPA 1994). For investors, the application of technical terms and classifications may need to be reduced to enable an investor to comprehend the impact of the financial statements. Littleton (1958), however, acknowledges the advantage of technical presentations to increase the importance of the information. This advantage is brought about through the drawing of clear divisions between the major classes of facts and strengthening the relevance of classes grouped together. However, AICPA (1994) states that non-professional users increasingly make use of the services of professional users (analysts) in times of increased complexity in the market. The requirements of investors could be established through a JAD workshop between investors, other users (internal and external to the company) and standard setters, whereafter a

classification framework for accounting information can be developed, taking the requirements of investors as well as other users into account where possible.

A special kind of investor is the absentee investor who does not have first hand knowledge of the activities and regulations of a company. Absentee investors normally rely upon the information communicated to them by the management and accountant of a company to make seemingly informed decisions. Nevertheless, the primary responsibility of management and accountants is towards the investors (Raun 1952). The information communicated to the absentee investor is based on a classification framework, and when developing a classification framework for accounting information, the requirements of the absentee investor may need to be taken into account.

3.11.3 Creditors

The main goal of creditors is to assess the ability of a company to meet its obligations related to current and future debt or other financial instruments. Companies can meet their obligations through paying the principal and interest on time or by transferring a collateralised asset (AICPA 1994). Creditors may, therefore, need different information from that required by other users to enable them to meet their main objective. In this regard a classification framework for accounting information should take the requirements of creditors into account.

3.11.4 Companies

Companies vary greatly in character and operational needs. While the temptation exists to try and fit a uniform framework or accounting pattern (Fowler 2004) onto the financial statements of all companies, it may ultimately not be a good idea. The criticism against such a move is that there are far too many companies operating in too many sectors in industry to design one standard pattern which will serve the needs of all these companies (Fitzgerald 1938b). Classification between companies in different sectors adds another component to the development of a classification framework for accounting information. This problem is elaborated on in Section 3.12 below.

3.12 Multiple frameworks versus a generic one

In the preceding discussions it was observed that the requirements of companies and stakeholders in accounting are diverse; hence attempting to satisfy conflicting needs of all stakeholders (including the underlying company) generates a problem (Goldberg 1964; Solomons 1986). A possible solution is to recognise that some requirements are necessarily contradictory in nature, and embark on the idea of using more than one base for classification by putting in place multiple conceptual frameworks for classifying accounting information. Hence two or more bases of classification may be needed given the different users' needs. An advantage of this approach is that a comprehensive picture is displayed to all stakeholders. There are two disadvantages, however:

1. Multiple classifications may lead to an information overload.
2. Unless multiple classifications are carefully verified, inconsistencies between two or more sets of overlapping information may result.

When users are confronted with multiple classifications it may lead to confusion and possible information overload, which in turn could result in incorrect decisions being taken. Naturally, if inconsistencies in the classification of accounting information result, users may make incorrect decisions and will, therefore, be unable to use the information optimally. An alternative solution is presented below.

In the preceding discussions regarding the requirements of analysts, investors, creditors and companies, it was mentioned a number of times that the requirements of these groups ought to be taken care of in a classification framework for accounting information. The challenge, however, is that these requirements often conflict with one another. A possible solution to this problem of diversity is to acknowledge that all the information needs of the underlying company and users of financial statements cannot be taken into account, but there are certain needs that are generic to all users and these can be addressed (IASB 2004), together with other needs that do not contradict any other need. This could be achieved by taking a distributed union of all requirements and then removing all those requirements that contradict any other requirement. Example 2.1 in Chapter 2 illustrates this process. A generic classification framework for accounting information with supplementary information

(briefly elaborating on the contradictory requirements) to assist users with further classification, reclassification and prediction may then be developed. This is the approach taken in this thesis.

3.13 Summary and conclusion

In this chapter a brief history of classification was presented and a number of definitions of classification from an accounting perspective were discussed. With the generic classification in Section 2.5.2 as a point of departure, the properties of a classification for accounting information were pursued and a pseudo-code algorithm was defined to classify accounting information. An explanation of the process of classification, particularly the steps in the classification of accounting information was discussed. Corollary 2.1 was also instantiated for the case of accounting and named Corollary 3.1. Having considered a number of issues with regard to measurement, it is suggested that an initial measurement to determine attributes of transactions is to be taken prior to classification, and that a follow-up measurement could validate the quality of the resulting classification. The idea of an initial measurement led to the formulation of Corollary 3.2 in subsection 3.9.2.

It was established that different users of accounting information and different companies need different classifications. This in turn led to the observation that a generic framework addressing a distributed union of requirements minus contradictions might be the way forward for developing a classification framework for accounting information. Contradictory requirements could then be catered for in the form of supplementary information to financial statements.

In the next chapter specific problems with regard to the classification of accounting information in the financial statements are discussed together with the role of classification in window dressing.

CHAPTER 4 SPECIFIC CLASSIFICATION PROBLEMS IN FINANCIAL STATEMENTS

4.1 Introduction

In the previous chapter some aspects regarding the classification of accounting information were considered; in this chapter various problems currently present in financial statements are discussed. Classification may take place at various stages in accounting, starting with the decision as to whether an amount is to be recorded as a debit or a credit, then the recording of a transaction, up to the final classification stage when accounts are classified in the financial statements of a company (i.e. reporting). There are, however, certain problems during the classification of this information. For example, items like deferred taxation are called 'accounting hybrids' because they have attributes of more than one class (Wild, Bernstein and Subramanyam 2001). In the *current/non-current* classification, different measurements (Gilman 1944; Schroeder *et al.* 2005) are used for different items, resulting in non-homogenous information being classified together.

4.1.1 Goal of this chapter

The goal of this chapter is to consider some general problems underlying the classification of accounting information. These classification problems ultimately manifest in the financial statements of a company. In this regard problems specific to the classification of information in the balance sheet and income statement are identified and discussed.

4.1.2 Layout of this chapter

In Section 4.2 some of the general criticisms in the literature regarding the classification of accounting information (i.e. recording) are discussed. Included in this section is the problem of reclassifying information at year-end (i.e. reporting). Classification in the balance sheet is discussed in Section 4.3. Criticisms of the classification of items in the balance sheet are highlighted in Section 4.3.1. Also in Section 4.3.1, general and specific problems related to classification in the balance sheet are discussed. Problems surrounding the liquidity concept in the balance sheet are investigated. Next some suggestions on the reclassification of items in the

balance sheet are explored. These suggestions include reclassification of assets, specifically the reclassification of R&D and of long-lived assets to be sold; reclassification of liabilities; and the reclassification of *current assets* and *liabilities*, specifically inventory. In Section 4.4 the focus shifts to classification problems in the income statement. Consideration is given in Section 4.5 to the way analysts reclassify accounting information portrayed in the financial statements. Section 4.6 focuses on the role of classification in the window-dressing of financial statements, and in Section 4.7 the role of time in classification is discussed. A summary concludes the chapter.

A visual representation of the layout of this chapter is shown in Figure 4.1.

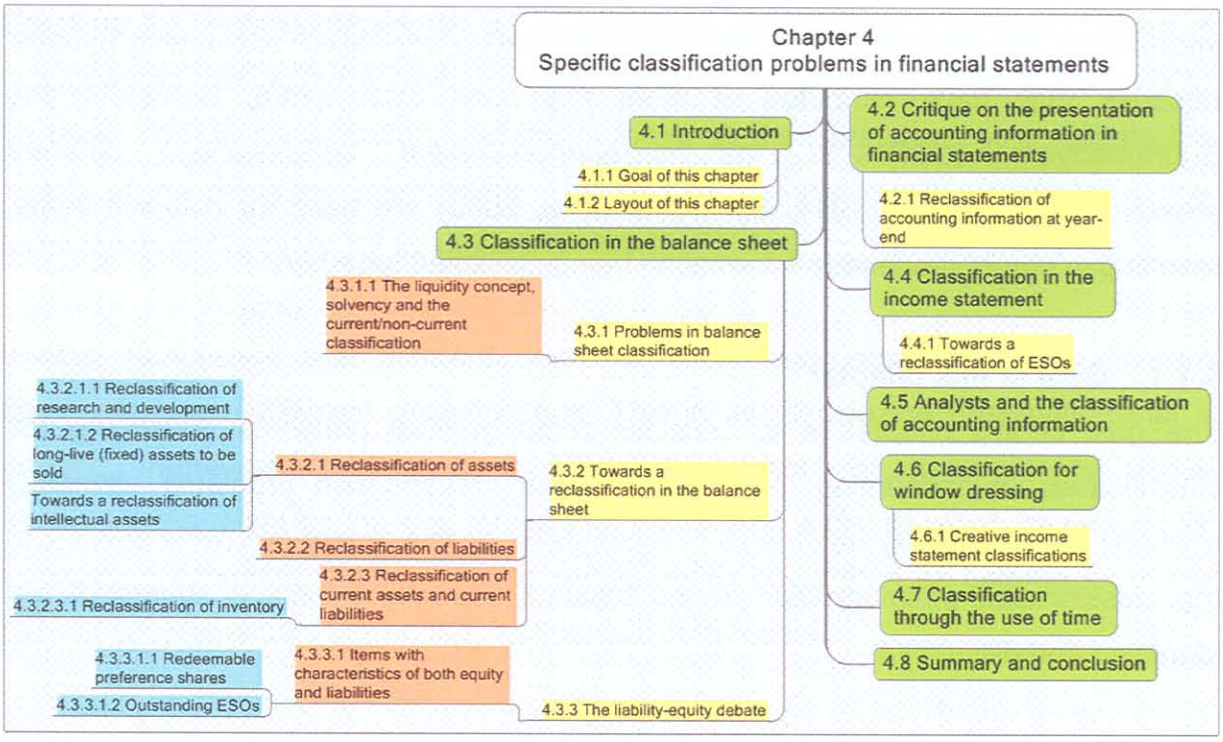


Figure 4.1 A visual representation of the layout of Chapter 4

4.2 Critique on the presentation of accounting information in financial statements

As far back as 1974, Lev (1974) claimed that the efficient capital markets theory implies that financial statement analysis is a rather futile activity. He also wrote that the "dissatisfaction with currently reported financial data is widespread among both the users and the preparers of the information" (Lev 1974:75-76). The structure and

content of the balance sheet were criticised by Fitzgerald (1936:74) in his argument that "others who have read balance sheets and who are not infected by accountancy concepts are often critical of the form and content of these statements". He further maintained that users often feel that the statements fail to portray useful information. Although the work of Fitzgerald (1936) and Lev (1974) is rather dated, the above criticisms of the information in financial statements is still applicable as, more recently, Miller and Bahnson (2002:50) claim that users know they cannot rely on "GAAP financial statements to be fully informative", hence the development of a classification framework for accounting information, especially for the balance sheet, may be in order. A conceptual framework for the classification of accounting information - aimed at improving the utility of such information - may be arrived at when all the known and relevant attributes of transactions are taken into account during the recording process, and re-evaluated at a later stage. This is necessary since attributes may change over time, e.g. at the time of reporting or in the future. The introduction of a normative subframework to identify attributes of transactions takes place in Chapter 7 of this thesis.

The chart of accounts is a tool used in accounting classification. According to Goldberg (2001:42) the "imposition of the accountant's classification, usually by means of a pre-designed artefact, (the chart of accounts)" may "preclude, or at least inhibit" users from the information they need. In the instance where unclassified data may be revealed to users interested in the company in a format not useful for their purposes, they may have to re-classify and summarise the information in a format of their own. The human mind, however, can only manage a reasonable amount of data simultaneously typically seven individual facts at any one time (Miller 1956, Jones 2002). In the case where a classification and summaries are presented, a choice is made beforehand for the users of which information is important and which parts are not important (Hendriksen and van Breda 1992). Hence, making classification decisions on behalf of users might not be in the best interest of the said users. Therefore, requirements of users have to be taken into account whereafter a classification framework for accounting information could be developed based on these requirements. However, the establishment of all user requirements is a time consuming and complex task and as a result only a strict subset of the suggestions

made by AICPA (1994) were taken into account in the development of the classification framework for accounting information in this thesis.

Next a brief discussion is presented on the reclassification of accounting information at the time of reporting, namely, year-end.

4.2.1 Reclassification of accounting information at year-end

At year-end, an artificial position in a company's lifecycle, companies perform a special classification exercise to display unrecognised classes of expense and revenue, which results in reclassification and summarising by the double-entry method (Paton 1962). Littleton (1958:56) states that "the task of compressing a mass of transaction facts into an intelligible enterprise statement is too great to be fulfilled by initial classification". Initial classification where data is classified into accounts at the time of recording is based on kinds and qualities whereas reclassification is based on fiscal periods or operating departments (Littleton 1958). In some instances facts are classified preliminary until a better picture can be formed as to where they fit into the company's activities. A clearer picture is formed at a later stage, often because attributes that were not known at the time of recording become known at the reporting stage. Clear guidelines additional to the standard classification framework ought to be provided to the accountant or the classifier for reclassification. The development of such guidelines warrants the input of a number of stakeholders and is beyond the scope of this work.

Following the introduction of generic problems inherent in the classification of accounting information, classification in the balance sheet is now addressed. This is done by first stating various requirements and generic problems as gathered from the literature, and then discussing specific classification problems in the balance sheet and the income statement.

4.3 Classification in the balance sheet

Before addressing the classification of items in the balance sheet, a good definition of the balance sheet is required. This calls for an initial measurement as prescribed by Corollary 3.2. Most (1982) sites the definition of a classified balance sheet from accounting terminology as a statement that identifies subclasses of *current assets*

and *current liabilities*. Unfortunately, however, there has been little discussion in the accounting literature on attempts to solve the classification problems which face the compilers and users of balance sheets. In this section these problems are highlighted.

The "two-sided" form of the balance sheet as suggested by equation 3.1 in subsection 3.3.1 is understood by some users but "undoubtedly also many find it a source of confusion and [they] must physically or mentally rearrange the balance sheet before its whole meaning becomes evident to them" (Fitzgerald 1938b:163). Currently this two-sided form of the balance sheet still prevails and continues to be a source of confusion to some users. Fitzgerald (1938b) and Stickney *et al.* (2004) further argue that even the users who understand the balance sheet need to rearrange it to bring out the significant relationships before a useful analysis can be performed and before information (concealed or otherwise) can be interpreted correctly. Therefore, since users often need to reclassify items in the balance sheet to meet their own objectives, a generic classification framework containing most of the accounting information needed by users may be a viable option to reduce the necessity to reclassify. However, eliciting the needs of users is an activity that requires input from users and standard setters, and arguably the best way to achieve this is through a joint committee. Another way to enhance reclassification could be to supply additional information to users based on requirements established during one or more JAD workshops (Wood and Silver 1995) and consultations.

Some items are classified together in accounting although they do not share the same attributes. Canning (1978) points out that users of financial statements ought to be conscious of the fact that items classified in the financial statements of a company are not always homogeneous in nature despite a given interpretation of the said facts in a particular arena. An example is the classification of items like inventory, accounts receivable and cash together as *current assets* in financial statements even though they have different valuation methods. In the proposed classification framework for accounting information in Chapter 7 the homogeneity of items is addressed through the use of attributes.

Assets are valued using different methods. According to Higgins (2004:19) total assets may, therefore, be seen as an "artificial accounting construct" and not economic reality. This is because of the recurring problem of market value versus book value. A revised classification framework for accounting information ought to have categories that include valuation methods and measurements of the same kind. These measurements form part of a second round of measurement.

The balance sheet is a summary of various activities within a company. Littleton (1958:81) claims that "the balance sheet is not a clear cut report on financial stewardship". He bases this argument on the fact that the balance sheet contains a combination of results from the financing as well as operating activities of a company. The balance sheet is, therefore, "not very informative about either one separately". Hendriksen and van Breda (1992:468) support this claim when they state the following: "as a device for describing the operations of the firm, the current/non-current classification is defective". An illustration of this claim by Hendriksen and van Breda (1992) is found in interest receivable that does not arise from operating activities of the company. Hence, the balance sheet may need to separate financing activities from operating activities.

According to Hendriksen and van Breda (1992), a balance sheet classification ought to meet the following objectives:

- *Presentation of solvency to creditors.* This was one of the earliest objectives of the balance sheet but the importance of solvency has changed over time. The credit grantor is no longer the main user of financial statements.
- *Description of company operations.* It should be clear to users what the company's operations entail. This requirement is normally addressed by additional reports prior to the presentation of the balance sheet and will therefore not be addressed as part of the proposed classification framework for accounting information in this thesis. Having said this, one should note that splitting the activities of a company between core and non-core in the proposed framework is also a way to describe the operations of the company.
- *Highlighting of valuation models.* This has to do with a second round of measurements and although such measurements are important in further

classification work, these are beyond the scope of this thesis and may be catered for in supplements to the financial statements as suggested by ASOBAT (Wolk *et al.* 2004). These supplements could be columnar representations of the different measurement methods and values.

- *Illumination of management's intentions.* If users are aware of management's intentions, it may influence their decisions. For example, a plan to sell a fixed asset is one intention of management that is highlighted in the proposed framework in Chapter 7. If, however, an intention cannot be accommodated in the statements, it is proposed that information about such intention form part of supplements to financial statements and is, therefore, not addressed as part of the proposed classification framework for accounting information in this work.
- *Prediction of cash flows.* Users need to know whether a company has a reliable positive or negative cash flow to enable them to make useful decisions. In the proposed classification framework for accounting information more information is added to the financial statements with the aim of helping users to make their own future predictions.

If all the above objectives are met, the classification framework for accounting information together with additional information provided will prove to be a highly descriptive framework.

In the following section specific problems with regard to the classification of information in the balance sheet are discussed. In particular, problems of accounting hybrids, liquidity, solvency and the *current/non-current* classification are addressed.

4.3.1 Problems in balance sheet classification

The present classification system for accounting information results in accounting hybrids, i.e. items which do not fit into any specific category. In the balance sheet the categories *assets* and *liabilities* are used. According to Fitzgerald (1936), there are items in the balance sheet which are neither of the two. The balance sheet also does not suggest that assets are included at their present realisable value. Sprouse (1966:46) named certain deferred credits in the balance sheet "what-you-may-call-its". These are: 1) the purchase of a company at a cost less than the book value of equity acquired; 2) gains arising from sale-and-leaseback transactions, and

3) deferred investment credits. Wolk *et al.* (2004:319) have added to the debate by including another type of deferred assets and liabilities: "by-products of income statement rules" which result from the revenue-expense approach of the income statement. These deferred items do not conform to *current asset* and *liability* definitions. These items are difficult to classify under the normal classification rules of accounting because they have attributes of more than one class.

Despite the fact that the work of both Fitzgerald and Sprouse is dated, their claims above are still valid, since these views are shared by Goldberg (2001). Accounting hybrids are items that have attributes which may result in them possibly being classified into two or more groups, but they do not have all the qualifying attributes to be classified into any one of these groups exclusively. Hence the classification framework for accounting information currently in use should be revised to include these "what-you-may-call-its" or accounting hybrids. This may be done by a comprehensive identification of attributes, as suggested by Corollary 3.2.

Leasing is another controversial activity of companies. The reasons are 1) off-balance-sheet financing becomes possible, and 2) it has tax advantages (Wolk *et al.* 2004). Off-balance-sheet financing has the advantage of 1) better debt ratios and 2) higher accounting rates of return. Since lease liabilities and lease assets are not displayed in the financial statements, the information supplied to users may be less complete and may result in users being misled and incorrect decisions being taken based on more favourable ratios. These items may need to be classified in the additional information supplied to users to enable them to incorporate it into their analysis of a company's financial health. An alternative is that leases may need to be classified as liabilities in the financial statements.

4.3.1.1 The liquidity concept, solvency and the current/non-current classification

One of the classifications in the balance sheet is working capital with two sub-classifications, namely, *current assets* and *current liabilities*. The purpose of working capital is to supply information about the solvency and liquidity of the company (Kam 1990). Kam (1990) points out that the classifications in the balance sheet should be

judged on whether it is useful in helping to assess a company's solvency. The issue of solvency and liquidity is highly controversial, as discussed below.

Originally the classification carried out in the balance sheet was based on the influence of the short-term credit granter. It was presumed that the interest of the short-term credit granter was based on *liquidity,* this presumption resulted in the categories *current assets* and *current liabilities,* which are the components of net working capital (Gilman 1944; Moonitz and Jordan 1963; Goldberg 1964). The proposed classification framework for accounting information should address the informational needs of all stakeholders as far as possible. This could be done through a distributed union minus conflicting requirements as described previously (refer also to Example 1.1).

The classification of assets and liabilities in the balance sheet is done based on liquidity. The liquidity concept has always been in "conflict with the going concern concept" according to Moonitz and Jordan (1963:526) since no company is seen as heading for early liquidation: instead companies are expected to carry on indefinitely. They continue their argument stating that it "has been proved virtually impossible" to prepare a balance sheet according to the liquidation concept without "distorting the accounts themselves". The ranking of assets and liabilities according to their liquidity is a "crude ranking of liquidity" and actually reveals very little about liquidity (Wolk *et al.* 2004:423). Wolk *et al.* (2004) also claim that the *current/non-current* classification is a very basic indication of a company's liquidity. If the way liquidity is currently addressed in financial statements leads to distorted information or is in conflict with the going concern concept of accounting, then a change in the classification of accounting information is warranted.

The classification and liquidity of inventory are also open to criticism. Kempner (1960:266-268) states that the traditional classification of inventory is a muchdiscussed topic, and gives a summary of the disadvantages of the way inventory is classified:

1. *Inventories are not nearly as liquid as are the other current assets such as cash, marketable securities and receivables.* A certain part of inventory may be

viewed as fixed since a company needs to have a minimum inventory level which may need to be classified as a *non-current* item. Since the operating cycles of companies differ, it follows that the inventory in companies with a short cycle (typically those less than a year) needs to be classified as *current* where in the case of long cycles inventory needs to be classified as *non-current*.

2. *The degree of liquidity varies with the industry and even within the same company.* The type of item being manufactured may influence the liquidity of the inventory. If a company manufactures and sells an item in less than a year it is more liquid than an item which is manufactured and sold over a period of two or more years. However, inventory consists of items in various stages in the manufacturing process, for instance work-in-process and finished goods. These also differ in liquidity and may, therefore, need to be classified based on how far they are from cash.
3. *Inventories that will not be converted into receivables or cash for some time must be removed from any short-term calculation of funds.* Currently an inventory item such as raw materials is less easily converted into cash, since such materials first have to be converted into a finished product before they can be sold (i.e. converted into cash). Therefore, the classification of finished goods will necessarily be different from that of raw materials, even though both of these are currently part of inventory.

Points 1 to 3 above are addressed in Chapter 7 through the development of a classification framework for accounting information.

The critical cash flow position cannot be determined with the use of *current assets* as the operating cycle of companies differ and may be longer than a year according to Goldberg (2001), Wolk *et al.* (2004) and Stickney *et al.* (2004). The deferred charges and credits contained in the *current assets* do not affect current cash flows and therefore ought not to be included in the assessment of the cash flow position of a company. Wolk *et al.* (2004) suggest that other classification systems to assess the liquidity of a company are to be employed, for example combining two classifications, namely, the one for monetary/non-monetary items and the one for *current/non-current* items. Since the *current/non-current* classification is part of much debate and criticism it follows that a classification other than *current/non-current* may need to be

developed. For instance, items could be classified according to the three time frames - past, present and future - rather than the one-year rule. To this end a classification framework for accounting information which takes time into consideration is developed in Chapter 7.

Hendriksen and van Breda (1992) argue that the classification of assets and liabilities as *current* and *non-current* as a method to present the solvency of a company is less relevant than other forms of classification. Some reasons for their claim are presented and discussed below:

- *Other financial statements: Income statements and cash flow statements may provide better information regarding the solvency.* If the income statement and the cash flow statement are currently better barometers of a company's solvency than the balance sheet, it follows that a new approach to the classification of the *current/non-current* items in a balance sheet may be needed. One way to achieve this could be through the determination of attributes of transactions at the time of recording, the time of reporting and also when attributes change in the future.
- *External financial reports: Used more by investors and other groups than creditors.* From this statement one may deduce that the demands and needs of all the relevant users have to be taken into account rather than just the demands of creditors when classifying accounting information. Therefore requirements of users need to be established through, for instance, a JAD workshop, which include standard setters.
- *Demand for favourable working capital ratio: Management is forced to take certain actions. For instance, pay current liabilities immediately preceding balance sheet date.* Because companies strive to meet the demand of the capital markets they tend to take certain actions which may not always have the best interests of users at heart. However, when companies ignore the pressure for a favourable working capital ratio, it follows that more reliable information is revealed in the financial statements, i.e. reclassifications may be minimised.

- *Places pressure on accountants to permit reclassifications to make the working capital appear more favourable. Companies are becoming highly complex and no predetermined working capital ratio can be deemed necessary for adequate solvency.* Predetermined working capital ratios may be of limited use in different sectors, because (for example) companies' operating cycles differ in length. As a result of these pressures on companies, reclassification may be undertaken for the wrong reasons. In this thesis it is argued that reclassification is done based on the fact that the attributes of transactions change over time and, therefore, reclassification becomes necessary at different stages in time, for instance at year-end.

A proposed classification framework for accounting information addressing the above problems is the topic of Chapter 7 in this thesis.

The Accounting Research Bulletin No.30 of 1947 introduced the *current/non-current* classification of assets and liabilities. Currently this practice is still being used in financial statements according to Miller and Bahnson (2002). Since there have been many developments in the financial sector since 1947, the classification framework for accounting information presented in Chapter 7 of this work addresses, amongst others the problem of *current/non-current* classifications. This is done through the identification of attributes and the use of time (i.e. past, present and future).

A precise definition of prospective members to be classified into classes based on their attributes is necessary for accurate classification to take place. In this regard Heath (1978:44) argues that "current assets and current liabilities are so poorly defined that proper classification is difficult for a number of items". Therefore, correct definitions of all the members of a classification framework should be established before proper classification can take place. In essence a classifier has to first identify attributes of transactions and items through an initial measurement as discussed in Section 3.9 before adequate definitions are developed.

Current liabilities as well as *current assets* contain items with a variety of characteristics. Kam (1990) claims that *current liabilities* include the following ill-

sorted components verbatim: 1) financing obligations, such as loans from banks, 2) operating debts, such as accounts payable and wages payable and 3) deferred credits, which in many cases will be discharged by conveying goods or services rather than cash. From the above it may be deduced that financing, operating and deferred items need to be classified separately based on the attributes that distinguish them from each other. Kam (1990) further points out that *current assets* include a number of dissimilar items, namely, cash, cash equivalents such as receivables, non-monetary assets and deferred charges such as unexpired insurance. Picking up on this claim, assume that cash, non-monetary assets and deferred charges all have different attributes. During classification these items will then be divided into separate groups as follows: cash is classified simply as cash, non-monetary assets are classified according to their measurement method and deferred charges are classified according to the future benefits they will yield. Therefore, dissimilar items in *current assets* need to be classified into a number of subclasses where each subclass is defined by the set of similar attributes of its members (refer step 5 of Algorithm 3.2 in subsection 3.8.1). This principle is applied through the use of a normative subframework as discussed in Chapter 7 of this work.

Hendriksen and van Breda (1992) also have the following critique on the *current/non-current* classifications:

- *It assumes that working capital items are closely related to current operation.* Working capital items may not always be closely related to the current operation of a company. For example, current borrowings (part of working capital) used to finance a retail company are not closely related to the current operations of the company, namely, the selling of retail items (e.g. shoes). In essence these differences stem from the fact that items classified as working capital have different attributes from those describing the current operation of the company and should, therefore, be classified differently.
- *Interest receivable, accounts receivable and inventories are all grouped together as current assets although they stem from different operating activities in the company.* Suppose that 1) interest receivable is earned on an investment, 2) accounts receivable includes an amount payable by a debtor who bought redundant computer equipment from the company and 3) inventories are kept

by the company to execute their core activity, namely, to manufacture tissue paper. These three items originate from different operating activities and it follows that their attributes and their subsequent classification may therefore differ, as suggested in Chapter 7.

- *It assumes that long-term assets and liabilities are related to the long-term planning of the company.* This assumption is incorrect, since long-term assets and liabilities are not always related to long-term planning. There are practices where companies use long-term borrowings to finance short-term liabilities, e.g. dividends. The classification of long-term assets and liabilities may need to be based on either the short- or the long-term plans of a company depending on the intention of the company.

The claims made by Hendriksen and van Breda (1992) above are essentially that in many companies, working capital is often not strongly related to the current operations of the company. The classification of items as *current* and *non-current* in the proposed classification framework for accounting information takes the above comments into account when focus is placed on the attributes of transactions in the normative subframework defined in Chapter 7 of this thesis.

When a bank uses the classification of *current assets* and *current liabilities*, they re-classify the items and add other items to the analysis (Gilman 1944). Some figures are written down by the bank while others like the cash value of life insurance are added. This is confirmed by van Tonder (2006); he also adds that banks revalue assets, for instance, livestock for credit granting. Because banks need to reclassify and even add items before they can do an analysis, it follows that the current classification of *current assets* and *liabilities* is not useful and does not facilitate decision-making. Therefore, current classifications for these entities may have to be revised.

The previous section considered various problems with the way information is presented in the balance sheet. The following section takes the next step, namely, suggesting ways in which the information may be reclassified to address these problems.

4.3.2 Towards a reclassification in the balance sheet

Since 1920, various researchers in the literature have suggested reclassifications of assets, liabilities, *current assets* and *current liabilities*. These are elaborated on in the following subsections.

4.3.2.1 Reclassification of assets

In an attempt to address the criticisms against the classification of *current/non-current assets* Wolk *et al.* (2004) suggest a sub-classification of assets. The aim is to supply much needed information about uncertainties regarding realisation and in particular how economic benefits are to be realised:

- Assets held for sale.
- Assets held for use.
- Assets representing deferred charges.

A classification framework for accounting information based on the above may well be able to communicate useful information and indicate the relative risks attached to the realisation of the benefits (Wolk *et al.* 2004). Users will have the benefit of more information supplied to them to enable predictions of the future if they are able to distinguish between assets that will be sold, assets that are still going to be used by a company and assets that have future consequences. The reclassification of assets according to the *realisation of economic benefits* may be needed to enable communication of more useful information to the various users of such information. These issues are addressed in Chapter 7.

Assets need to be classified according to their attributes and to this end Mauriello (1963) suggested a more comprehensive classification of assets based on their attributes as displayed in Figure 4.2. The content of Figure 4.2 is discussed below.

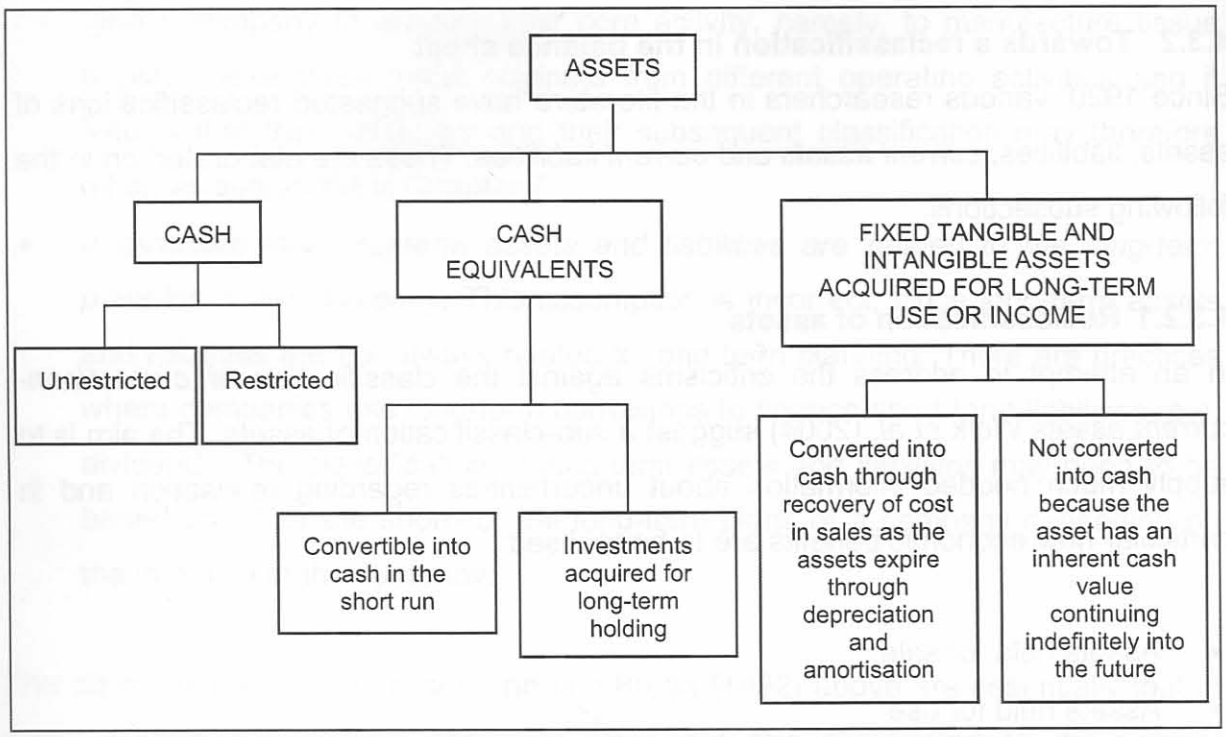


Figure 4.2 Classification of assets according to characteristics (Adapted from Mauriello 1963)

According to Mauriello's (1963) classification, assets are partitioned into cash; cash equivalents and fixed tangible and intangible assets acquired for long-term use or income. Taking basic characteristics of assets into account when conceptualising a classification framework for accounting information is one of the properties of classification as discussed in Section 3.6. The use of the two categories of cash, namely, unrestricted and restricted, will enable users to see which cash is available for use in the company. This issue is addressed in Chapter 7 where a classification framework for accounting information is proposed. Cash equivalents are subdivided into convertible in the short run and investments acquired for long term holding. This subdivision allows users to determine which cash will be available in the company for future use. The classification of fixed tangible and intangible assets based on whether they will be converted into cash or not, aims to supply more relevant information that will assist a user in the prediction of future cash flows.

4.3.2.1.1 Reclassification of research and development

Various companies engage in *Research and Development* (R&D) activities to achieve future economic benefits. Research is expected to yield useful results over a period of time and could, therefore, be classified as a deferred asset. Governing

bodies, however, raise the following three, closely related, objections: 1) there seems to be uncertainty on whether the investment made will yield the necessary results, 2) the relationship between expenses laid out and the benefits gained is often not clear, or appears to be absent and 3) it is difficult to measure the future benefit of the proposed research (Solomons 1986). Miller and Bahnson (2002) refer to R&D classification as a practice that started in 1974 and is still in use. To enable the correct classification of R&D all the relevant attributes of the transactions and objections raised above need to be considered carefully when developing a classification framework for accounting information. Example 7.3 in Chapter 7 indicates the various classification possibilities of R&D based on the changing of attributes over time.

4.3.2.1.2 Reclassification of long-lived (fixed) assets to be sold

Fixed assets that are to be sold in the next 12-month period of a company are with current practice classified as fixed assets. However, since these fixed assets have a shorter life expectancy in the company and their liquidity increases during the following year, they should not be viewed as fixed assets. Meeting and Luecke (2002) suggest that long-lived assets (fixed assets) held-for-sale should be reclassified using the following preconditions:

- Management has to commit to the selling of the asset.
- The asset is in a condition to be sold immediately, subject only to the terms and conditions normally in force when selling such an asset.
- The company is actively marketing the asset at a reasonable price, compared to its current fair value.
- A high probability exists for the sale of the asset within one year. Also, the transfer of ownership can be completed in the same year.

The above preconditions are in accordance with the Financial Reporting Exposure Draft (FRED) 32 – July 2003 (Accountancymagazine 2003). Since the original intention of using the asset to generate income has changed to selling the fixed asset it follows that its classification will change. In reclassifying assets to be sold in the next financial period, more useful information regarding a company's economic facts is revealed to users of financial statements. This is because users will be able to see

the decrease in fixed assets based on the intention to sell the assets. This requirement is addressed by the proposed framework in Chapter 7.

4.3.2.1.3 Towards a reclassification of intellectual assets

A number of attempts (Skandia 1994, Brooking 1997, Edvinsson and Malone 1997, Roos, Roos, Edvinsson and Dragonetti 1997, Gröjer 2004 and OECD 2006) have been made at classifying and measuring intellectual assets but some conceptual, methodological and practical difficulties were experienced. Methodological difficulties are experienced as intellectual assets are also known as intellectual capital, intangibles or even knowledge capital (OECD 2006). It therefore follows that it is difficult to classify an item which has different names and no fixed taxonomy. Globally there appears to be no accepted definition or classification of intellectual assets. However, there appears to be some agreement on the following three core characteristics: 1) a probable source of future economic profit, 2) a lack of physical substance, and 3) it can be traded or retained by a company (OECD 2006). Therefore, there is a need to research the attributes of intellectual assets whereafter a comprehensive definition can be developed which will lead to a more fitting classification of intellectual assets.

Some accounting bodies (e.g. FASB, IASB, SAICA) use the term intellectual assets while some researchers (e.g. Brooking 1997, Edvinsson and Malone 1997, OECD 2006) talk about intellectual capital. Hence, further research is needed to establish a classification for *intellectual capital* in order to determine whether these two groups are talking about the same thing or whether they are talking about two different concepts. In this endeavour an investigation ought to be launched to decide whether intellectual capital is current source or future source of funds.

Currently, R&D, patents and trademarks are commonly included in the classification of intellectual assets. However, the definition needs to be broadened to include human resources and capabilities, organisational competencies and relational capital (OECD 2006). The Measuring Intangibles to Understand and Improve Innovation Management (Meritum) project classifies intellectual capital into three classes:

1) Human capital: knowledge, skills, and know how, i.e. that which employees take with them when they leave the company.
2) Relational capital: Resources from outside the company, e.g. customers, suppliers and R&D partners.
3) Structural capital: knowledge that stays with the company when employees leave (OECD 2006).

A possible division of intellectual capital (IC) into various other forms of capital is presented in Figure 4.3.

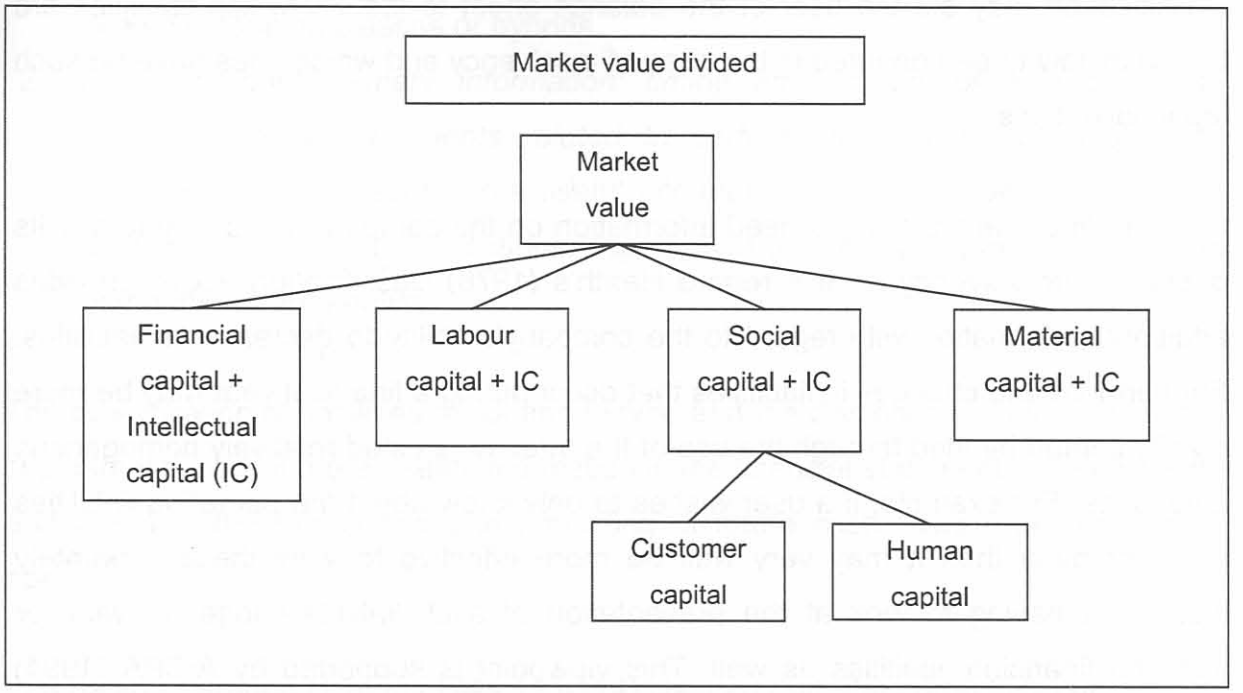


Figure 4.3 A possible division of market value (Source: Gouws 2007)

In Figure 4.3 market value is divided into four classes, namely, financial capital, labour capital, social capital and material. Intellectual capital is included in each of these. Labour capital is viewed as all capital involving employee-related activities. Social capital is viewed as customer-related items, e.g. satisfaction, repeated business, price sensitivity, etc. An example of human capital is knowledge, skills and the abilities of employees that can "leave" the company, while material capital may include items such as brand names, patents, copyrights and so forth.

4.3.2.2 Reclassification of liabilities

Heath (1978) suggests that liabilities be classified into three types, namely, operating, taxation and financing liabilities. If one assumes that the attributes of transactions leading to the classification of liabilities are taken into account, it follows that the classification will differ for the three suggested types. Wolk *et al.* (2004) support Heath's suggestion when they propose the following separate classification of liabilities based on the types listed above: 1) contractual liabilities, 2) constructive obligations, 3) equitable obligations, 4) contingent liabilities and 5) deferred credits. According to Wolk *et al.* (2004) this will enable users to evaluate the inherent attributes of the various kinds of obligations attached to each liability. Such classification may aid the user of the balance sheet to identify which liabilities are bound by law to be honoured in the case of insolvency and which ones have no such legal obligations.

Users of financial statements need information on the company's capacity to pay its debts, i.e. its solvency. In this regard Heath's (1978) classification above provides additional information with regard to the company's ability to decrease its liabilities. Furthermore, the changes in liabilities that occur during a financial year may be more readily comprehended through the use of the three suggested relatively homogenous categories. For example, if a user wishes to only know about the operating liabilities of a company then it may very well be more effective to view these separately instead of having to look at the presentation of such liabilities together with for instance financing liabilities as well. This viewpoint is supported by AICPA (1994) when they state that the users whom they interviewed wish to see a split between core and non-core liabilities. The classification of liabilities according to type may aid in the reporting of more useful information to users of financial statements.

4.3.2.3 Reclassification of current assets and current liabilities

The operating cycles of companies differ and in this regard Hendriksen and van Breda (1992) claim that the *current/non-current* classification does not provide the information needed by users. Their claim is based on difficulties with regard to 1) the interpretation of the operating cycle and 2) the lack of evidence that the *current asset* classification is relevant to any specific user's needs. Hendriksen and van Breda

(1992) call for other classification methods to be researched. They suggest two alternatives:

1. *Classify liabilities based on the type of credit sources available to the company.* If the type of credit sources available to a company is internal capital (funds) and external capital, it follows that more useful information is supplied to users because they can determine whether the company can fund itself through internal funds or if the company has to rely on external credit sources. When liabilities are classified according to the type of credit sources, their different attributes are taken into account and they are partitioned accordingly, resulting in no overlapping classes or hybrids.
2. *Disclose supplementary information: timing and amount of expected cash receipts and disbursements related to certain assets and obligations.* By following this suggestion more useful information will be disclosed to users to enable more accurate predictions, especially if the time and amount of cash in and outflows are known.

The classification of liabilities according to type and the disclosure of information in a supplement present more useful information in the financial statements of a company and assist in the forecasting and predicting of future cash flows (refer to point 2 above).

In a dated reference Gilman (1944:113-114) claimed that "the current classification is not a good classification, considered either on its own merits or from the special viewpoint of accounting". Certain items classified as *current assets* or *current liabilities* need to be excluded from the current classification. In this regard Gilman (1944) suggests that it makes sense to exclude the items in Table 4.1 from the classifications in use:

Table 4.1 Suggestions for the exclusion of items from traditional classification

	Item excluded	From
1.	Early maturity of a long-term debt	Current liabilities
2.	Cash held in anticipation of purchasing a fixed asset	Current assets
3.	Receivables from the sale of fixed assets	Current assets
4.	Inventories in excess of one year's normal requirements	Current assets

Adapted from Gilman (1944)

The practice suggested by item 1 in Table 4.1 is already employed in financial statements. The classification of item 2, *cash held in anticipation of purchasing a fixed asset* as not being part of *current assets* would lead to a better forecast of cash available for other operating activities. The reason is that companies need cash to replace or expand their fixed assets and this cash usually gets absorbed by other operating activities. Using this classification to earmark the cash may be much needed. The exclusion of *receivables from the sale of fixed assets* (item 3) from *current assets* is necessary because it does not usually form part of the core activities of the company. When inventory, item 4, is used during a period that is longer than the operating cycle of 12 months, a classification other than current is needed (refer to Section 4.3.2.3.1). Suggestions 2 and 4 in Table 4.1 are taken into account in Chapter 7 in the proposed classification framework for accounting information.

It is plausible that a classification framework that supplies more useful information to the users of financial statements than the *current/non-current* classification could be defined. In this regard Heath (1978) also calls for an alternative to the *current/non-current* classification, aimed at providing more useful information for evaluating a company's solvency. Heath's recommendations are summarised below:

1. *Attributes of specific assets and liabilities should be disclosed as a supplement.* Supplying additional information like attributes (for example core, restricted, deferred, etc.) may guide users in their decisions but one should guard against information overload.
2. *Sources of credit available to companies may be used as a basis for the classification of liabilities.* Hendriksen and van Breda (1992) both put forward this recommendation, and it is discussed in the first paragraph of this

subsection. Users may need this information to enable them to predict the company's future as they will be able to see if the company uses internal or external sources of funding.

3. *The traditional method of asset classification according to their order may still be used but not classified as current/non-current.* The order for classifying assets is currently based on either increasing or decreasing liquidity. According to Wolk *et al.* (2004) the current liquidity measurement is a very coarse metric. Nevertheless, in the absence of a better technique, the classification of assets according to liquidity, either increasing or decreasing, can still be used provided one has a correct measure of liquidity.

The above recommendations suggest a revision of the *current/non-current* classification and this is in part the topic of Chapter 7.

4.3.2.3.1 Reclassification of inventory

In 1944 Gilman (1944) proposed that fixed assets and inventories be classified as deferred charges to revenue. His argument was that both represent a credit facility, namely, future revenue that could be used to cover present costs. When classifying fixed assets as deferred charges to revenue, one should take into account that only fixed assets used in the operations of the company may yield future revenue to cover the costs. Inventory may be classified as a deferred charge to revenue as it will most certainly be sold in future, resulting in revenue to cover the present costs with the exception of obsolete stock. Fitzgerald (1951) argued that inventory should be classified as fixed assets rather than as *current assets*. If inventory is to be classified as a fixed asset, only a portion will be viewed as fixed since a company always needs a minimum inventory level to carry on with its operations. Fitzgerald (1951) also views inventories and plant as charges kept over to be covered by future income which should therefore be classified in the same way. The idea of the reclassification of inventory as fixed assets is shared by Kempner (1960) based on the fact that a company needs to have a minimum inventory level to operate. This classification will be accurate if the items are valued at cost. Kempner (1960) suggests that inventory be classified directly below *current assets*. For the sake of argument, minimum level inventory, slow moving inventory and finished goods all have different attributes which may result in a different classification. The classification of inventory needs to

be done in accordance with its defining attributes, using the proposed initial measurement in line with Corollary 3.2 in Chapter 3.

4.3.3 The liability-equity debate

There is an ongoing debate as to whether some financial instruments should be classified as equity or as liabilities since they possess characteristics of both. The FASB (2003), in their FAS 150, provide some guidelines in this regard but there are researchers (e.g. Clark 1993, Forker 2003, Balsam 1994, Bohan 2003, Kirschenheiter, Mathur and Thomas 2004) who have questioned the outcome of these guidelines. Some of the items in question have attributes of both equity and liabilities, hence a possibility may be to create an entirely new class in which such items may be placed, since items classified together need to have the same attributes and may not share attributes of two or more different classes.

The FASB (2003) oppose the creation of a new class. They argue that before FAS150 was issued, the statement of financial position classified certain financial instruments between the liabilities and equity section. Concept Statement 6 does not permit classification outside the classes of assets, liabilities, and equity. If an item does not fit into a class, it would necessitate that the Board define a new element in the financial statements. However, the Board decided not to follow this course of action, partially because, among other concerns, an undesirable precedent would be created where classes are added whenever new instruments are developed that are difficult to classify. In essence therefore the FASB (2003) warns against following an easy route by simply classifying an item into the new class whenever it becomes difficult to choose between equity and liabilities. However, the classification of the FASB rests on the current accounting equation 3.1 which may need to be revised to include a new class. In July 2003, the FASB (FASB 2004) launched phase 2 of FAS150 to reclassify single-component financial and other instruments. They make the distinction between equity and liabilities based on both the following characteristics: 1) whether it has a settlement requirement and 2) whether it is an ownership instrument. They classify perpetual instruments, direct ownership instruments and indirect ownership instruments as equity and all other instruments as liabilities or assets. The fact that the FASB is developing FAS150 in phases may also lead to classifications which may be more adequate, since a phased development

allows for iteration and a possible revisit of previous decisions, hence a better outcome.

According to IAS 32 (AC 125) "the issuer of a financial instrument shall classify the instrument, or its component parts, on initial recognition as a financial liability, a financial asset or an equity instrument in accordance with the substance of the contractual arrangement and the definition of a financial liability, a financial asset and an equity instrument" (IASB 2004:para 15). Coupled with this claim is the view that it may be scientifically justified to extend the current accounting equation 3.1. The IASB (2004) guideline recognises that an *initial* recognition is to be applied to the item to be classified, in essence agreeing with the initial measurement proposed in Chapter 3 of this thesis (refer to Corollary 3.2).

Accountants are obliged to disclose the nature of the elements of a company's capital structure to enable users to evaluate (Clark 1993):

- how debt and equity instruments will influence the availability and allocation of a company's resources;
- the gearing, return on equity and the cost of resources and
- the risk and uncertainty on the company's value (FASB 1978).

Naturally in the classification of items belonging to the classes of equity or liabilities or even a new class between these, it is of the utmost importance that the needs of users of financial statements ought to be taken into account.

Whether an item is classified as a debt (i.e. a liability) or equity has an impact on the cash flow, value and risk of a company. According to Clark (1993:15) financial economic literature provides a basis for the following conclusions:

- Capital structure affects future cash flow: therefore, the distinction between debt and equity is important to users for decision-making.
- Options on a company's own shares are liabilities.
- Preferred shares are a liability in most cases.

- Separating compound instruments into fundamental financial components has information content.

The distinction between debt and equity is of importance to users of financial statements since they base their decisions on the future cash flow of a company which in turn is influenced by the company's capital structure.

Components of the capital structure of a company have an impact on the cost of capital of a company. According to Clark (1993:22), the capital structure of a company has a "long-run" influence on the future cash flow of a company and will, therefore, influence distributions to investors. Hence it is important that items be classified as uniquely as possible and not forced into a particular category. This may necessitate the creation of a new class for the classification of items with characteristics of both equity and liabilities i.e. items which do not fit exclusively into the class of either liabilities or equity.

The FASB suggested that, in order to supply useful information to users regarding liquidity (a liability may have a liquidity level) and ownership (part of equity), there needs to be a classification based on ownership criterion and settlement criterion (FASB 2003).

Next some examples of items with characteristics of both equity and liabilities are presented.

4.3.3.1 Items with characteristics of both equity and liabilities:

In this section two such items are discussed, namely: 1) redeemable preference shares and 2) outstanding employee stock options (ESOs).

4.3.3.1.1 Redeemable preference shares

A practice applied constantly by financial managers is the attempt to keep debt off the balance sheet. One relatively new example of this is redeemable preference shares. In essence these may be viewed as debt trying to pass as owners' equity. Nair, Rittenberg and Weygandt (1990) together with the SEC (Securities and Exchange Commission) propose that it is a liability based on the "mandatory

redemption feature". Hence redeemable preference shares currently fit into a so-called no-mans land (Wolk *et al.* 2004: 343) and may be an ideal candidate to be classified into a third in-between class.

4.3.3.1.2 Outstanding ESOs (Employee Share Options)

According to the IASB's (2004) IF2 BC, outstanding ESOs are classified as equity. Balsam (1994), Bohan (2003) and Kirshenheiter *et al.* (2004) regard outstanding ESOs as liabilities. "An equity instrument is only issued on the exercise date as opposed to the grant date" (Sacho and Oberholster 2005:94) and ESOs are therefore to be classified as liabilities because these reflect the economic substance of ESOs best. Although the IASB's classification of ESOs as equity is consistent with its conceptual framework, it has the disadvantage that it fails to comply with its stated objectives of providing transparent and comparable information to the users of financial statements (Forker 2003). Paying the employee creates a potential obligation and therefore ESOs need to be classified as liabilities.

The conventional finance relationships in terms of the level and growth of profitability and cash flows are maintained when outstanding ESOs are classified as liabilities (Kirschenheiter *et al.* 2004:137). The classification of ESOs as liabilities provides economically reliable and useful accounting information to investors and shareholders, but is in contrast with SFAS 123 and 128 which suggest the classification as future equity holders. The classification as equity distorts the financial statements (Kirschenheiter *et al. 2004)*. They base their argument on three reasons: 1) the deferred taxes associated with the ESOs are treated as liabilities, 2) diluted EPS is based on intrinsic value rather than fair value, and 3) the implicit cash flows paid to option holders at exercise are never recognised. There are two issues to be considered in the classification of ESOs: 1) time with regard to future equity holders, and 2) the capitalistic model, which regards current shareholders as the only "owner".

In the next section focuses on classification issues in the income statement.

4.4 Classification in the income statement

It is general practice to partition the income statement into two categories: *above-the-line* representing operating income, and *under-the-line* representing non-operating income (McKee 2005). The items classified *under-the-line* may affect the valuation of the shares of a company. According to Ellis and Williams (1993), when the Accounting Standards Board (ASB) issued Financial Reporting Standard (FRS) 3, companies were no longer able to smooth Earnings Per Share (EPS) by moving unusual items below the line or using their own discretion on which items are exceptional and which are extraordinary. The classification system of accounting should not allow for income smoothing. An analysis of income smoothing and big baths and their effect on the integrity of information portrayed in the financial statements is presented by van der Poll (2003). Classifying items above-the-line and then again under-the-line according to the needs of the company management may not be in the best interest of users as any classification of accounting information needs to be done objectively and not on the basis of subjective intentions.

Revenue is currently classified according to time and actions, namely, 1) during production, 2) when the product is completed, 3) when the product is sold, and 4) when cash is received (Wolk *et al.* 2004). When the classification of an item is made on temporal attributes it needs to be disclosed as additional information to users as it may guide them in their decisions. The classification of costs is based on the matching assumption. Wolk *et al.* (2004) state that, if possible, costs are matched with revenue directly produced as a result of the cost. If there is an indirect cause-and-effect relationship, then cost is matched in a relational and systematic manner. Lastly, costs are classified as period expenses if there is not even an indirect cause-and-effect relationship. Relationships and attributes are the building blocks of a classification framework, as stated in Chapter 3.

The classification of items as expenses (an outlay that cannot be directly related to the core activities of a company) or as costs (a sacrifice made by a company when conducting their core business) influences the net income of a company. Hendriksen (1982) indicates that net income may be presented as: 1) value added, 2) company income, 3) net income to investors, 4) net income to residual equity holders, and 5) net income to shareholders. The presentation of net income is

influenced depending on whether deductions from income are seen as expenses or income distributions. In a proposed classification framework for accounting information, deductions from income need to be clearly identified as expenses or income distributions (costs) to enable the correct presentation of income. This classification model is developed in Chapter 7 of this work.

Costs and revenues may be classified using different methods. Thacker (1962) suggests the following useful methods of classification of costs and revenues:

1. ***Functional classification:*** *The classification of costs and revenues are based on how they influence the final product.* Since companies have activities that can be divided into core and non-core activities it follows that the classification of costs and revenues according to their influence on the final product may lead to a financial statement containing information that is much more useful to the user. In this thesis the functional model of the income statement is used.
2. ***Object classification:*** *Costs and revenues are classified based on the type of expenditure or revenue. The income statement in which such classification manifests is called an object income statement.* Further consideration of an object income statement is beyond the scope of this work, since in this thesis an accounting classification for the functional model of the income statement is developed in Chapter 7 (see also point 1 above).
3. ***Management efficiency classification:*** *Shareholders choose a management which will, in their opinion, maximise profits and return on investments.* This statement claims that shareholders will invest with a company whose management displays an ability to maximise profits. The maximising of profits can take place, quite possibly because different classifications for different purposes are employed by management.

Any of the functional, object and management efficiency classifications for the income statement can be taken into consideration when the proposed classification framework for accounting information is developed, but in this thesis the functional model is chosen in Chapter 7.

happens because the acquired service assets have been consumed, thereby decreasing the entity's equity (IASB 2004). Share-based compensation has an inverse relationship with the company's share price, indicating that investors recognise such compensation as an expense (Aboody, Barth and Kasznik 2001:2-3).

The granting of share options to employees is an internal transaction since no outsiders can participate and, because ESOs can never be sold, they cannot be recognised as expenses (Derieux 1994:41). According to Sacho and Wingard (2004), this statement by Derieux (1994) is unsubstantiated because employees of a company and even its shareholders are separate from the company. Companies are seen as separate legal personae that exist apart from their shareholders and employees in most countries.

In the following section, the view of analysts on accounting classification and, in particular, the reclassifications done by analysts are discussed.

4.5 Analysts and the classification of accounting information

In accounting, accounts are divided into three categories: assets, liabilities and owners' equity (refer equation 3.1). If an account does not fit into any of these categories, Sprouse (1966: 45) calls the account a "what-you-may-call-it". According to Sprouse (1966), analysts who determine whether these accounts are contra assets or an element of stockholders' equity, and who reclassify these accounts are almost certain to have less information than the accountant in doing so. It may be deduced that this reclassification of accounting information is necessary because the known attributes of items or transactions are not taken into account when the items are classified. Therefore, a classification framework for accounting information that takes attributes of items and transactions (as proposed in Chapter 7) as well as users' informational needs into account is a possible solution to the problem of erroneous reclassifications or items not fitting into a specific category.

Analysts often reclassify accounting information to be able to perform a different analysis of the said information. Naturally they need precise assumptions when they reclassify the information to enable them to correctly interpret the content of financial statements (Stickney *et al.* 2004). Stickney *et al.* (2004) continue by claiming that, if

analysts cannot make assumptions that are reasonably precise they should resist the temptation to make or use any such assumptions. Analysts should be aware of the differences in the classification of accounts when interpreting the analysis based on the financial statements of a company. Since analysts rely on the information supplied to them for the analysis of financial statements, a comprehensive classification framework for accounting information that supplies additional information, for example, operating cycles and even the attributes used when the classification took place, may result in analysts having to make fewer assumptions and reclassifications.

Accountants tend to be more conservative when confronted with uncertainty. For example, when an exceptionally high income is expected an accountant may decide to delay the display of such an amount in the financial statements until its realisation is certain. However, such conservatism tends to result in a lack of good quality information for the analysis of financial statements (Stickney *et al.* 2004). This idea is supported by Miller and Bahnson (2002) since they suggest that quality financial reporting should entail more complete information to reduce uncertainty, as described in Section 3.4. A possible solution to this uncertainty is to reveal on a pro-rata basis the uncertain items in the classification framework (e.g. if the probability of the realisation of an exceptionally high income in the above case is 20% (say), then only 20% of the expected amount is displayed and classified as income), or, as suggested by Miller and Bahnson (2002), the inclusion of more complete information.

According to Higgins (2004), there is a difference between economic and accounting earnings, leading to a valuation problem and resulting in possible misrepresentation of earnings and market value information of a company. Although the financial statements have their limitations, they may still prove to be a good foundation for the analysis of a company's information (Higgins 2004). Assuming that all known and relevant attributes of transactions are taken into account, it follows that differences between economic and accounting earnings may be addressed effectively. Therefore, the classification framework for accounting information developed in Chapter 7 takes the attributes of transactions into account as well as the requirements of more than one group of users.

Share prices of companies are influenced by many factors. According to Lev and Thiagarajan (1991), quality adjusted earnings for non-sustainable gains and losses provide a better explanation of changes in share prices than reported income. Since earnings are adjusted for non-sustainable gains and losses, it follows that investors who adjust the financial statements, reclassify certain information to reflect economic reality. For the sake of argument, non-sustainable gains and losses could have the attributes which classify them as exceptional or non-core earnings, and thereby lessen the necessity to reclassify the information. Therefore, accounting information that is classified according to the known attributes of transactions may provide information that is more useful to the user.

The emphasis of analysts has moved from which items are classified as working capital to how much cash will be received and when, according to Heath (1978). This view is shared by Schroeder *et al.* (2005) when they claim that the total of *current assets* reveals the amount of cash that might be received in the next financial year. However, the user has to decide how much will be realised based on his or her own judgement. Classifying according to cash and cash realised is encouraged by Mauriello (1963) and Wolk *et al.* (2004). Since a company has first-hand information on when and how much cash will be received, it follows that analysts may benefit from the classification of items according to the time of realisation and the amount realised. This may be achieved when attributes of transactions are taken into account at the time of recording (past) and revised at the time of reporting (present and future).

Next the problem of classifying financial information for window dressing purposes is discussed.

4.6 Classification for window dressing

Window dressing in the financial statements may influence the integrity and quality of such statements. Griffiths (1995) states that the preparation of financial statements is often based on subjective judgements that influence the quality of the final product, despite enhancements and positive improvements made to accounting guidelines. Such subjectivity may lead to window dressing in the financial statements of a company through the classification of accounting information. "It is not just the figures

themselves which can be adjusted to suit a company's particular requirements. For the creative accountant the way the numbers are packaged can also have an important influence" (Griffiths 1995:1). When figures are classified in different ways, the outcome can be seriously affected and so are decisions, e.g. the integrity of information based on book entries may differ from the integrity of information based on real transactions. Book entries are used to classify figures in different ways and may be used to classify accounting information in such a way that the figures appear more favourable for the company (van der Poll 2003). Therefore, a classification framework for accounting information which takes the attributes of transactions into account could have as an aim the reduction of possibilities of classification for window dressing.

The creative accountant may use many different techniques, namely, "delay and defer", or "accelerate and allocate" (Griffiths 1995:187; Mulford and Comiskey 2002). The first technique pretends that there is no cash around, while in fact there is cash available. The second technique creates the illusion of available cash, while in fact there is no surplus cash. This phenomenon is reminiscent of the first law of Newtonian physics which states that matter and energy cannot be destroyed; neither can it be created if it did not exist in some or other form beforehand (Halliday, Resnick and Walker 1997). The cash flow of a company is arguably one of the best barometers in assessing a company's financial health since no amount of window dressing can influence the absence or availability of cash. It is plausible that a classification for accounting information revealing the *real* cash flow of a company may help to prevent this kind of window dressing.

Companies like to treat long-term funding i.e. off-balance-sheet finance and borrowings, as equity rather than debt because it has positive implications for the gearing ratio of a company (Griffiths 1995). It may be deduced from this claim that companies can classify items based on their own intentions rather than on good practice even though it is not in the best interests of the user. Therefore, a classification framework for accounting information may aim to diminish the ability of management to decide where to classify an item simply to allow for a better financial picture to be reported. Companies can inflate their cash position by deferring payments or classifying payments to the next financial year. These payments can

include staff bonuses, redundancy payments or paying creditors without sending out the cheque (Griffiths 1995). Since the deferring of items is also a way of classification, deferred items need to be classified separately in the financial statements to enable users to identify future-related items.

Quality financial reporting should portray all the important details of a company and its operations. Miller and Bahnson (2002) prescribe that financial reporting should be done concretely, i.e. no important details should be left out. Reporting should also be done at the time when a transaction occurs. Both these two requirements facilitate sound financial analysis. In particular, the smoothing of financial information should not be performed to enhance the financial health of a company, but if it does become necessary to smooth information, then analysts should be the people responsible for applying any smoothing operators on the financial information (Miller and Bahnson 2002). Classification ought not to be used for the enhancement of company figures and, therefore, a classification framework for accounting information needs to take time, i.e. past, present and future into account. This is one of the topics of Chapter 7.

4.6.1 Creative income statement classifications

The process of classificatory smoothing is discussed by Riahi-Belkaoui (2004). It is the process of smoothing income statement statistics other than net income; such activity can reduce variations over time in the income statement statistics of the company. Classificatory smoothing is done by management when they classify intra-income statement items. An example of intra-income classificatory smoothing is when the recognition of income is deferred from a particular year to the following year. The classification of transactions should take place as and when they occur based on the known attributes at the time of recording, and reclassification may take place as time passes and attributes change or more attributes become known.

The manipulation of a company's earnings is not a good practice and may be suspected by the market and users. Kam (1990) opposes what is called earnings manipulation. Generally, analysts and markets are not easily misguided by the devices of management to display economic facts to suit their own goals. An example of earnings management is reporting a subsidiary's acquisition as the pooling of interest instead of as a purchase. Another example is when expenditure is

capitalised instead of being recorded as an expense. Earnings management is, however, in line with GAAP but the manipulation of earnings is not supported by GAAP (Stickney *et al.* 2004). Earnings management is when management chooses accounting policies within GAAP to maximise earnings whereas the manipulation of earnings is viewed as a way to misrepresent earnings in ways outside of the scope of GAAP. The manipulation of financial information may need to be prevented or at least diminished by the development of a high-quality classification framework for accounting information.

The "financial numbers game", as it is called by Mulford and Comiskey (2002:37) manifests in various forms. In the financial statements, numbers may be reported in such a way as to portray another message regardless of how the transaction was recorded. For example, companies may classify nonrecurring gains as *recurring* to enable the reporting of higher earnings. In this context a nonrecurring gain is seen as a once-off opportunity or gain which will not occur again in future. The opposite, namely, when a nonrecurring loss is classified as *recurring* to lower the earnings of a company, also happens. Analysts may subsequently be prepared to exclude the loss from core earnings (McKee 2005). When a company wants to protect their earnings, they make use of provisions where-after the cash flow statement partially reveals the effect of provisions on the profile of a company (Griffiths 1995). The misuse of provisions and nonrecurring gains may be reduced if a classification framework for accounting information presents book entries more prominently. This is addressed in the normative subframework presented in Chapter 7.

The reporting of unusual items in the financial statements is governed by GAAP, and should be classified as part of continuing operations (McKee 2005). Management may, however, disagree with GAAP, and stay with the practice of disclosing unusual items as unusual. The rationale behind this decision is that analysts may view unusual items as not having any effect on the future operations of the company. Earnings management is made possible by the "number of grey areas in classifying" (McKee 2005:173). An example of a grey area is given at the beginning of this paragraph, namely, unusual items classified as part of continuing operations according to GAAP, but not agreed on by management. The so-called "grey areas" in the classification of accounting information is addressed in the proposed

classification framework for accounting information through the use of attributes to classify transactions.

Window dressing takes place in the income statement when individual items are classified under different subheadings, resulting in the changing of important sub-totals and manipulating the users' perception of the financial health of the company (Mulford and Comiskey 2002:295). Table 4.2 presents some examples of the process of classificatory smoothing:

Table 4.2 Classificatory smoothing in the income statement

Smoothing operation	Result
Item moved to or from operating expenses.	Increase or decrease in operating income.
Expenses moved from cost of sales to selling, general and administrative expenses.	Increase in gross profit.
Operation sold at a gain – out of discontinued operations. Operation sold at a loss – into discontinued operations.	Higher levels of income from operations.
Gains or losses classified as extraordinary.	Target level of income from continuing operations is met.

Adapted from Mulford and Comiskey (2002).

If classificatory smoothing is based on the intentions of management it follows that the diminishing of classificatory smoothing will not easily be brought about by a classification framework. For example, under current practice a company has the freedom to interpret GAAP in two ways, for example, because of non-strict rules as indicated by the first row of Table 4.2. This row suggests that an item, for example, an administrative expense, may be classified either as part of operating expense or not. However, creative income statement classifications can be reduced when the framework is built on the classification of transactions based on the relevant and known attributes.

4.7 Classification through the use of time

Time plays a crucial role in accounting. Events from the past are recorded in the current financial statements, and management uses these figures to predict the future. "The many transactions whose effects are reported in the balance sheet or

which themselves are reported in the income statement or statement of retained earnings are all, at the balance sheet date and at the date investigated by the auditor, past events" (Mautz and Sharaf 1961:82). In this thesis three (accounting) time zones, the past (recording), the present (reporting) and the future (events that have future effects at date of reporting) are addressed. "The past is based on reality (i.e. transactions, events and occurrences that already took place), whereas the future is based on mind creation. The integrity of information based on reality and the integrity of information based on a creation of the mind may therefore differ in quality" (Van der Poll 2003:48). In a classification framework for accounting information, time may need to be taken into account as attributes of transactions may change over time, leading to reclassification at the time of reporting.

Figure 4.4 indicates various timelines, namely, the past, present and future, that exist in accounting transactions. However, these temporal attributes are largely ignored in present accounting practices, resulting in different values and unlikely items being grouped together.

ARROW OF TIME

PRESENT

	PAST	FUTURE
Created by Accounting Phenomena	• Real (pure) events • Physical happenings • Occurrences • Transactions	• Artificial (non) events • Simulated happening • Predictions • Contingencies • Allocations • Provisions and reserves
Method	• Double entry (DE)	• Book entry through DE
Orientation	• Matter-orientated • Resource flow-orientated	• Mind-orientated • No flow
Outcome	• Certainty	• Uncertainty
Paradigm	• Accountability	• Decision usefulness

Figure 4.4 Accounting's time paradigm (Gouws 2003)

The past is certain; it is measurable and in accounting it is based on transactions. The future is uncertain; it is not measurable and it contains no transactions (only artificial transactions). Uncertainty about the future has its origin in the present. The integrity of yesterday's information is much higher than the integrity of information about the future (van der Poll 2003). These three time zones are reflected in the proposed classification framework for accounting information presented in Chapter 7, and are further elaborated on below.

Revenue recognised prematurely in the income statement may lead to the influencing of expectations about earning power (Mulford and Comiskey 2002; McKee 2005). Since transactions need to be classified as and when they occur, a classification framework for accounting information has to take the effect of time into consideration. For example, a classifier may need to identify attributes relevant to the past (recording of a transaction), the present (reporting) and transactions with future consequences.

The proposed classification framework for accounting information developed in Chapter 7 has a temporal component since a transaction is analysed for possible past, present or future effects using its attributes.

4.8 Summary and conclusion

A critique on the presentation of accounting information in financial statements has been put forward together with a discussion on the reclassification of information at year-end. The specific problems with regard to classification in the balance sheet are numerous and widespread. The biggest problems in the balance sheet seem to be the liquidity concept together with the *current/non-current* classification owing to the different valuation methods and time frames. Some authors called for selected reclassifications, and analysts also made a contribution. The reclassification of assets, liabilities, *current assets* and *current liabilities* has been suggested. A call for the reclassification of inventory was also made, based on the idea that it is a deferred charge to future income. An exposure draft developed to suggest the reclassification of fixed assets to be sold in the next 12 months after the balance sheet date was discussed. This will undoubtedly lead to fewer problems with the classification of accounting information in the balance sheet.

A discussion aimed at the reclassification of intellectual assets led to the question of whether intellectual assets and intellectual capital is the same item. This question presents a need for further research in this area. The liability-equity debate was also highlighted in this chapter, and the conclusion reached was that there are some items with characteristics of both equity and liabilities which may suggest the need for the development of a new class in the accounting equation (3.1). Specific reference was made to redeemable preference shares and outstanding ESOs.

The income statement has classification problems related to accrual accounting and matching. A reclassification of ESOs as expenses was discussed and argued for in contrast with the equity view of the FASB. It is shown that analysts have to reclassify the information portrayed in the financial statements before they can do a meaningful analysis of the company's information. A proposed classification framework for accounting information may reduce the problem of window dressing in financial statements. Classificatory smoothing is one of the instruments used by management to send different messages to users of the financial statements, and this ill practice may also be alleviated through a proposed classification framework for accounting information. The use of time in accrual accounting and matching also leaves a loophole for the smoothing of information, and a proposed classification framework for accounting information should address this problem.

Chapter 5, which follows next, is a discussion on the research methodology used in this thesis.

CHAPTER 5 RESEARCH METHODOLOGY

5.1 Introduction

This chapter presents an overview of the research methodology (i.e. the set of research methods) that was used in this work. Recognised empirical methods were employed, amongst others an analysis of existing data, namely, an analysis of text data (literature survey), an analysis of numeric data (secondary data analysis) and primary data (a questionnaire) (Ryan *et al.* 1992; Mouton 2004). A comprehensive literature survey was undertaken, an analysis of 93 companies (balance sheets and income statements) listed on the JSE was conducted and a questionnaire was prepared and sent to a large number of listed companies, academics and analysts.

5.1.1 Goal of this chapter

The goal of this chapter is to discuss the research methods that were used in the research reported on in this thesis. In particular the three main methods used are described and discussed. These are a literature survey, an analysis of financial statements (balance sheets and income statements) and a questionnaire.

5.1.2 Layout of this chapter

The layout of the chapter is as follows: Following this introduction the literature survey which was conducted for this study is discussed in Section 5.2. Thereafter, the empirical research component is discussed in Section 5.3. This includes the analysis and the questionnaire that was used for this research. A summary and a brief indication of what is to follow in Chapter 6 conclude the chapter.

The above layout is represented in Figure 5.1

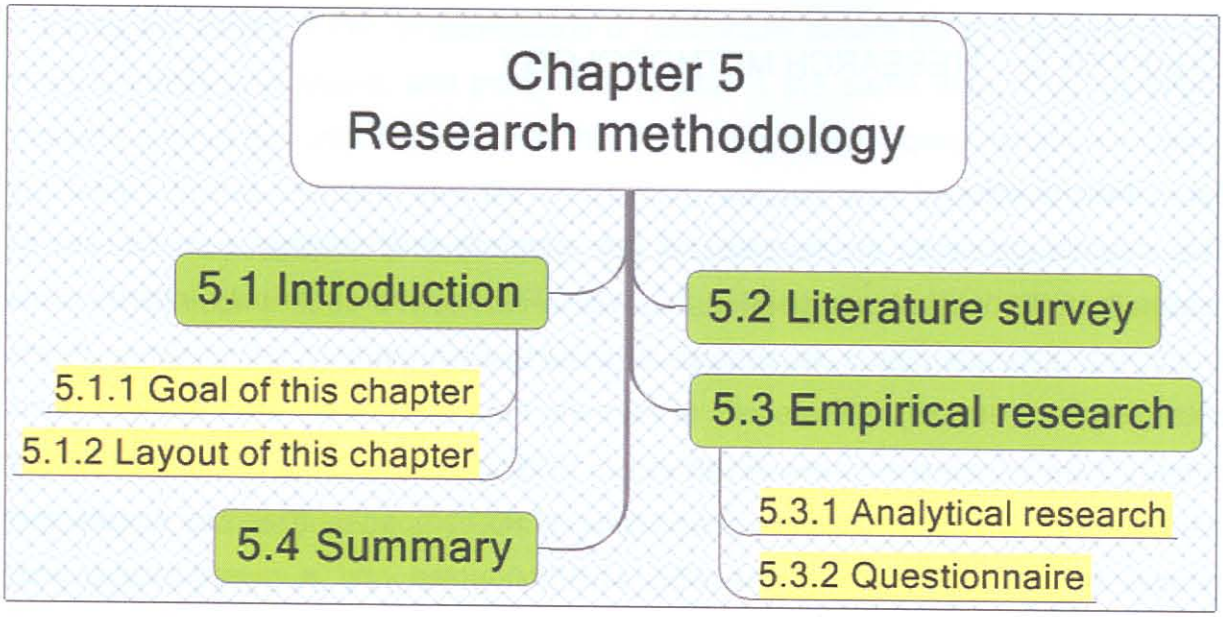


Figure 5.1 A visual representation of the layout of Chapter 5

5.2 Literature survey

To conduct a thorough literature review one needs access to books, conference proceedings, journal articles (national and international), theses and dissertations. Arguably one of the best modern ways to conduct a comprehensive literature survey is to make use of the Internet and the world-wide-web (www). To gain access to a large information base on various topics, access to the Internet is a necessity. The Internet consists of a number of access protocols which feature programs that allow the user to search for and retrieve material.

A major disadvantage of the Internet is that it is a self-publishing medium which means that anybody, even those with very little technical knowledge, can publish on the Internet. This often leads to less trustworthy information, i.e. non-refereed articles regularly find their way onto the Internet. A second disadvantage of the Internet is that the information may be outdated because it is not updated on a daily basis (Library 2006). The reason for this is that people publish material on the Internet and, since it is not readily *visible,* as is a book on a shelf, forget about it. Therefore, cyberspace and the Internet in particular are devoid of a very important general design principle, namely, that "things should be made visible" to allow for optimal use (Norman 1998; van der Poll and Kotzé 2005). One should therefore carefully evaluate any information gathered from the Internet.

A number of challenges that are presented when searches are done on the Internet can be overcome by adhering to the following guidelines (Du Toit 2002):

1. *Be specific with search words* (e.g. spelling, synonyms, singular form, qualified entities, etc.). For example, if one searches for the word "classification", about 272,000,000 references are picked up, but if one qualifies the search by looking for "accounting classification" about 101,000 references are found.
2. *Try several search engines*. Different search engines have access to different parts of the world-wide web (www), and to minimise the possibility of missing important references, the author agrees with the philosophy of using multiple search engines. Two popular search engines used in this work are mentioned below.
3. *Test the trustworthiness of web sites*. It is important to determine whether a web site normally publishes non-refereed content or whether accredited journals and conference contributions are listed there. To this end the author found the JSTOR (2006) site a useful and reliable source.
4. *Stay current and informed* about the subject-related area on the web. The FASB sends out regular updates of important activities and changes in accounting. For this reason, the author joined their newsletter and obtained useful material through this medium.

The Internet searches were mostly done through the electronic library (called Oasis) of the University of South Africa (UNISA). Two other useful search engines used are Google (www.google.com) and Yahoo (www.yahoo.com). Some journal articles are available electronically in PDF (Portable Document Format), which standardises the process of downloading and printing. In this instance the site developed by JSTOR proved to be very helpful. Articles stored on the JSTOR website are offered in PDF, PostScript and TIFF (Tagged Image File Format) formats. JSTOR is a non-profit organisation with the mission to act as a trusted electronic archive (JSTOR 2006). The use of this site was very useful in the retrieval of older articles from accredited journals.

The indexes of books were scrutinised for keywords (e.g. attribute(s), classification, relationships, uncertainty, reclassification, working capital, accountability, decision-making, users) relating to the study so that additional authoritative references could be found. The reference lists of the books and articles consulted usually formed a good source of additional books and articles.

To analyse the natural language arguments quoted in this work the author employed critical natural language reasoning (NLR), as proposed by Ryan *et al.* (1992:157-158). When reasoning about a claim one normally starts with one or more premises and then rationalises from the premises to a final conclusion. Along the way a number of assertions, justifications and explanations are formed, all aimed at justifying the conclusion (Ryan *et al.* 1992). A well-known problem with natural language is that it may at times be ambiguous, as indicated by Meyer (1985) and Ryan *et al.* (1992). Therefore, NLR is often translated into a formal notation such as propositional logic or predicate logic in order to remove problems of possible ambiguity. An example of a sentence in propositional logic is given in Example 2.1 in Chapter 2. However, such translations are beyond the scope of this thesis.

5.3 Empirical research

The empirical research was divided into an analysis of the financial statements (balance sheet and income statement) of 93 companies listed on the JSE and a questionnaire based on the criticisms from the literature survey and statements with regard to specific classification requirements.

5.3.1 Analytical research

The analytical research was based on the companies listed on the JSE. A worksheet was received from the JSE containing the names of 379 companies listed and divided into sectors. The population for the analysis was, therefore, made up of these 379 companies. A population in statistics denotes the sample which is drawn from the total group of objects to be researched (Wonnacott and Wonnacott 1990). Systematic Random Sampling was used to choose 50% of the companies. Below are the steps to be followed in order to achieve a systematic random sample (Trochim 2005):

- Enumerate the members in the population from 1 to *N*.
- Decide on a value for the sample size. Call it *n*.
- Calculate $k = N/n$ which is the size of the interval. If *k* is not a whole number (i.e. an integer), then round up to the next integer.
- Randomly select an integer between 1 and *N*.
- Take every k^{th} unit to consider in the study.

The companies were numbered from 1 to 379. The value of *n* was decided on as 190, which is approximately 50% of 379, i.e. $190 \approx 379/2$. A random number between 1 and 379 was chosen by a computer. The computer generated the number 216 which referred to Anglo American PLC, following the original enumeration. Next $k = 379/190 \approx 2$ was calculated. Hence, Anglo American PLC was named company 1 and the following company, company 2. From there on companies were numbered either 1 or 2, alternatively. At the end of this exercise all the companies numbered as company 1 were chosen and the rest were discarded. Effectively, therefore, every second company of the original 379 was chosen to participate in the sample. New numbers from 1 to 190 were assigned to the companies on a spreadsheet.

The planned analytical research component entailed the analysis of the income statement and the balance sheet of the 190 listed companies selected (refer to Appendix C). This large number of companies proved to be too comprehensive, since the number of columns that had to be recorded for the purpose of the analysis created a major space problem, both for a spreadsheet as well as for ordinary sheets of paper. It was, therefore, decided to make a second random sample from the selection of 190 companies. The numbers from 1 to 190 were placed in a hat and a number was drawn in a random fashion. The number drawn was 58, which corresponded to the company Wooltru Limited. This company was chosen and every second company thereafter. When reaching the last company on the original list, the author looped (using modulo arithmetic) to the top of the list, and again every second company was chosen, totalling 95 companies (Refer to Appendix D). Companies from the banking sector were also excluded as their accounting classifications differ substantially from the other companies. This resulted in the analysis of 93 companies in total.

Two Microsoft Excel® worksheets (also known as spreadsheets) were created for each sector of the selected companies, making use of the balance sheets and income statements published on the McGregor BFA database. Whilst developing the worksheets, it became clear that these would be much more user-friendly if the companies were displayed in columns and the different line items were displayed in rows. All the line items which refer to the same item but are named differently by the various companies were given the same colour code.

In the balance sheet a green border was used to display the assets of a company and a red border used to display equity and liabilities. In the income statement a green border was used to outline the items *above the line,* i.e. items that contribute directly to the generation of revenue and are matched with the revenue, while a red border was used to outline the items classified *below the line*, i.e. items that do not contribute directly to the generation of revenue and/or items which are allocated. Taxation was indicated in blue as an *on the line* item since there is uncertainty whether taxation contributes to the generation of revenue or not. Initially an asterisk (*) was used to indicate where a company allocated an item. However, while finalising the worksheets it became apparent that the use of a numbering system instead of the asterisk would be much more effective as companies tend to change the order of the items around. The first company and the first year of analysis (as described in the previous and current paragraphs) for that company in a sector were used as an indicator of the sequence of the line items for that sector.

Next the primary instrument used in this thesis to collect information, namely the questionnaire, is discussed.

5.3.2 Questionnaire

A questionnaire is a valuable research tool in the gathering of information. To compile a comprehensive questionnaire is potentially a very time consuming, yet rewarding, exercise. Once it has been compiled, methods of disseminating a questionnaire include:

1. hard copies using the postal services;
2. facsimile; and
3. electronic mail (i.e. email).

Each of these methods has its own advantages and disadvantages. The advantage of sending a hard copy using the postal services is that it arrives in the same style and font as intended by the sender. This advantage may be a deciding factor for a researcher whose questionnaire contains a considerable number of mathematical symbols or specialised fonts, and where the preservation of the original style and format is, therefore, crucial. Obvious disadvantages of ordinary mail are that it is slow and mail may be misplaced, destroyed or lost. The questionnaire used in this thesis did not contain a substantial amount of mathematical text or specialised fonts, hence the advantage mentioned would not apply to the questionnaire in this study. The author therefore decided against this option.

One of the advantages of a facsimile is that it is faster than ordinary mail and will in most cases preserve mathematical text and specialised fonts, but a disadvantage is that it may be unreadable because of a break in the transmission or a paper jam that occurred on the receiver's side. Another disadvantage is that the print quality may be poor and the sender would not be able to establish this. Sending a facsimile may also be a time-consuming process since the number dialled may be engaged or out of order and every number must be dialled separately. Because of these disadvantages, the author also decided against the use of faxes.

Based on the high rate of email responses received during the author's MCom research project (van der Poll 2003), it was decided to make use of email again. When an email is sent, the potential respondent receives it almost immediately, making it easier to respond, and thereby making this method one of the fastest available. The disadvantages of email are: the server could be down, the e-mail address may be invalid, or (a primary disadvantage) a company might have a general email address where the email may get lost because nobody takes ownership of it. Unless the sender has the name or specific email address of the potential respondent, the mail may be misplaced or simply ignored. It should be noted that some of these disadvantages apply to ordinary mail and faxes as well.
A questionnaire was compiled using MS Word 2003® in order to determine the problems relating to the classification of information in the financial statements of companies as well as classification in general in accounting.

The following sequence of events was followed to prepare, send and then analyse the responses from the questionnaire:

Step 1: Setting up the questionnaire

The questionnaire was built around 32 statements, with five agreement-disagreement levels for each statement. The levels on which respondents had to decide were 'strongly agree', 'agree', 'uncertain', 'disagree' and 'strongly disagree'. The 32 statements were compiled on the basis of the literature survey done in Chapters 2, 3 and 4 of this study. It was sometimes difficult to convey the real meaning of a statement without leading to misinterpretation of the statement by potential respondents. The questionnaire is presented in Appendix B, and a discussion and analysis of the responses from the questionnaire is presented in Chapter 6.

Step 2: Preparing an electronic mailing list

In order to send the questionnaire to all the listed companies, a database was exported from the McGregor BFA database to Microsoft Excel®. It contained the names, addresses, telephone numbers, fax numbers and e-mail addresses of 398 listed companies. Matching this list with that from the JSE revealed some differences. Unlisted companies had to be removed from the list after being compared with the JSE list. Despite the electronic age, only 317 companies had e-mail addresses listed on the database, hence these companies were selected as respondents. Some of the listed companies are analyst companies (i.e. companies employing analysts). The opinions of financial managers and analysts of financial statements were requested from the 317 companies. Questionnaires were also sent to 190 academics at major universities in South Africa in order to test the viewpoint of the academic sector.

Step 3: Sending out the questionnaire

A total of 507 electronic questionnaires was sent out, 317 to companies and 190 to academics. In the case of companies, the names of the financial managers were obtained from the websites of the different companies. A generic message was

compiled to direct the mail to the financial manager of a company. The email addresses of the academics were received in electronic format, copied to the Novell GroupWise® email facility used at UNISA, and a generic message was sent together with the attached questionnaire after permission from the respective deans had been obtained.

Step 4: Receiving the responses

The first completed questionnaire was received less than 12 hours later. A number of questionnaires were not delivered. Forty (40) emails bounced back because the e-mail addresses did not exist. This left 467 responses that could be expected.

Step 5: Recording of the responses

A record of all responses was kept on the MS Excel address list. Some companies replied to the e-mail, a process which facilitated matching the reply with the original e-mail message. Some companies, however, replied by fax and this complicated the matching process somewhat. On some faxes no company name or fax number was indicated. The reason why a record had to be kept was that a follow-up email was sent to all companies who did not respond to the first email. Naturally, reminding a company that had already responded would be extremely unprofessional.

Step 6: Follow up

Eight weeks after the first e-mails were sent out a reminder was sent to all those who had not yet responded. At that stage a total of 54 completed questionnaires had already been received. The cut-off date was set as 31 January 2006, and by that time a total of 71 completed questionnaires had been received. However, the last questionnaire was received on 14 March 2006. A total of 72 completed questionnaires were received for this study and all of them were incorporated in the results presented in Chapter 6.

5.4 Summary

In this chapter the various research methods used in this work were described. These methods include a literature survey, analytical research and the use of a questionnaire. In total, 95 companies listed on the JSE were analysed and 72 questionnaires were discussed.

In the next chapter the results of the literature survey, the questionnaire and the analytical research are analysed.

CHAPTER 6 RESULTS OF THE RESEARCH

6.1 Introduction

A claim made by Weirich and Reinstein (1992) gives proper justice to the research undertaken in this work. "Efficient and effective accounting or auditing research is often necessary in order to determine the proper recording, classification, and disclosure of economic events" (Weirich and Reinstein 1992:4). A useful classification framework for accounting information may only be brought about as the result of effective and efficient research. This chapter reports on all three endeavours in this regard, namely, the literature survey, the analysis of financial statements and the use of the questionnaire.

6.1.1 Goal of this chapter

The goal of this chapter is to report on the findings and reasoning from the literature survey, the questionnaire and the analysis of the financial statements (balance sheet and income statement) of JSE listed companies. A discussion of each statement in the questionnaire is also conducted.

6.1.2 Layout of this chapter

In this chapter the results that were obtained from the literature survey are presented in Section 6.2. In Section 6.3 the empirical research done in this thesis is divided into two: Section 6.3.1 presents the analysis of the balance sheet and the income statement of various companies, while the results of the questionnaire are presented in Section 6.3.2. A summary concludes the chapter.

A visual representation of Chapter 6 is given in Figure 6.1.

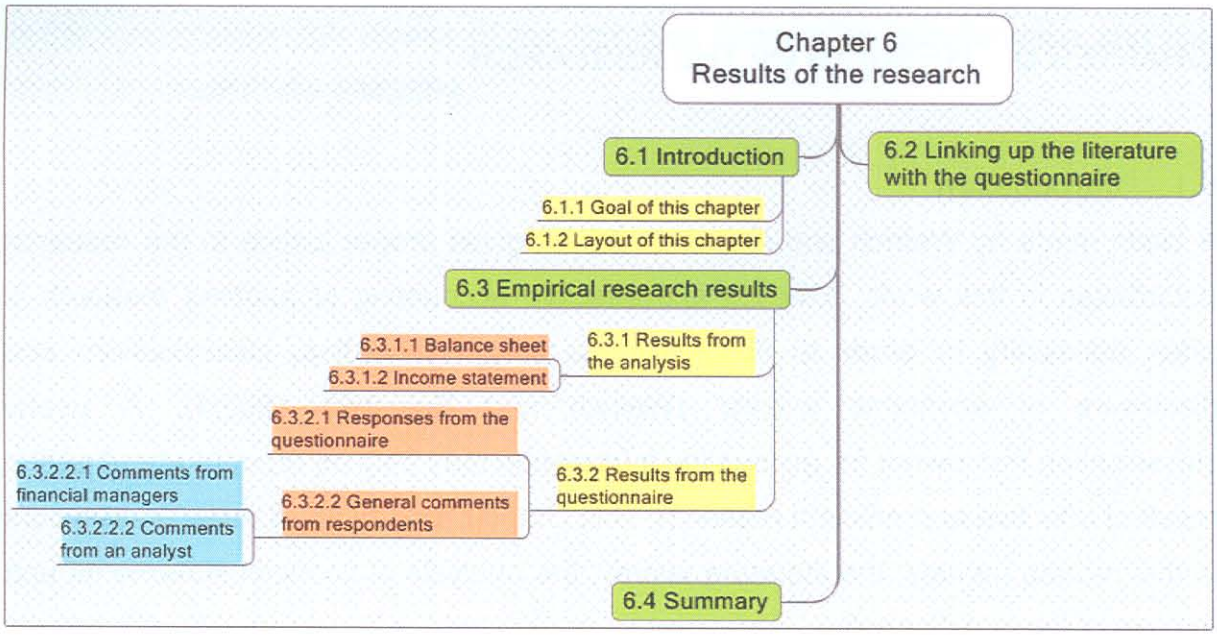


Figure 6.1 A visual representation of the layout of Chapter 6

6.2 Linking the literature to the questionnaire

The majority of the literature consulted supports the main theme of this thesis, namely, that a comprehensive classification framework for accounting information is needed. Many problems in the present classification of accounting information have been revealed over a long period. The following is a visual summary (or mind map) in two figures of the literature review and the questionnaire statements and responses, interrelated with the problem statement that supports the hypothesis of this work. It starts with the problem statement as a basis. Thereafter it links up with the literature survey which it relates to sections in the thesis. Some important quotations from authors, sections from this work and the relevant statements from the questionnaire are displayed as call-outs. The blue dotted lines show the relationships between the relevant sections of this thesis.

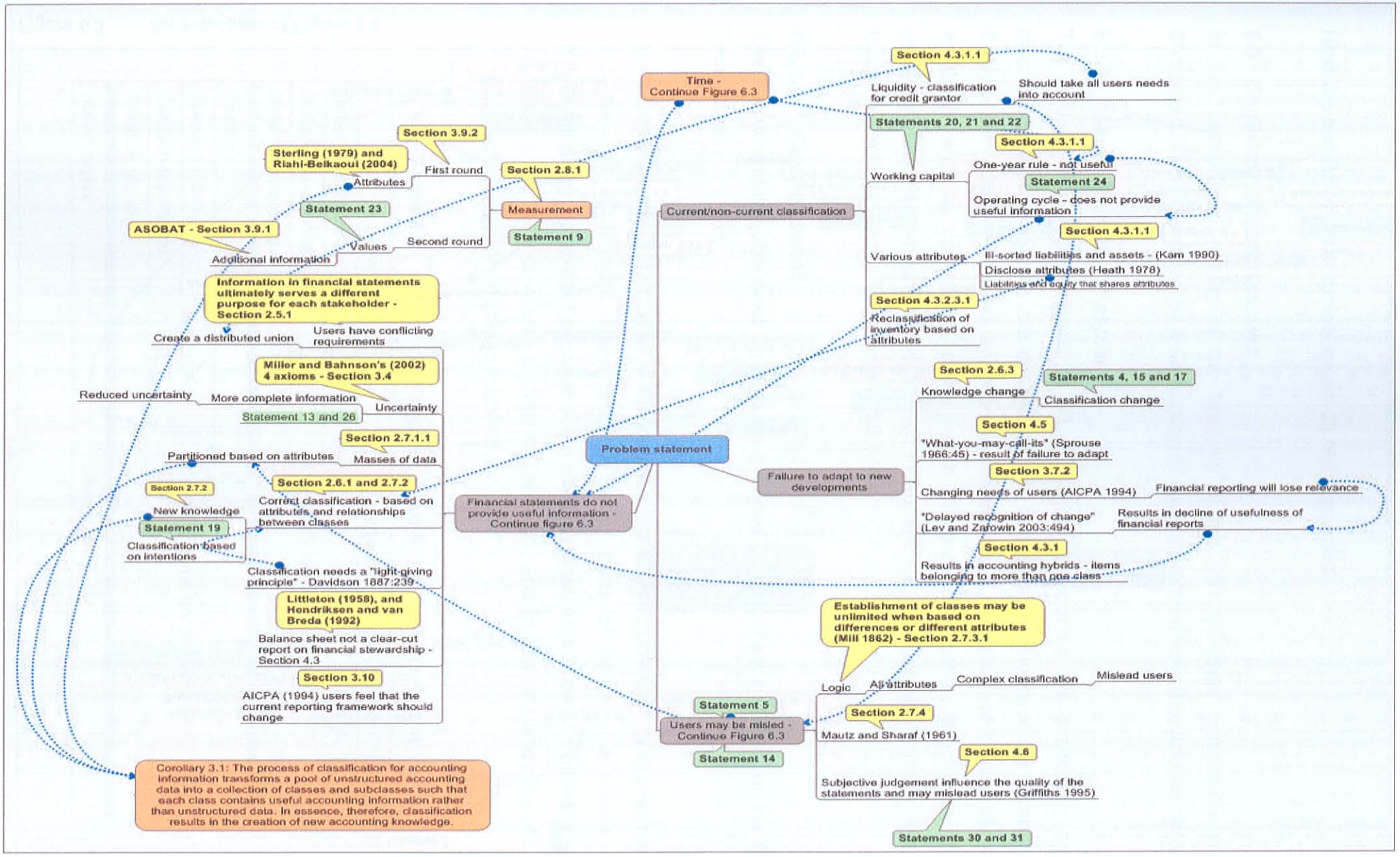


Figure 6.2 **A visual presentation (mind map) of the problem statement, literature survey, questionnaire and the relationships between these**

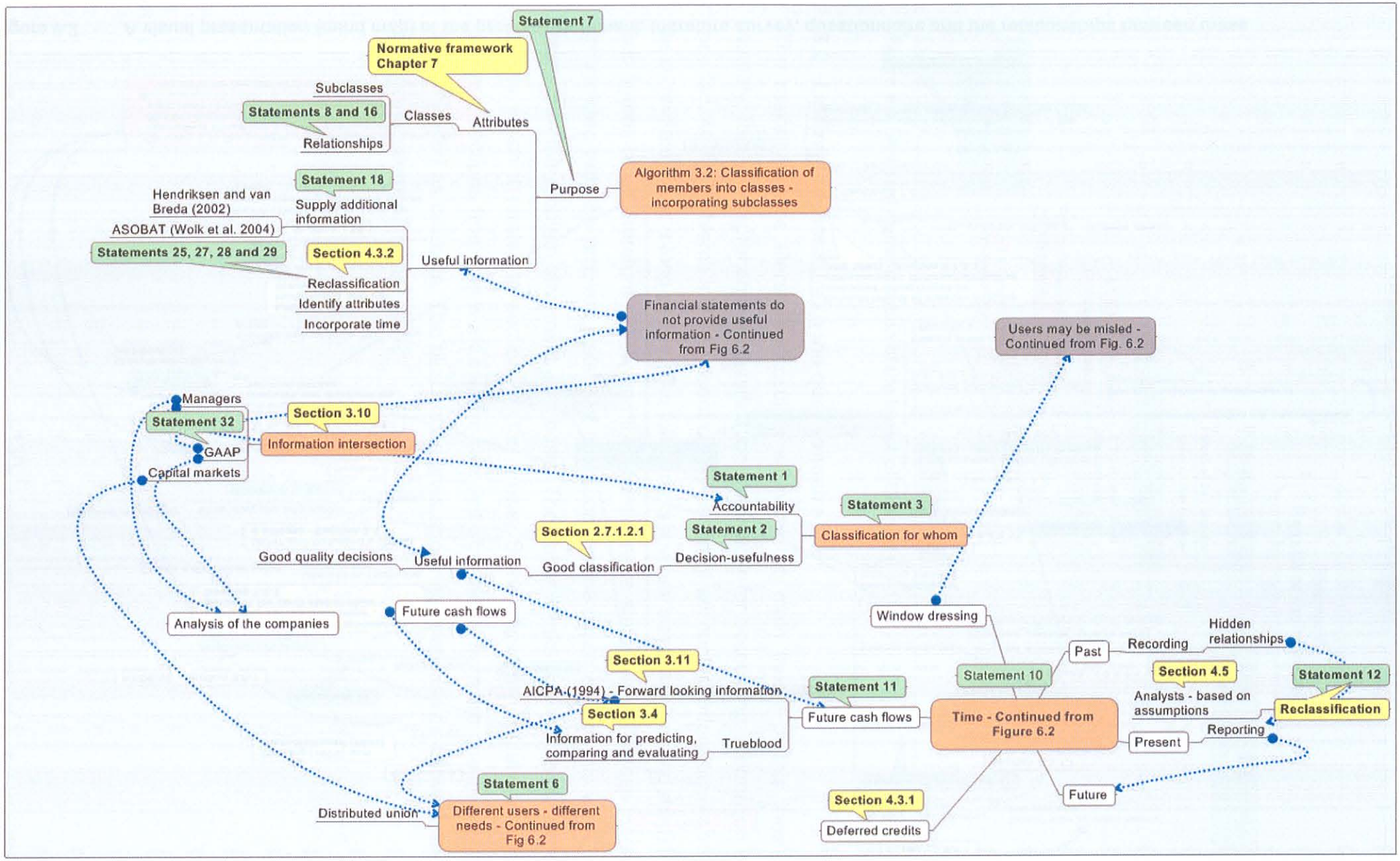


Figure 6.3 An extension of Figure 6.2

Next the results of the empirical research are presented.

6.3 Empirical research results

In this section the results of the analysis of the 93 JSE-listed companies are discussed. This is followed by a discussion of each statement from the questionnaire.

6.3.1 Results from the analysis

The findings from the analysis of 93 JSE-listed companies are presented and discussed. The companies are divided into 28 sub-sectors, and for each company three years of balance sheets and income statements, if available, were analysed to establish whether companies comply with current classification practices. The analysis of all the companies is contained in Appendix E. The results of the analysis follow in Sections 6.3.1.1 and Section 6.3.1.2.

6.3.1.1 Balance sheet

The following were observed through an analysis of the balance sheets of the 93 companies:

1. Much diversity is displayed in the balance sheets when categories are named. The use of different names for the same class of items is a matter of terminology. An extract of some of the aliases (those with three or more aliases) used in the balance sheet is given in Table 6.1, and in each instance the IASB suggested category name is supplied.

Table 6.1 Abstract of aliases used in the balance sheet

Aliases	Suggested category name (IFRS)
Deferred taxation/tax	Deferred income tax assets
Deferred taxation/tax asset	
Deferred income tax	
Taxation	Current income tax assets
Taxation receivable	
Taxation refundable	
Taxation prepaid	
Stated capital	Share capital

Aliases	Suggested category name (IFRS)
Share capital	
Ordinary shares	
Shareholders' equity	
Ordinary share capital	
Issued capital	
Long term debt	Borrowings
Interest-bearing debt	
Long-term borrowings	
Borrowings	
Long-term liabilities	
Long-term loans	
Interest-bearing liabilities	
Interest-bearing borrowings	
Current taxation/tax	Current income tax liabilities
Current tax payable	
Current income tax liabilities	
Taxation/tax	
Taxation/tax payable	
Income tax payable	
Provision for tax	
Taxation/tax liabilities	
Taxation owing	
Receiver of revenue	
South African Revenue Services	
Current taxation liabilities	
Trade and other receivables	Trade and other receivables
Trade receivables	
Trade debtors and other receivables	
Accounts receivable	
Debtors	
Receivables and prepayments	
Receivables	
Debtors and other receivables	
Creditors	Trade and other payables
Trade and other payables	
Trade payables and provisions	

Aliases	Suggested category name (IFRS)
Accounts payable	
Accounts payables and accruals	
Payables	
Trade creditors and accruals	
Retained income/loss	Retained earnings
Retained earnings/loss	
Revenue reserves	
Accumulated losses/profit	
Accumulated loss/earnings	
Retained surplus	
Retained profit	
Retained profits and reserves	
Bank overdraft balances	Bank overdrafts
Bank loans and overdrafts	
Bank overdrafts and trade finance advances	
Bank overdrafts	
Bank overdrafts and short-term loans	
Cash and cash equivalents	Cash and cash equivalents
Deposits and cash	
Bank balances and cash	
Bank balance	
Bank balances and cash equivalents	
Bank and cash	
Cash on call, at bank and on hand	
Cash	
Cash on hand	
Cash on hand and at bank	
Bank deposits and balances	
Cash and cash deposits	
Cash at bank	
Cash balances	
Cash resources	
Deferred tax/taxation liability	Deferred income taxation liabilities
Deferred tax/taxation	
Deferred income tax	

2. Companies sometimes change the order of items around, for instance, while deferred taxation is sometimes reflected as the first *non-current liability*, it sometimes occurs in the middle, and is sometimes given as the last item under *non-current liabilities*. Companies may have different viewpoints of liquidity, which result in different classifications. Liquidity has already been shown as a "crude ranking" by Wolk *et al.* (2004), and it was also suggested that a correct measure for liquidity is not available.
3. The only company of the 93 selected companies to adhere to FRED 32 (*non-current assets held for sale*) was Tiger Wheel and Tyre in 2005. This may be because companies are not aware of this exposure draft as yet, but may classify information in accordance with FRED 32 as soon as an accounting statement is released. Another reason could be that it was the only company that had *fixed assets held for sale.*
4. Ceramic was the only company to display *payments in advance* as a *non-current asset.* When a company makes a payment in advance it may be viewed as a *non-current asset* or even a deferred asset based on the attributes of the transaction. In this work it is argued that a payment which is made in advance should be classified as a deferred asset based on the future benefit.
5. Sabvest did not separate assets and liabilities as *current/non-current*. This is the prescribed procedure if the company considers the information provided in this way to be more relevant and reliable (Cilliers *et al.* 2004), for example, when time is not an issue in the separation. The information is, however, classified according to a liquidity ranking from fixed to liquid.
6. Network Healthcare Holdings displayed short-term borrowings, long-term borrowings and cash equivalents under the subheading: *net interest bearing debt.* This is in contrast with current classification practice where long-term borrowings are classified as *non-current liabilities*, short-term borrowings are classified as *current liabilities* and cash equivalents are classified as *current assets*. The way Network Healthcare Holdings classifies all interest-bearing debt may prove to be a useful classification, since entities with similar attributes are grouped together.
7. Capitec Bank Holdings Limited and Cadiz Holdings Limited classified all *liabilities* before *equity*, with no division between current and non-current. Standard practice is to first classify equity items, whereafter non-current

liabilities and current liabilities are classified. However, in the banking sector and financial sector, assets and liabilities should be grouped together in an order that reflects their liquidity, without a split between current and non-current items, but not all the financial sector companies adhered to this rule. Therefore, it appears that companies do not always strictly follow the practice laid down by GAAP.

8. Caxton and CTP Publishers and Printers LTD classified deferred taxation as a separate item just after minority interest. According to IAS 12 (IASB 2004), deferred taxation should be classified as equity if the tax relates to items that are credited or charged to equity in the same or different period. An instance where deferred taxation was classified as equity was when there was a change in the carrying amount of property, plant or equipment based on revaluation. This may be the reason why these two companies classified deferred taxation as part of equity.
9. Minority interest was reflected as a *non-current* asset by The House of Busby Limited. Current practice (IAS 27) is to classify minority interest as part of equity.
10. Pacific Holdings Limited classifies VAT as a separate item under *current liabilities.* This classification may be in conflict with current practice as VAT is usually classified as part of taxation.

Despite the deviations encountered with naming conventions, in general companies tend to adhere strictly to the rules and regulations prescribed by GAAP and IFRS .

6.3.1.2 Income statement

In the income statements the following deviations were detected:

1. Not all the companies divide the income statement into *continuing* and *discontinuing* activities. In accordance with IFRS 5, companies should classify operations that are discontinued separately. The possible non-compliance with IFRS 5 may be because the companies do not have discontinued operations.
2. Sappi Limited and Richemont Securities AG use the term *sales* instead of *revenue.* The use of the category *revenue* is prescribed by AC 111 and IAS 18. However, sales may be viewed as part of revenue.

3. Spectrum Shipping Limited uses the terms *gross billings* and *cost of billings* instead of following current practice, and using the terms *cost of sales* and *gross profit.*
4. There is no conformity when it comes to labelling the various items in the income statement. An extract of some of the aliases (again three or more aliases) used in the income statement is shown in Table 6.2.

Table 6.2 Abstract of aliases used in the income statement

Aliases	Suggested category name (IFRS)
Net revenue	Revenue
Gross operating revenue	
Gross revenue	
Revenue	
Income	
Gross profit/loss	Gross profit
Gross profit for the year	
Gross turnover	
Gross margin	
Operating costs	Operating expenses
Operating expenses	
Operating expenditure	
Net financing costs	Finance costs
Net finance income/costs	
Finance income	
Financing costs	
Finance costs	
Finance expense	
Net interest	
Interest paid	
Interest expense	
Interest received	
Interest income	
Interest earned	
Net finance charges	
Finance charges	
Financing activities	

Aliases	Suggested category name (IFRS)
Profit/loss before taxation	Profit/loss before income tax
Income/loss before taxation	
Net profit/loss before taxation	
Earnings before taxation	
Operating profit before taxation	
Net income/loss before taxation	
Profit before taxation on ordinary activities	
Profit/loss before taxation and States share of profit	
Tax/taxation	Income tax expense
Income tax/taxation expense/gain	
Taxation provided	
Taxation benefit	
Taxation and States share of profit	
Taxation expense	
Profit/loss for the period	Profit/loss for the year
Profit/loss after taxation	
Profit/loss for the year	
Income/loss after taxation	
Net profit/loss for the year	
Net profit/loss	
Net profit/loss after tax/taxation	
Earnings after taxation	
Net income/loss attributable to ordinary shareholders	
Net income/loss attributable to equity shareholders	
Profit/loss for the year before dividends	
Retained profits for the year	
Net income for the year	
Net income after taxation	
Profit/loss from ordinary activities	
Profit/loss after taxation on ordinary activities	

As is the case with the balance sheet, most companies adhere strictly to the rules and regulations of IFRS and GAAP, despite the deviations encountered with naming conventions.

6.3.2 Results of the questionnaire

A total of 71 completed questionnaires were received by the cut-off date, and one was received thereafter. The distribution from the respondents could be proportioned as follows: companies – 40 responses, analysts – 8 responses and academics – 24 responses.

The other responses received have been classified in Table 6.3 below:

Table 6.3 List of responses

Response	Number of responses
Companies refrained (Not their policy to complete surveys)	11
Academics refrained (Not their subject)	5
Email bounced back (Address invalid)	40
Forwarded (No other reply received)	12
Too busy to partake	7
Financial manager of two listed companies, therefore returning only one response	8
Total	**83**

Given the feedback in Table 6.3 of 83 questionnaires not filled in plus the 72 completed questionnaires, a response rate of 155 out of a possible 507, i.e. 30.6% was achieved. A response rate of 30-35% is viewed as a good response (Walonick 2006). However, if the emails that failed to be delivered because the address was incorrect (40 in total), are not taken into account, a response rate of 22.68% was achieved.

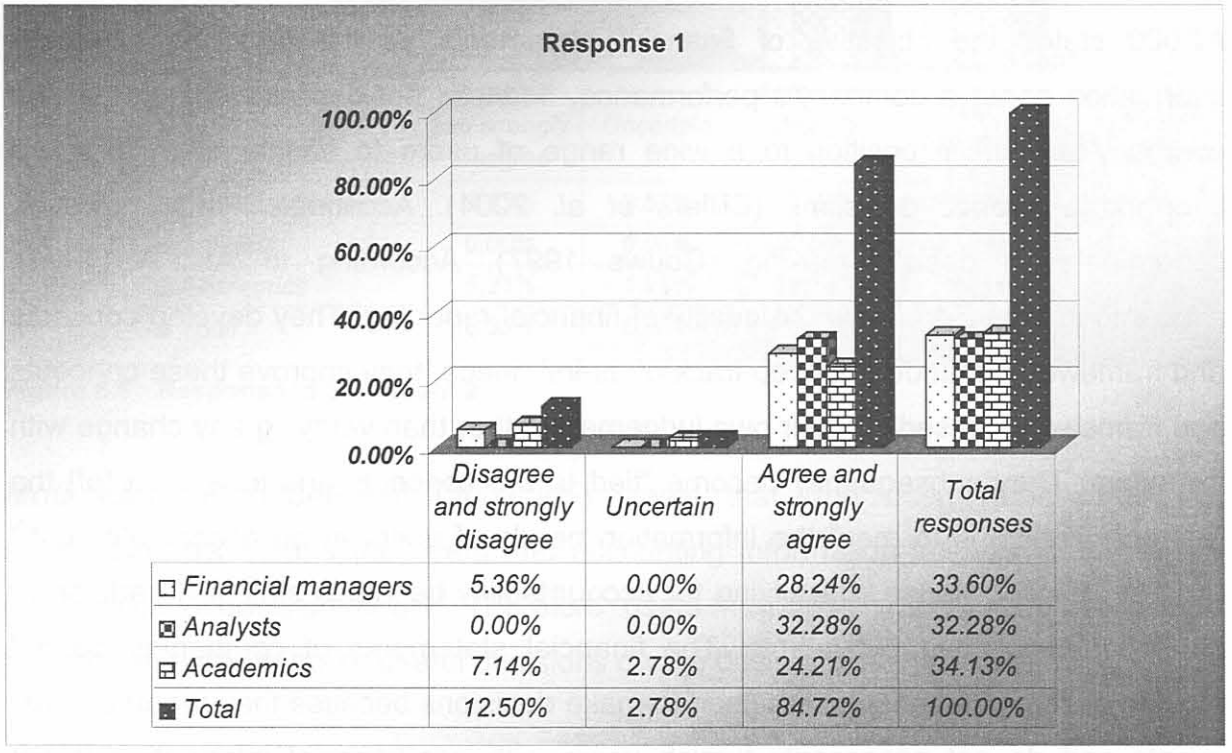
The questionnaire and the covering letter that were sent to the financial managers of the listed companies are reproduced in Appendix A and Appendix B respectively.

In the following section the responses received per statement are presented and analysed.

6.3.2.1 Responses from the questionnaire

In this section the responses received per statement are presented along the following lines: first the statement is given, followed by a histogram and an analysis of the responses. Thereafter a motivation for the statement is given and finally a discussion of the outcome is conducted. The questionnaire consisted of 32 statements.

Statement 1: The accountant classifies for accountability/reporting purposes



	Disagree and strongly disagree	Uncertain	Agree and strongly agree	Total responses
Financial managers	5.36%	0.00%	28.24%	33.60%
Analysts	0.00%	0.00%	32.28%	32.28%
Academics	7.14%	2.78%	24.21%	34.13%
Total	12.50%	2.78%	84.72%	100.00%

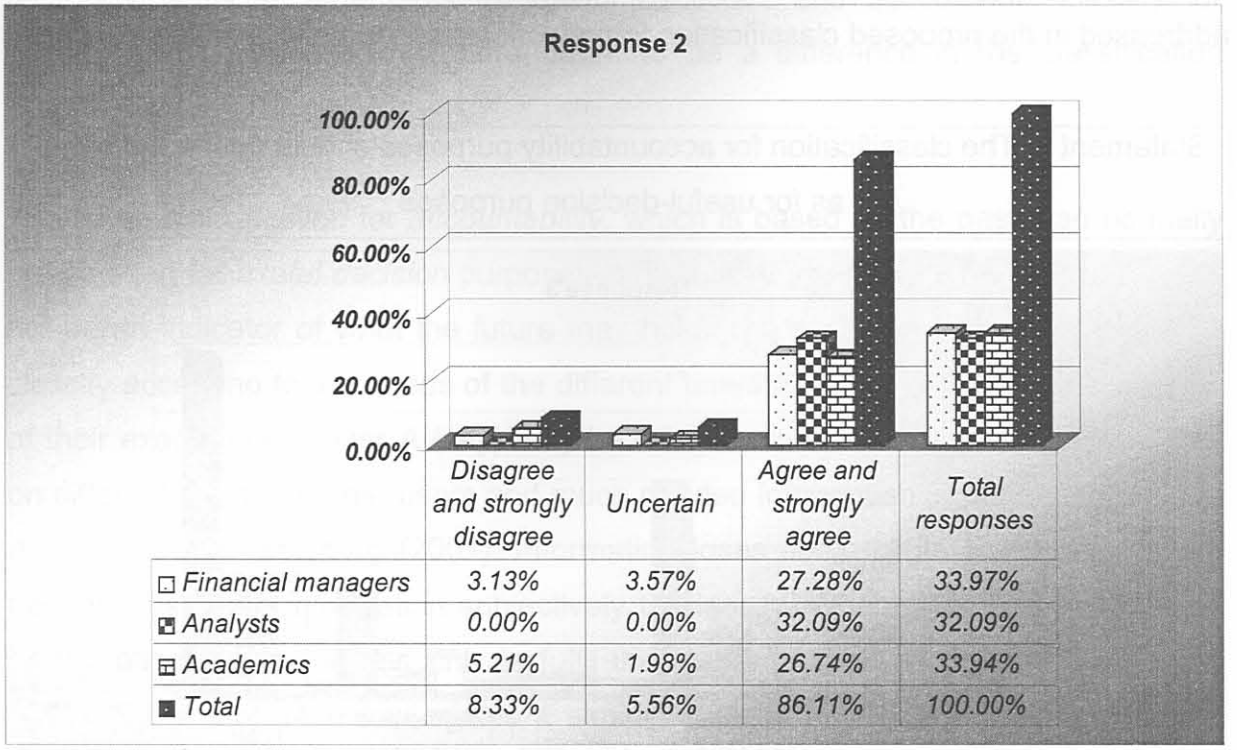
Figure 6.4 Response to Statement 1

Motivation: One of the primary objectives of corporate financial reporting is to provide information on the accountability of management (Riahi-Belkaoui 2004) and accountability is the oldest objective of accounting (Mattessich 1995:9), therefore, accountants currently classify for accountability. "It is up to the accountant to provide information about the events and leave to the user the task of fitting the events to their decision-models" (Riahi-Belkaoui 2004:365). Accountants may, therefore, follow the accountability objective and provide the information to the user to reclassify the information for their own decision-making purposes.

Discussion: The overall reaction on this question was positive, since 84% of the financial managers, 100% of the analysts and 71% of the academics agreed that an accountant classifies for accountability or reporting purposes. The response shows that the respondents agree on the historical reason for classifying, namely, accountability. The *accountability classification* was based on and influenced by the needs of the credit grantor (Esquerre 1927). Classification based on accountability is a way to close off and report on a certain stage in the past. It is practical for the accountant.

AC000 states the objective of financial statements as the provision of useful information about a company's performance, financial position and changes in the company's financial position to a wide range of users to enable them to make informed economic decisions (Cilliers *et al.* 2004). Accountability is, however, subordinate to decision-making (Gouws 1997). According to AICPA (1994), accountants rarely measure the quality of financial reporting. They develop concepts and frameworks that do not keep track of users' needs; they improve these concepts and frameworks based on their own judgement rather than verifying any change with the users. They subsequently become "tied to the concepts and lose sight [of] the real goal (which is to meet the information needs of users at an acceptable cost)" (AICPA 1994:7). Hence, classifying for accountability becomes almost a tradition or ritual performed by accountants. The financial statements of companies do not provide all the information users need to make decisions because they report on past events and do not necessarily furnish users with non-financial information (IASB 2004). It may be necessary to include additional information in the financial statements to enable users to make their own predictions and reclassifications.

Statement 2: Analysts/users classify for useful-decision purposes



	Disagree and strongly disagree	Uncertain	Agree and strongly agree	Total responses
Financial managers	3.13%	3.57%	27.28%	33.97%
Analysts	0.00%	0.00%	32.09%	32.09%
Academics	5.21%	1.98%	26.74%	33.94%
Total	8.33%	5.56%	86.11%	100.00%

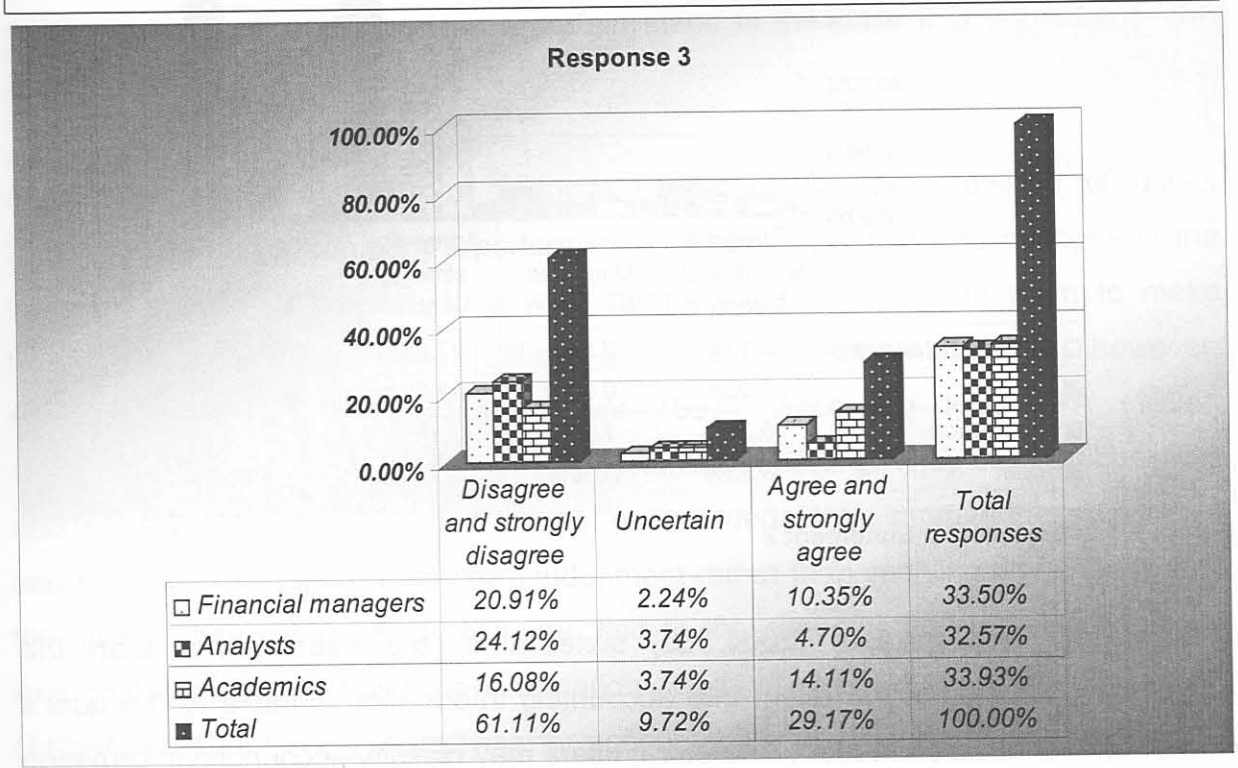
Figure 6.5 Response to Statement 2

Motivation: Riahi-Belkaoui (2004:365) states that "the user, rather than the accountant, transforms the event into accounting information suitable to the user's own individual decision model". Therefore, users may classify accounting information primarily in order to make useful decisions on the basis of this information.

Discussion: Financial managers (80%), analysts (100%) and academics (79%) agree with this statement. Referring back to AC000 (Cilliers *et al.* 2004), users need useful information for their decisions. To classify for useful decisions, the classification will have a forward-looking (future) perspective. From the responses it is apparent that accountability and useful-decision purposes are viewed by the respondents as the same idea. There are two schools of thought in accounting: 1) classification for accountability (Gray, Owen and Adams 1996) and 2) classification for useful decision-making (Miller and Bahnson 2002; Riahi-Belkaoui 2004; AICPA 1994). The objective of classification for accountability is based on the past, while for decision usefulness, it is based on the future and should, therefore, differ.

The fact that analysts and other users reclassify information (refer to Section 4.5) shows that they currently have different information needs which may need to be addressed in the proposed classification framework for accounting information.

Statement 3: The classification for accountability purposes should not be the same as for useful-decision purposes



	Disagree and strongly disagree	Uncertain	Agree and strongly agree	Total responses
Financial managers	20.91%	2.24%	10.35%	33.50%
Analysts	24.12%	3.74%	4.70%	32.57%
Academics	16.08%	3.74%	14.11%	33.93%
Total	61.11%	9.72%	29.17%	100.00%

Figure 6.6 Response to Statement 3

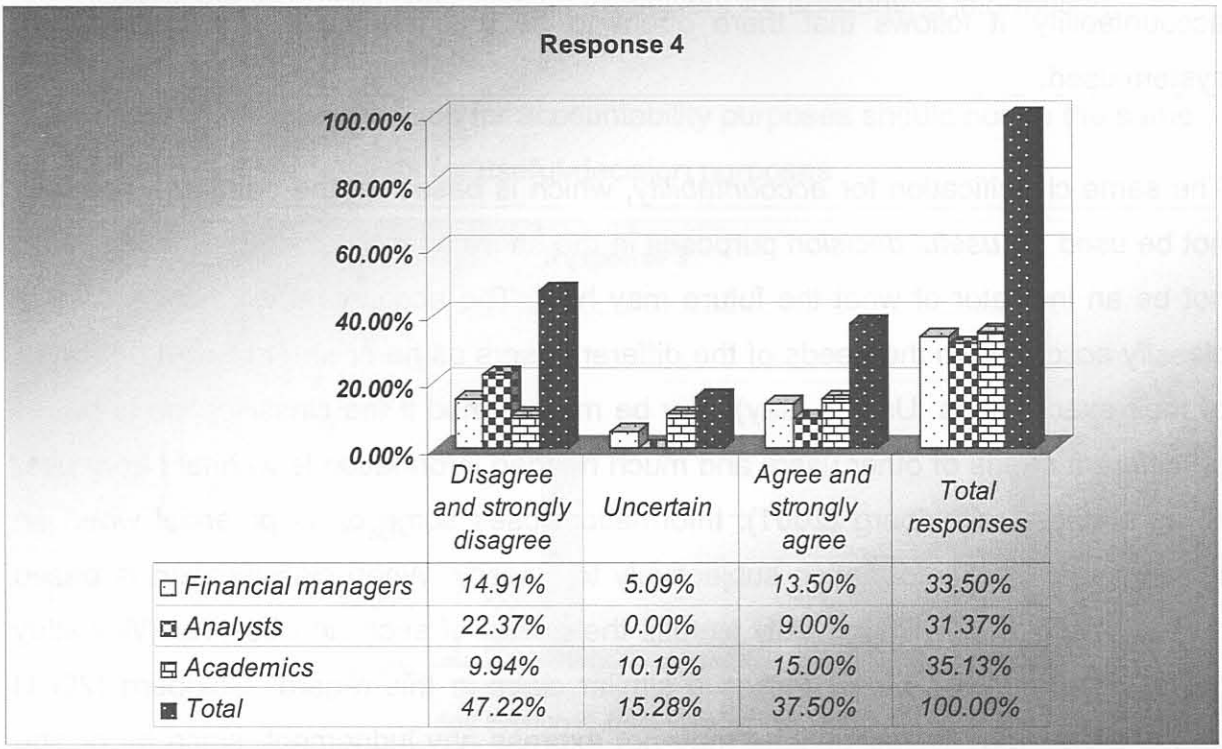
Motivation: Accountability is mainly concerned with equity among competitors and claims for the distribution of wealth and income (Williams 1987). Both these are concerned with fairness whereas decision usefulness, also called predictive ability, is not based on the same concerns (Williams 1987). As motivated in statements 1 and 2, accountability and decision usefulness may be viewed as two different objectives and this may be why analysts and other users reclassify accounting information when making decisions. These two objectives may be viewed as accountability for reporting and predictive ability for useful decisions.

Discussion: Only 31% of the financial managers, 14% of the analysts and 42% of the academics agreed with this statement. As stated before, respondents view the objective of classifying for accountability on the one hand and for useful decision-

making on the other, as being the same objective. If analysts and other users reclassify financial statements for useful decisions and accountants classify for accountability, it follows that there ought to be a difference in the classification system used.

The same classification for *accountability*, which is based on the past, can normally not be used for *useful decision* purposes in the future as well, since past events may not be an indicator of what the future may hold. The accountant will not be able to classify according to the needs of the different users as he or she may not be aware of their exact needs. User *A* (say) may be misinformed if the classification is based on different needs of other users and much needed information is withheld from user *A*, as stated by Goldberg (2001). Information loses some of its potential when an observer uses the information subjectively to classify. When classification is based on the observer, it will tend only to fulfil the needs of such an observer (Wheatley 1993). Statement 14 below makes a similar claim in this regard. Goldberg (2001) further states that the accountant may not express any judgement, since he or she may only be the observer and as far as possible should report financial facts objectively. The response to this statement also reveals that the notion of time, whether it is past (recording of a transaction aimed at accountability), present (reporting for accountability and decision-making) or future (decision-making), may need to form part of a framework for the classification of accounting information.

Statement 4: New types of transactions emerge continually, rendering the current classification system inadequate



	Disagree and strongly disagree	Uncertain	Agree and strongly agree	Total responses
Financial managers	14.91%	5.09%	13.50%	33.50%
Analysts	22.37%	0.00%	9.00%	31.37%
Academics	9.94%	10.19%	15.00%	35.13%
Total	47.22%	15.28%	37.50%	100.00%

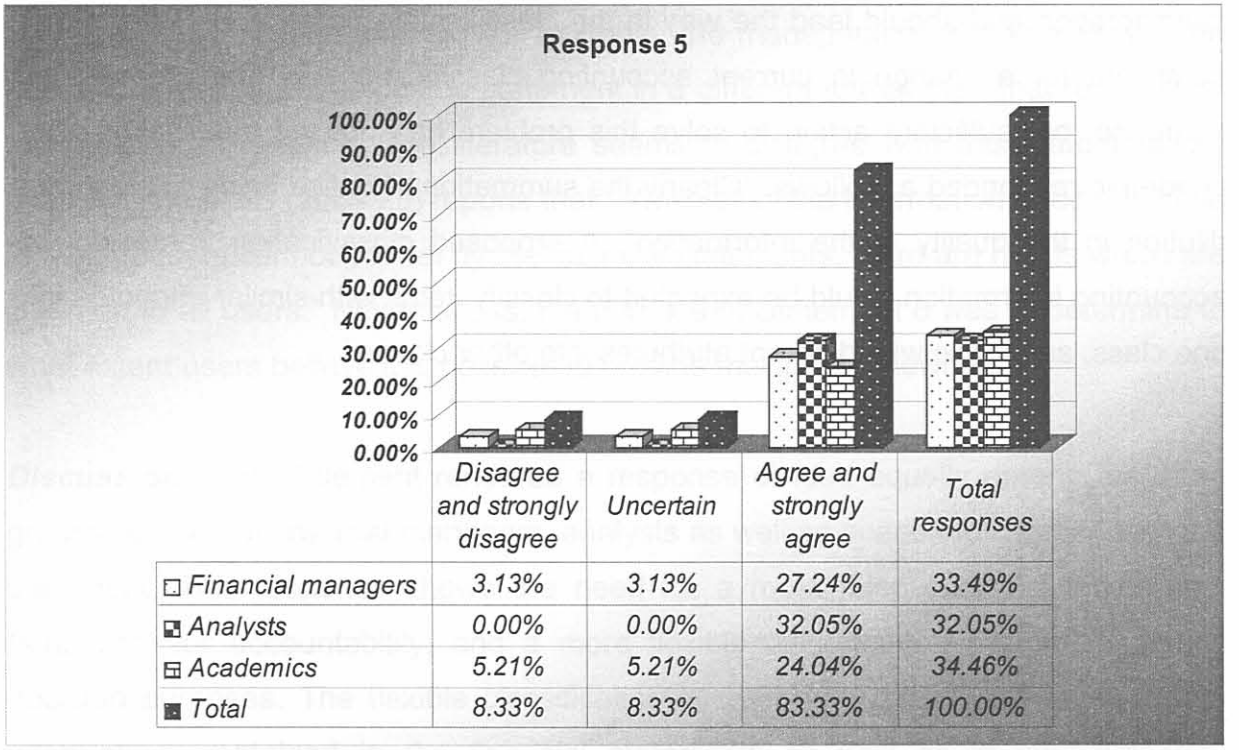
Figure 6.7 Response to Statement 4

Motivation: As argued by Wolk *et al.* (2004:318), "it is remarkable that the categoric[al] framework used to classify accounting transactions is virtually unchanged since Pacioli's time". Since the time of Pacioli, a vast number of changes have taken place in industry and new types of transactions have been developed. New types of transactions have been included in the current (old) framework, although they may have different attributes and their attributes may even overlap between two or more categories, resulting in accounting hybrids. The FASB (2003) issued FAS 150 for the "Accounting for Certain Financial Instruments with Characteristics of both Liabilities and Equity" which is a result of new financial instruments that have been developed and need to be classified. In this regard Lev and Zarowin (2003) also state that the accounting system has a delayed recognition of change (e.g. new financial instruments), which leads to information that is less useful.

Discussion: In this instance 40% of the financial managers, 29% of the analysts and 43% of the academics agreed with the statement. The responses may be divided into

two groups, namely, those who believe that new kinds of transaction will not fit into current static structures (38%) and those who believe that the new items should be forced into an inadequate structure (47%). The classification currently in use is based on a structure provided by Wolk *et al.* (2004) (refer to Section 7.2.2), and this structure is inherently static. Structures are not flexible but systems are. It is therefore difficult to make structural changes. New kinds of transactions may introduce new attributes and relationships, and may not fit into the present classification structure (refer to Step 4 of Algorithm 3.2 in Section 3.8). Sprouse (1966:46) names some items "what you may call its" because they do not fit into just one category based on their attributes. This may be the result of new transactions being forced into an existing structure. As Einstein claimed, to solve a problem, one should start with a new way of thinking (Quotations 2006). Therefore, a proposed classification framework for accounting information may need to be flexible enough to accommodate new transactions by possibly incorporating time and also by moving beyond mere static structures.

Statement 5: Classified facts may become distorted when unlike elements are classified in the same account (Littleton 1958:45)



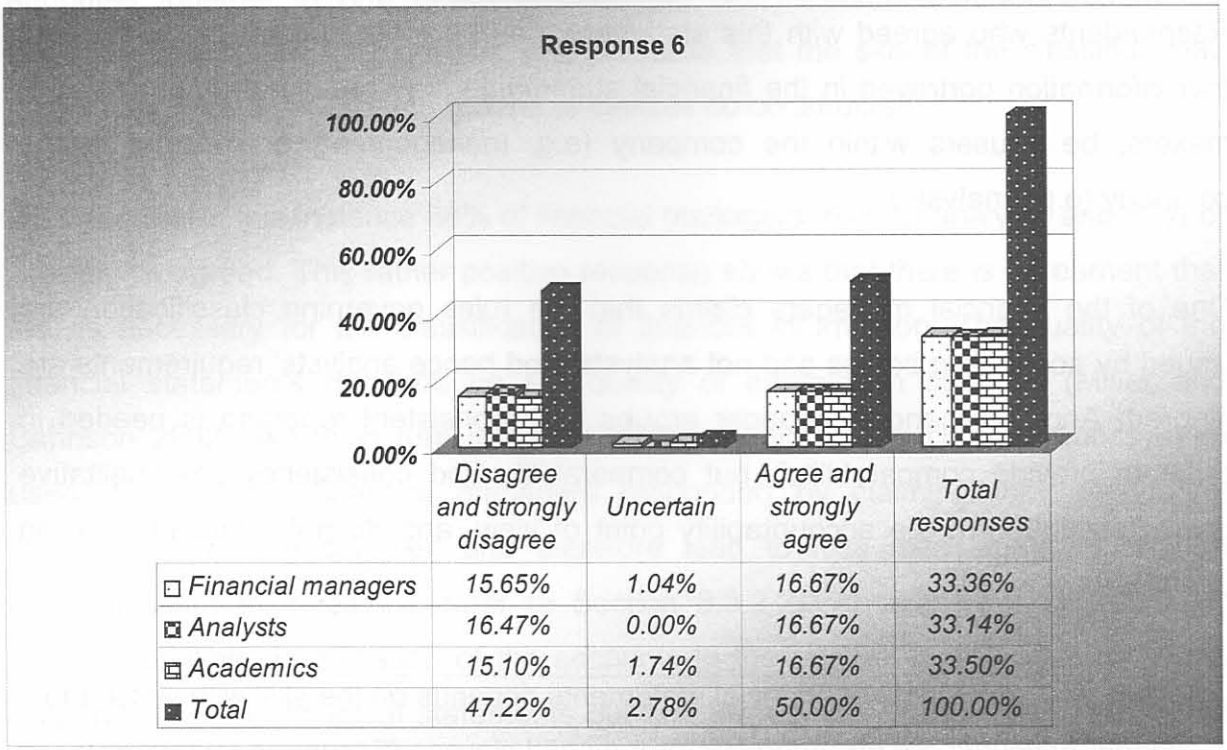
	Disagree and strongly disagree	Uncertain	Agree and strongly agree	Total responses
Financial managers	3.13%	3.13%	27.24%	33.49%
Analysts	0.00%	0.00%	32.05%	32.05%
Academics	5.21%	5.21%	24.04%	34.46%
Total	8.33%	8.33%	83.33%	100.00%

Figure 6.8 Response to Statement 5

Motivation: As indicated by Littleton (1958:45), "probably no other feature of [a] system is more sensitive to transaction changes than accounts, and probably more unsuspected distortion of the classified facts comes from crowding unlike elements into the same account than from any other fault". Schroeder *et al.* (2005) explained that adding items with a different measurement basis together is much like "adding apples and oranges". Items with the same attributes may need to be classified together to provide information that is relevant and comparable, while unlike items ought to be in different classes.

Discussion: This statement rendered a very positive response, as 81% of the financial managers, 100% of the analysts and 70% of the academics agreed. AC Littleton is viewed as a "founder of [accounting's] intellectual database" as he did much for the development of Accounting thought and theory (Bedford and Ziegler 1975:435). When facts are classified together they should share the same attributes, e.g. the same valuation method. It follows that a proposed classification framework for accounting information should take into account that elements of different kinds (type) should not be grouped together. Following the proposed initial measurement (Corollary 3.2), the attributes and relationships between items should be taken into consideration and should lead the way in the classification process. A rather strong sentiment for a change in current accounting classifications is proposed by this response, but sufficient action to solve this problem has not yet been taken. One academic responded as follows: "Clearly the summation of unlike items will lead to a dilution in the quality of the information". A proposed classification framework for accounting information would be expected to classify items with similar attributes into one class, and those with different attributes into other classes.

Statement 6: A different classification system should be in place for different users



	Disagree and strongly disagree	Uncertain	Agree and strongly agree	Total responses
Financial managers	15.65%	1.04%	16.67%	33.36%
Analysts	16.47%	0.00%	16.67%	33.14%
Academics	15.10%	1.74%	16.67%	33.50%
Total	47.22%	2.78%	50.00%	100.00%

Figure 6.9 Response to Statement 6

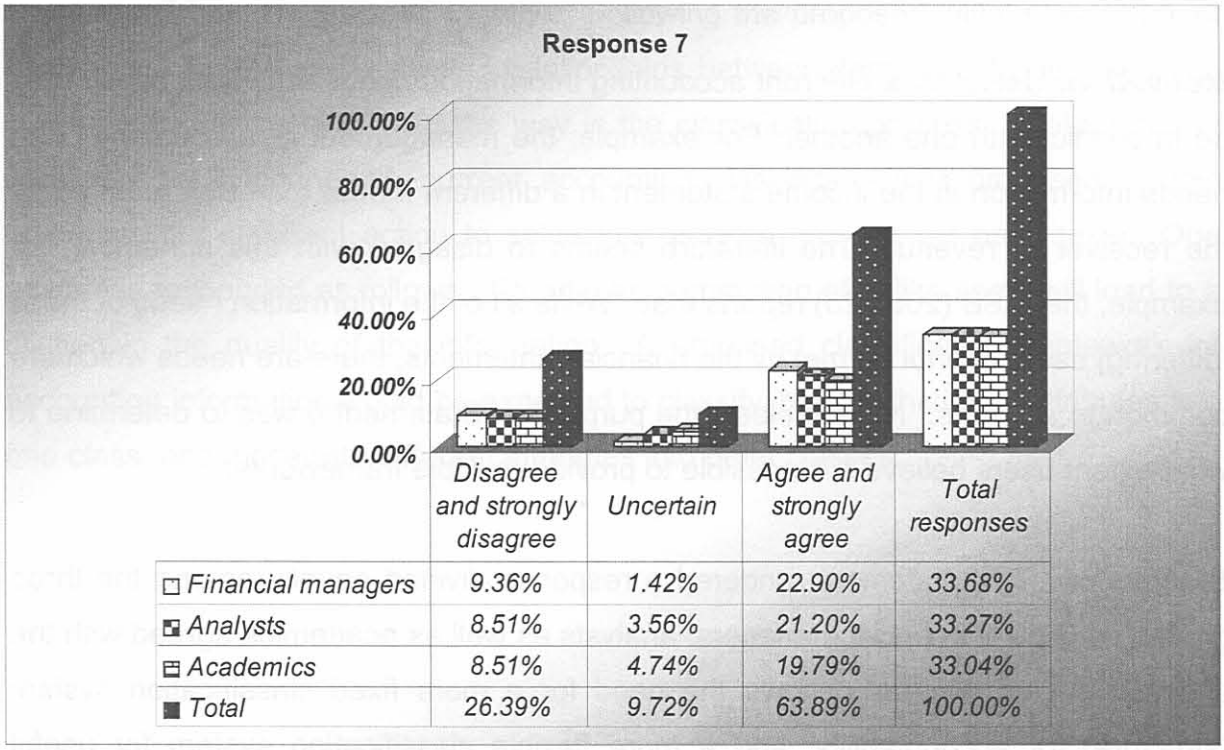
Motivation: Users have different accounting information needs and such needs may be in conflict with one another. For example, the management of a company often needs information in the income statement in a different format than that required by the receiver of revenue. The literature seems to disagree with this statement, for example, the IASB (2004:25) reports that: "While all of the information needs of these [differing] users *cannot be met* by the financial statements, there are needs which are common to all users." Nevertheless, the purpose of Statement 6 was to determine to what extent users believe it is possible to provide multiple frameworks.

Discussion: This statement rendered a response divided equally among the three groups as 50% of financial managers, analysts as well as academics agreed with the statement. This response shows the need for a more fixed classification system (structure) for accountability, and a more flexible classification system for useful decision purposes. The flexible classification system may provide users with more information, contained in the financial statements as well as in supplementary contributions (Miller and Bahnson 2002), but reclassification will be their privilege and responsibility, since a classification system that can fulfil all the needs of all the users

will be near to impossible (IASB 2004), because users have vastly different information needs, different backgrounds and different purposes (Goldberg 2001). Respondents who agreed with this statement may be more susceptible to the fact that information portrayed in the financial statements may be useful to all decision-makers, be it users within the company (e.g. management) or external to the company (e.g. analysts).

One of the financial managers claims that the rules governing classification are issued by accounting bodies and not analysts, and hence analysts' requirements are ignored. Another financial manager argues that "consistent reporting is needed in order to provide comparability", but comparability and consistency are qualitative characteristics from the accountability point of view, and do not relate to decision usefulness.

Statement 7: The value of financial statements depends on the skill with which the ledger accounts are arranged into groups and classes (Fitzgerald 1938a:249)



	Disagree and strongly disagree	Uncertain	Agree and strongly agree	Total responses
Financial managers	9.36%	1.42%	22.90%	33.68%
Analysts	8.51%	3.56%	21.20%	33.27%
Academics	8.51%	4.74%	19.79%	33.04%
Total	26.39%	9.72%	63.89%	100.00%

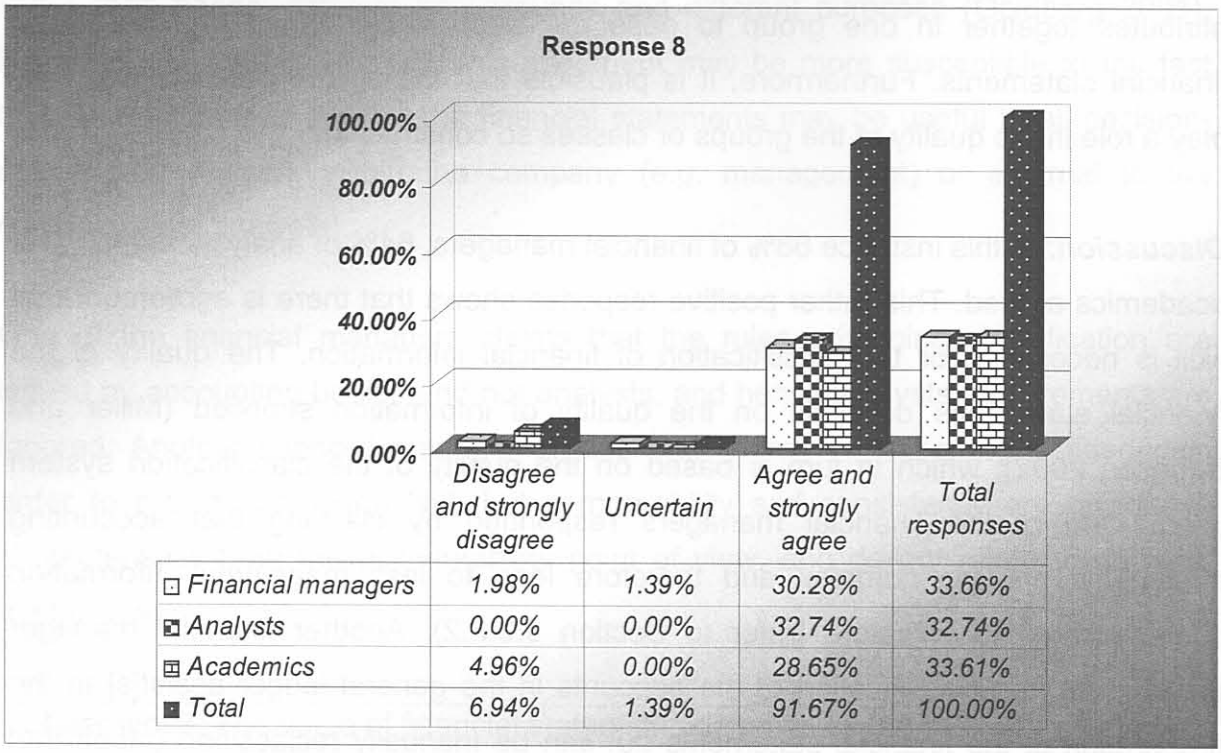
Figure 6.10 Response to Statement 7

Motivation: This question was motivated by the statement of Fitzgerald (1938a). An example of one such a class in the financial statements is assets. When a group of

ledger accounts are combined into a class, it makes sense to keep items with similar attributes together in one group to ease the classification of information in the financial statements. Furthermore, it is plausible that the skill of the classifier may play a role in the quality of the groups or classes so constructed.

Discussion: In this instance 68% of financial managers, 64% of analysts and 60% of academics agreed. This rather positive response shows that there is agreement that skill is necessary for the classification of financial information. The quality of the financial statements depends on the quality of information supplied (Miller and Bahnson 2002), which in turn is based on the quality of the classification system used. One of the financial managers responded by claiming that accounting statements are too complex and therefore lead to less meaningful information communicated to investors (refer to Section 6.3.2.2). Another financial manager argues that "the classification of the accounts in the general ledger assist[s] in the preparation of the financial statements but can be manually reclassified (albeit that this is [a] manual intervention and cost ineffective)". It is hard to conceive of classification as being cast into a fixed structure since it needs to be flexible (refer to the discussion in Statement 4 above) to incorporate new members with new attributes. The accountant of the future has to be skilfully alert to opportunities of new transactions being developed to fit them into a classification framework for accounting information.

Statement 8: Classification is a way of making meaningful relationships visible



	Disagree and strongly disagree	Uncertain	Agree and strongly agree	Total responses
Financial managers	1.98%	1.39%	30.28%	33.66%
Analysts	0.00%	0.00%	32.74%	32.74%
Academics	4.96%	0.00%	28.65%	33.61%
Total	6.94%	1.39%	91.67%	100.00%

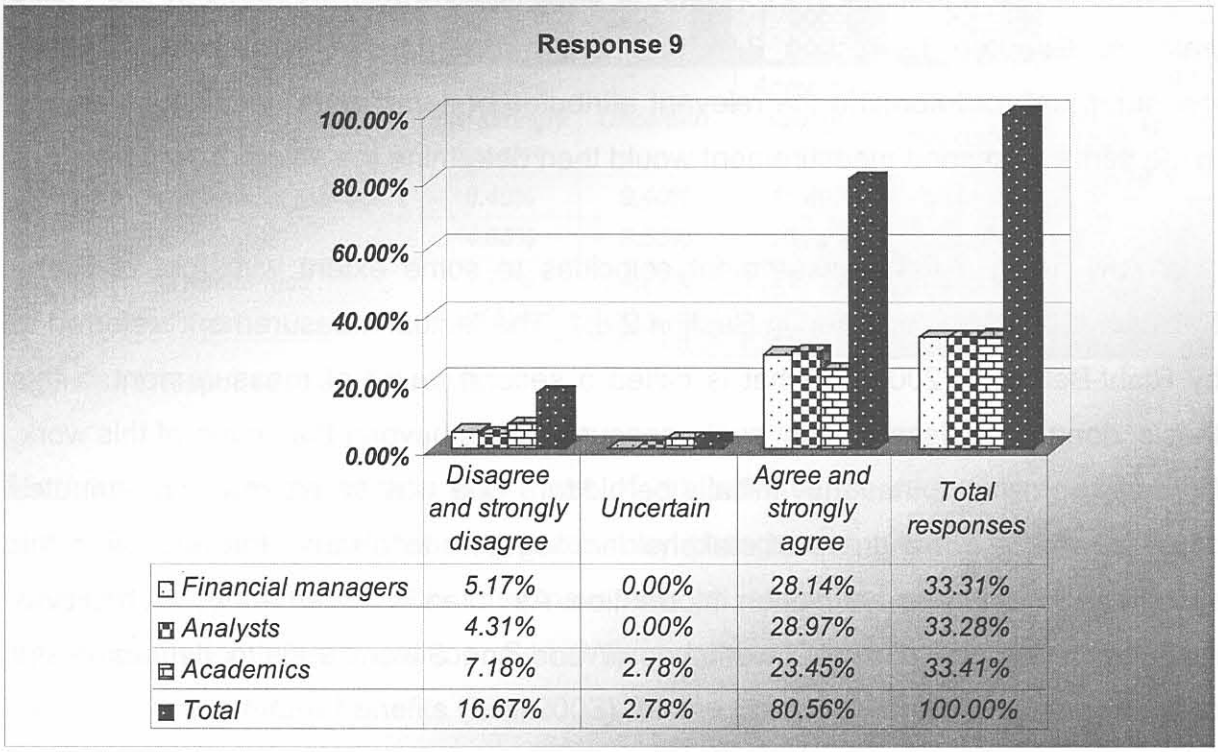
Figure 6.11 Response to Statement 8

Motivation: According to Goldberg (2001:45), classification may not provide new knowledge but "the search for relationships which it entails may lead to a recognition of otherwise unsuspected characteristics whose relationships with other occurrences or phenomena may prove of interest or value in the search for knowledge". In a way, therefore, establishing previously unknown relationships may lead to the creation of new knowledge.

Discussion: This statement is widely supported by the respondents: 90% of the financial managers, 100% of the analysts and 85% of the academics supported the statement. Relationships among the various items of the financial statements are very important when classification takes place, and respondents seem to acknowledge the importance of relationships in classification. Relationships show how the quality of information can be improved to provide more useful information for the decisions to be made by various statement users. Relationships may need to be made visible to users of financial statements. However, sometimes there are hidden (tacit) relationships (Prigogine and Stengers 1983) or hidden connections (Capra 2002), and the question is how to discover these relationships. One way to explore

hidden relationships is to get several stakeholders together in a JAD (Joint Application Development) session and to discuss various possibilities. During a JAD session a number of stakeholders come together to brainstorm a number of issues about which decisions have to be made (Wood and Silver 1995). In this instance the JAD session would be about eliciting relationships. It should be noted, however, that the presence or absence of relationships between entities depends on the attributes applicable to these entities.

Statement 9: Classification is a prerequisite for measuring



	Disagree and strongly disagree	Uncertain	Agree and strongly agree	Total responses
Financial managers	5.17%	0.00%	28.14%	33.31%
Analysts	4.31%	0.00%	28.97%	33.28%
Academics	7.18%	2.78%	23.45%	33.41%
Total	16.67%	2.78%	80.56%	100.00%

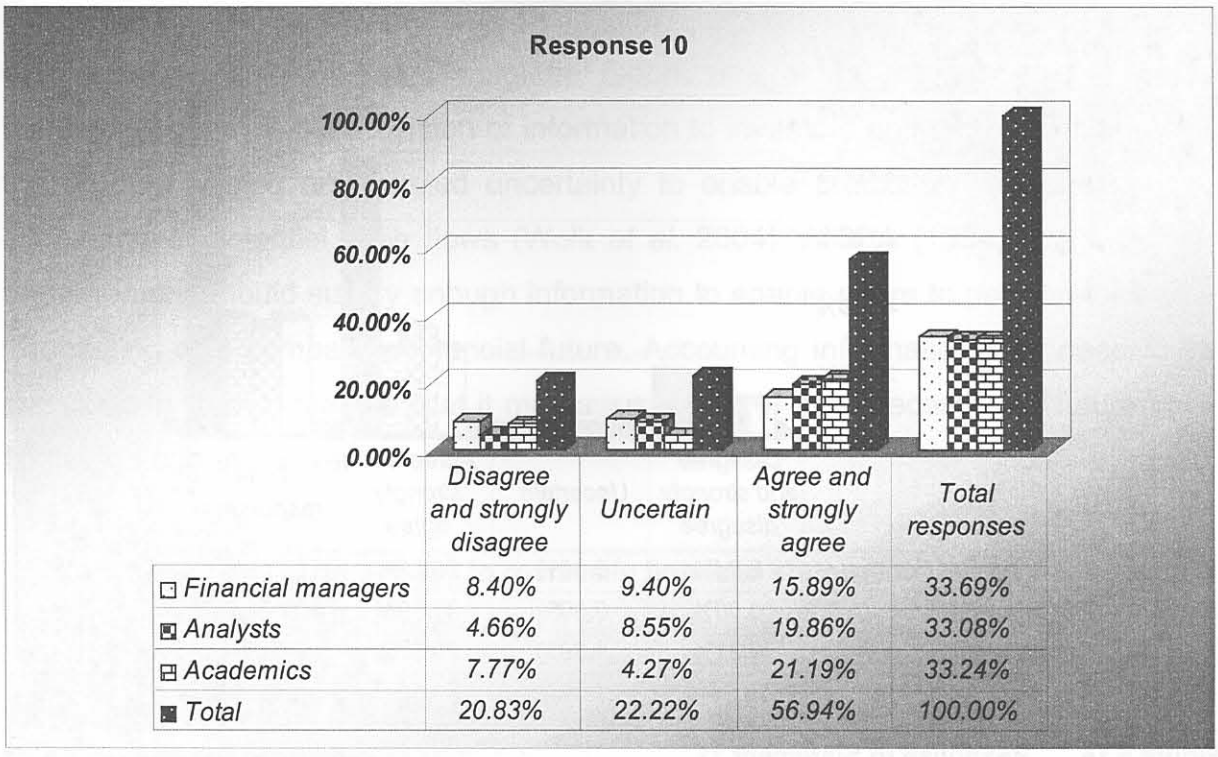
Figure 6.12 Response to Statement 9

Motivation: The idea behind this statement was to determine how respondents see the role of measurement with relation to classification. One may argue that a classifier first has to classify something before it can be measured. This view makes sense if one thinks of a measurement as a valuation of an item, e.g. inventory valued as LIFO, FIFO or fair value. Hence classification may be a prerequisite for measuring. There is, however, another view of this problem and this view is motivated below.

Discussion: The positive response of 84% of the financial managers, 87% of the analysts and 70% of the academics who agreed indicate that these respondents were thinking about measurement as described above when they answered this question. Hence they are of the opinion that one has to classify before you can measure. However, items are classified according to their common attributes and, looking at the issue of measurement at a more detailed level, one may argue that, before one can classify, attributes have to be identified. This may be viewed as "measuring" or evaluating the item to determine relevant attributes. If one calls this an initial measurement (refer to Corollary 3.2), then it follows that a certain form of measurement is actually a prerequisite for classification. It is proposed in this thesis (refer to Chapter 3, Section 3.9) that two measurements be taken: an initial measurement to determine the relevant attributes of items and relationships among these items. A second measurement would then determine the value of an item.

The view of an initial measurement coincides to some extent with that of Riahi-Belkaoui (2004) as discussed in Section 2.8.1. The "actual measurement" referred to by Riahi-Belkaoui (2004) is what is called a second round of measurement in this thesis, done after classification; such measurement is beyond the scope of this work. Naturally some attributes may initially be hidden. One way to extract such attributes of an item is to get a group of stakeholders together to discuss the entities in the system and thereby reveal hidden information. As noted in Statement 8, such activity is generally known as a JAD workshop (Wood and Silver 1995) to determine the needs of users.

Statement 10: Past, present and future-orientated recordings must be classified separately



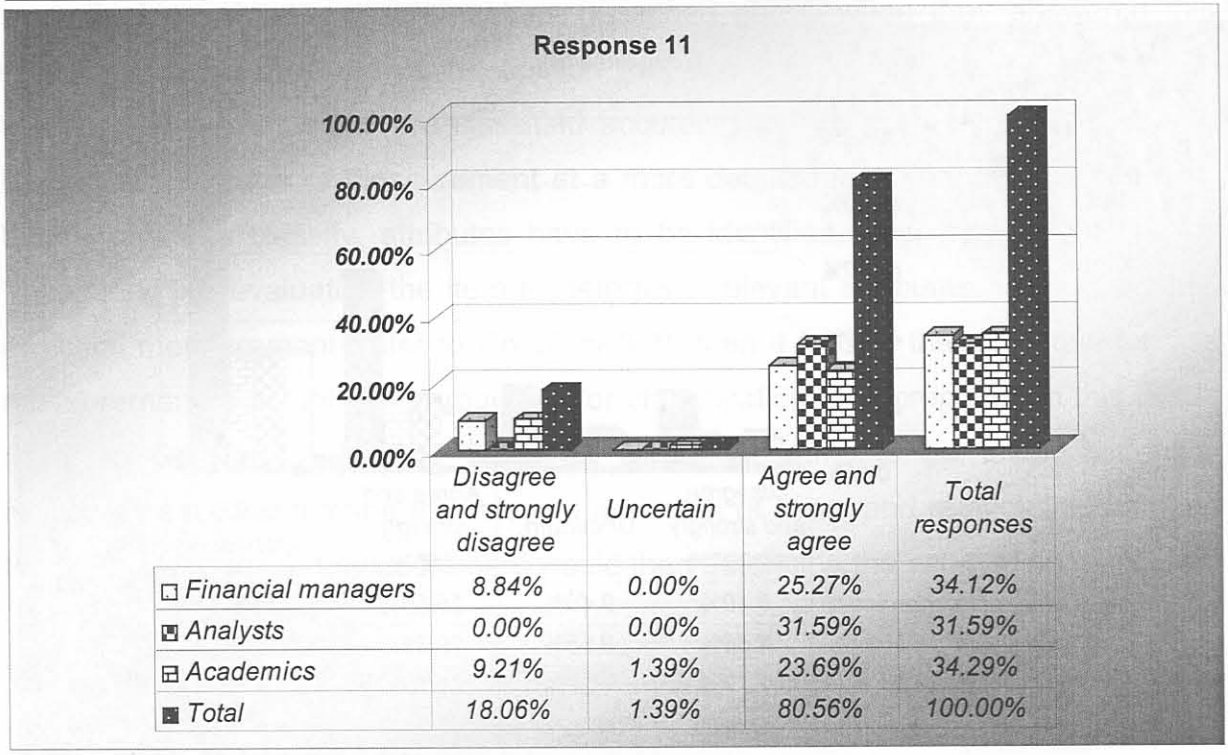
	Disagree and strongly disagree	Uncertain	Agree and strongly agree	Total responses
Financial managers	8.40%	9.40%	15.89%	33.69%
Analysts	4.66%	8.55%	19.86%	33.08%
Academics	7.77%	4.27%	21.19%	33.24%
Total	20.83%	22.22%	56.94%	100.00%

Figure 6.13 Response to Statement 10

Motivation: Each transaction has a set of attributes when recording (*past*) takes place. As time passes by these attributes may change and, when it is time to report (*present*) on this transaction, the new set of attributes may lead to a new classification for this transaction. Some transactions, for instance R&D expenses, may even have *future* benefits (Lev 2003) for the company which are not known at the time of recording but may be realised later and may lead to another classification.

Discussion: The response is mostly positive as 47% of the financial managers, 60% of the analysts and 64% of the academics agree with this statement. The financial managers seem to be more in doubt as to whether this kind of classification is necessary or not. The reason for this may be that in practice three different classifications may result from the proposal made by this statement, leading to more complex reporting structures and a possible information overload. Nevertheless, a proposed classification framework for accounting information may need to take time into account, which is the topic of Chapter 7.

Statement 11: Accounting information should be classified in such a manner that it facilitates the forecasting of future earnings and cash flows



	Disagree and strongly disagree	Uncertain	Agree and strongly agree	Total responses
Financial managers	8.84%	0.00%	25.27%	34.12%
Analysts	0.00%	0.00%	31.59%	31.59%
Academics	9.21%	1.39%	23.69%	34.29%
Total	18.06%	1.39%	80.56%	100.00%

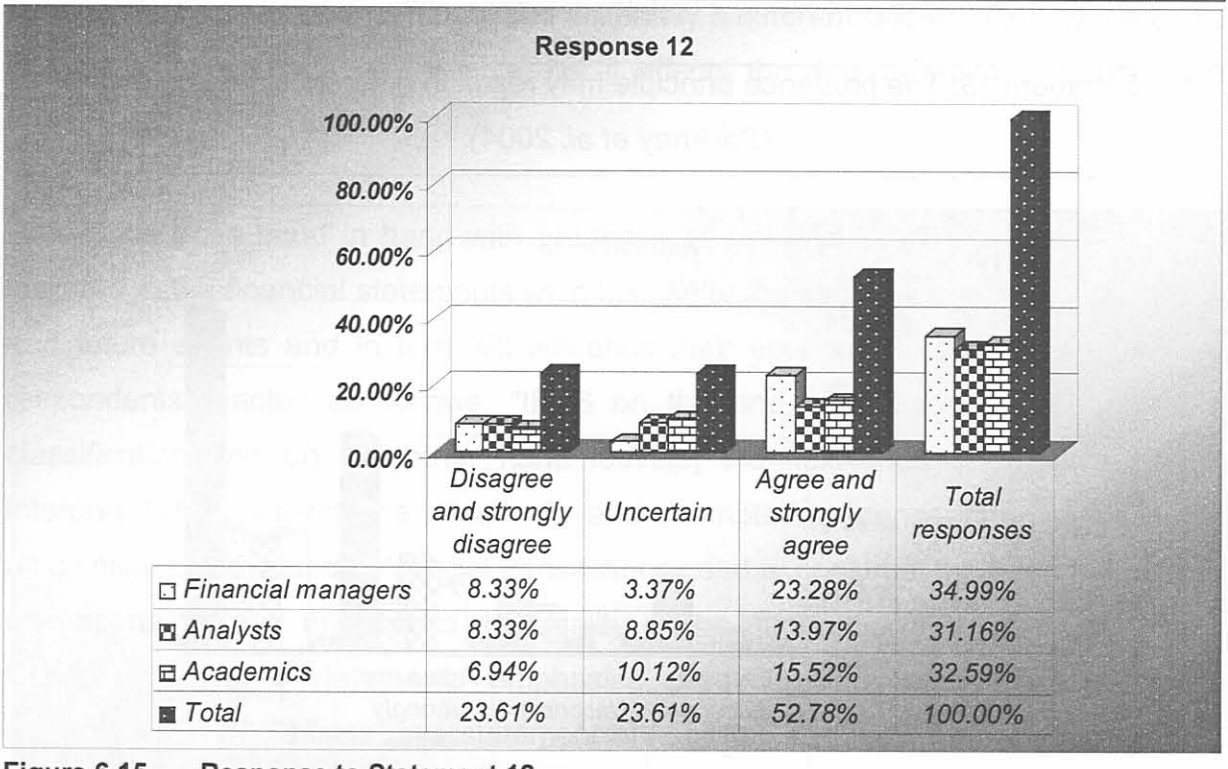
Figure 6.14 Response to Statement 11

Motivation: "Each event should be described in a manner facilitating the forecasting of the same event in a future time period given exogenous changes" (Sorter 1969:17). The Trueblood Committee (Trueblood 2004) states that the objective of financial statements should be to supply useful information for the prediction, comparison and evaluation of potential cash flows and earning power. The AICPA Committee (AICPA 1994:33) suggests that "in an ideal world, the most relevant accounting data would be those that reported assets and liabilities in a way that would allow analysts to impute the future cash flows emanating from them individually and collectively". The literature, therefore, seems to support the claim made in this statement, since it may (amongst other things) assist users in the prediction of future cash flows.

Discussion: A total of 74% of the financial managers, 100% of the analysts and 69% of the academics agreed. Analysts are concerned with a company's future earnings and cash flows hence it would be to the benefit of analysts if accounting information could be classified in such a manner that it facilitates this forecasting. Financial

managers also need information about forecasting to enable them to make decisions about the future. The information portrayed in the financial statements should be classified in such a manner that the information facilitates forecasting of future earnings. In the Trueblood Committee report, one of the objectives of financial statements given is the provision of information to investors and creditors in terms of the amount, timing and related uncertainty to enable prediction, comparison and evaluation of potential cash flows (Wolk *et al.* 2004). AICPA (1994) suggests that management should supply enough information to enable users to perform their own forecasting of a company's financial future. Accounting information may need to be classified in such a manner that it may assist users in the forecasting of future cash flows and earning power.

Statement 12: It is necessary to reclassify financial statements in order to reflect economic reality (Lev & Thiagarajan 1991)



	Disagree and strongly disagree	Uncertain	Agree and strongly agree	Total responses
Financial managers	8.33%	3.37%	23.28%	34.99%
Analysts	8.33%	8.85%	13.97%	31.16%
Academics	6.94%	10.12%	15.52%	32.59%
Total	23.61%	23.61%	52.78%	100.00%

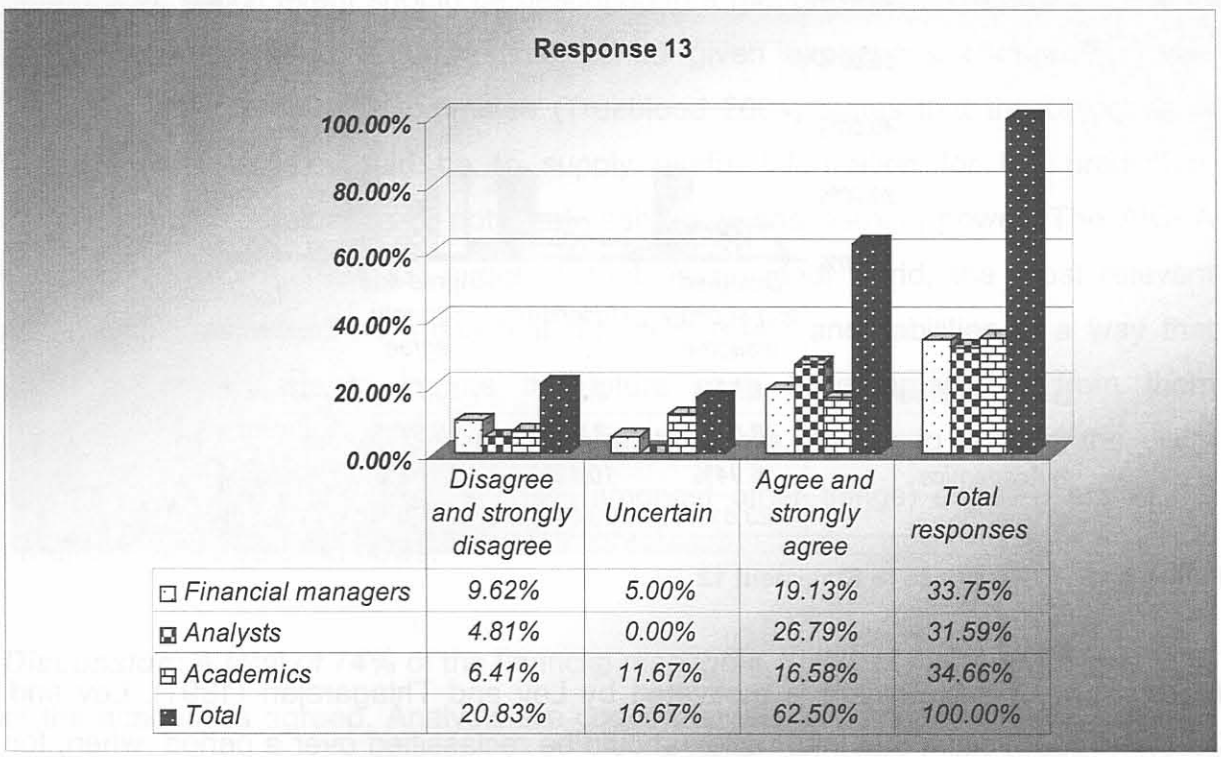
Figure 6.15 Response to Statement 12

Motivation: This statement is motivated by Lev and Thiagarajan (1991). Lev and Zarowin (2003) claim that information should be reclassified over a period when, for example, a company has a restructuring exercise to enable the reflection of economic reality. Investors and other users need to make changes (reclassify)

routinely to the financial statements and the information they contain to enable them to use the information for decision-making (CFA 2005). A proposed classification framework addressing the needs of those who currently have reasons to reclassify information may reduce such reclassification needs.

Discussion: Financial managers (67%) mostly agree with the statement, whereas 45% of the analysts and 48% of the academics agree. The responses show that a classification of information in financial statements, as well as a reclassification of information published in financial statements may be needed. The number of respondents that are uncertain (24%) reflect that classification is a grey area that needs to be addressed and developed further. New relationships may be revealed when reclassification takes place. Economic reality is often based on the personal perception of the user. A user needs information to create his or her own economic reality and such information should be supplied by the classification system. Reclassification may be necessary for some users and would normally be based on the information supplied by the classification system in use.

Statement 13: The prudence principle may result in different classifications (Stickney *et al.* 2004)



	Disagree and strongly disagree	Uncertain	Agree and strongly agree	Total responses
Financial managers	9.62%	5.00%	19.13%	33.75%
Analysts	4.81%	0.00%	26.79%	31.59%
Academics	6.41%	11.67%	16.58%	34.66%
Total	20.83%	16.67%	62.50%	100.00%

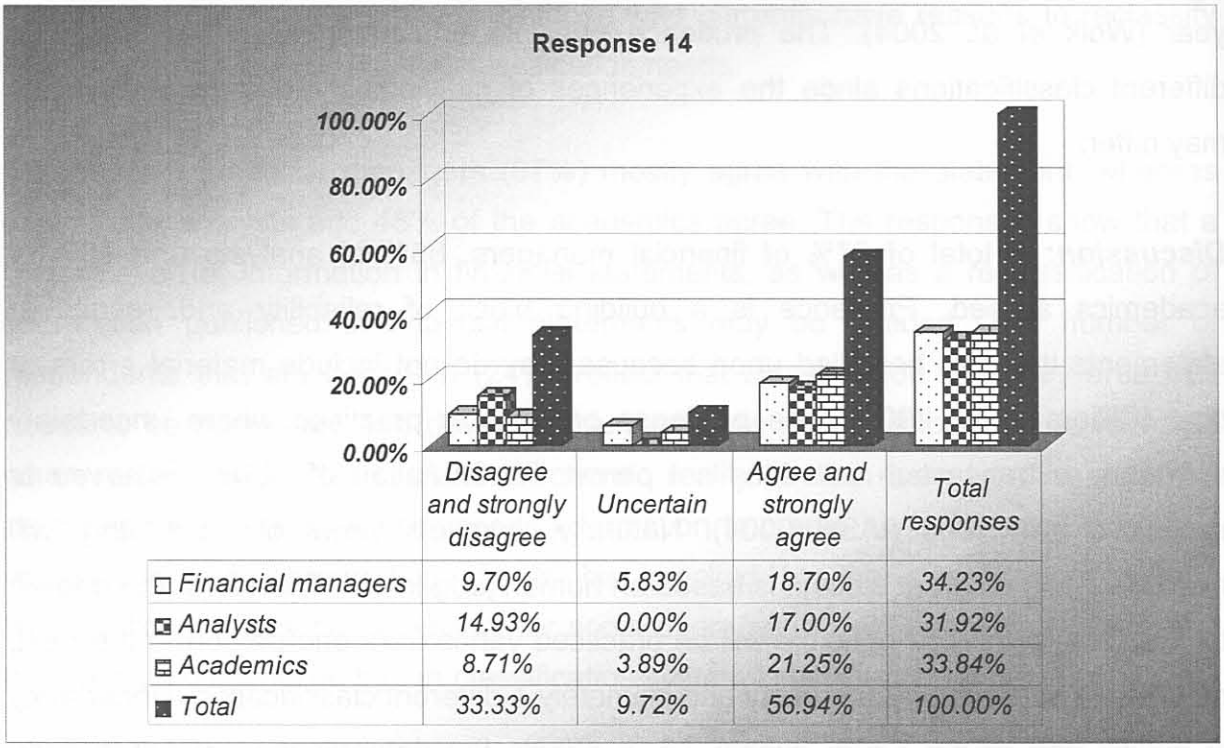
Figure 6.16 Response to Statement 13

Motivation: Based on the prudence principle, excessive income may be classified in the following financial year or excessive expenses may be classified in the current year (Wolk *et al.* 2004). The prudence principle or conservatism may result in different classifications since the experiences of individuals regarding uncertainty may differ.

Discussion: A total of 57% of financial managers, 85% of analysts and 48% of academics agreed. Prudence is a building block of reliability and results in statements that can be relied upon because they do not include material errors or bias (Cilliers *et al.* 2004). The prudence principle is practised where uncertainty surrounds a transaction but does not permit the formation of *hidden reserves* or *excessive provisions* (IASB 2004). Naturally, people's views of uncertainty will necessarily be different since it is based on human judgement. Therefore, the degree to which the prudence principle will be practiced varies from one person to the next, resulting in degrees of uncertainty and ultimately a different classification. Uncertainty is mostly part of the future events, i.e. it affects the determination of future cash flows.

Relevance goes hand in hand with prudence as it will only allow information to be included in the financial statements which is useful to users to evaluate past, present and future events and in turn will influence their economic decisions. One of the respondents reacted as follows: "IFRS on the one hand specifically describe[s] classification and on the other hand leave[s] the field wide open for personal interpretation and given the complexity and attempted prudence, financial reporting as a whole is 'devalued'". Artificial transactions used to construct the future are based on uncertainty and may affect the quality of the information (van der Poll 2003). Users of financial statements emphasise prudence but stress that deliberate understatement of assets, overstatement of liabilities and income smoothing should be discarded (AICPA 1994). The prudence principle may result in different classifications but should not result in understatements, overstatements and smoothing.

Statement 14: The accountant's classification may preclude or inhibit others from using much-needed information (Goldberg 2001:42)



	Disagree and strongly disagree	Uncertain	Agree and strongly agree	Total responses
Financial managers	9.70%	5.83%	18.70%	34.23%
Analysts	14.93%	0.00%	17.00%	31.92%
Academics	8.71%	3.89%	21.25%	33.84%
Total	33.33%	9.72%	56.94%	100.00%

Figure 6.17 Response to Statement 14

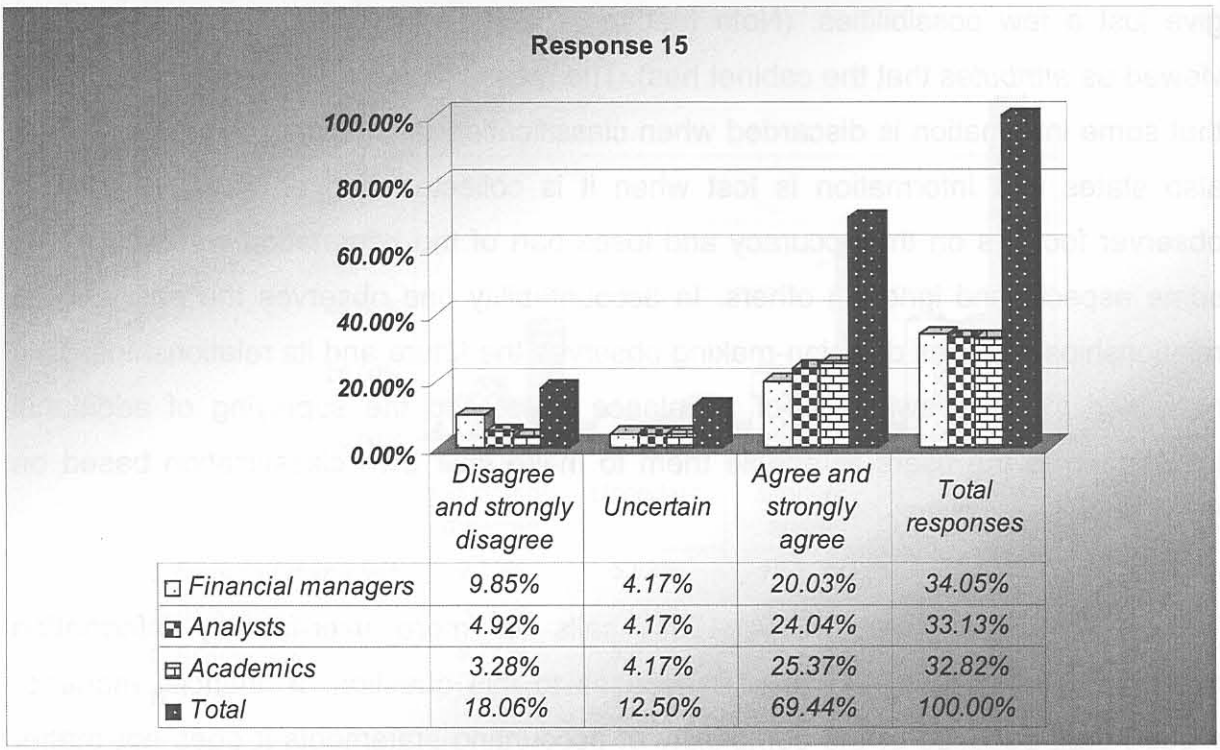
Motivation: This statement follows from a claim by Riahi-Belkaoui (2004:364) with regard to the conventional accounting model: "Its classification schemes are not always appropriate. The chart of accounts for a particular enterprise represents all of the categories into which information concerning economic affairs may be placed. This will often lead to data being left out, or classified in a manner that hides its nature from nonaccountants". According to Miller and Bahnson (2002), information supplied in GAAP financial reports do not provide information which users need and this may be based on the way the information is classified. The objective of financial reports is to provide useful information, but if it is classified in a manner that hides the nature of the data or even omits data, then the objective may not be reached.

Discussion: The response to this statement indicates a need for a proposed classification framework for accounting information, with 55% of the financial managers, 53% of the analysts and 63% of the academics agreeing with the statement. Goldberg (2001) gave the following simple example: A person buys a filing cabinet for $500 from a company. Some users may need information on the

colour, number of drawers, size or even the manufacturer of the cabinet, while other users may need information about the selling price or even the replacement price, to give just a few possibilities. (Note that these features of a filing cabinet may be viewed as *attributes* that the cabinet has). The message conveyed by this example is that some information is discarded when classification takes place. Wheatley (1993) also states that information is lost when it is collected and organised since the observer focuses on the accuracy and loses part of the information when choosing some aspects and ignoring others. In accountability one observes the past and its relationships whereas decision-making observes the future and its relationships. This may lead to the drawing up of a balance sheet and the supplying of additional information to the users to enable them to make their own classification based on their own needs.

The AICPA committee (AICPA 1994) calls for more user-friendly information reporting. However, in the list of responses to this question, a financial manager argued that, because of the complexity of accounting statements it does not matter how information is classified: it is becoming less meaningful for the investor in any case. This response seems to imply that a comprehensive classification framework satisfying *all* the needs of *all* the users may not be the way to go; neither is the introduction of two or more different classifications. Another solution may be to take a distributed union of all needs of all stakeholders and remove conflicting requirements. This is the approach advocated in this thesis (refer to Example 1.1).

Statement 15: Definitions of classification should change when the needs of society change (Heath 1978:52)



	Disagree and strongly disagree	Uncertain	Agree and strongly agree	Total responses
Financial managers	9.85%	4.17%	20.03%	34.05%
Analysts	4.92%	4.17%	24.04%	33.13%
Academics	3.28%	4.17%	25.37%	32.82%
Total	18.06%	12.50%	69.44%	100.00%

Figure 6.18 Response to Statement 15

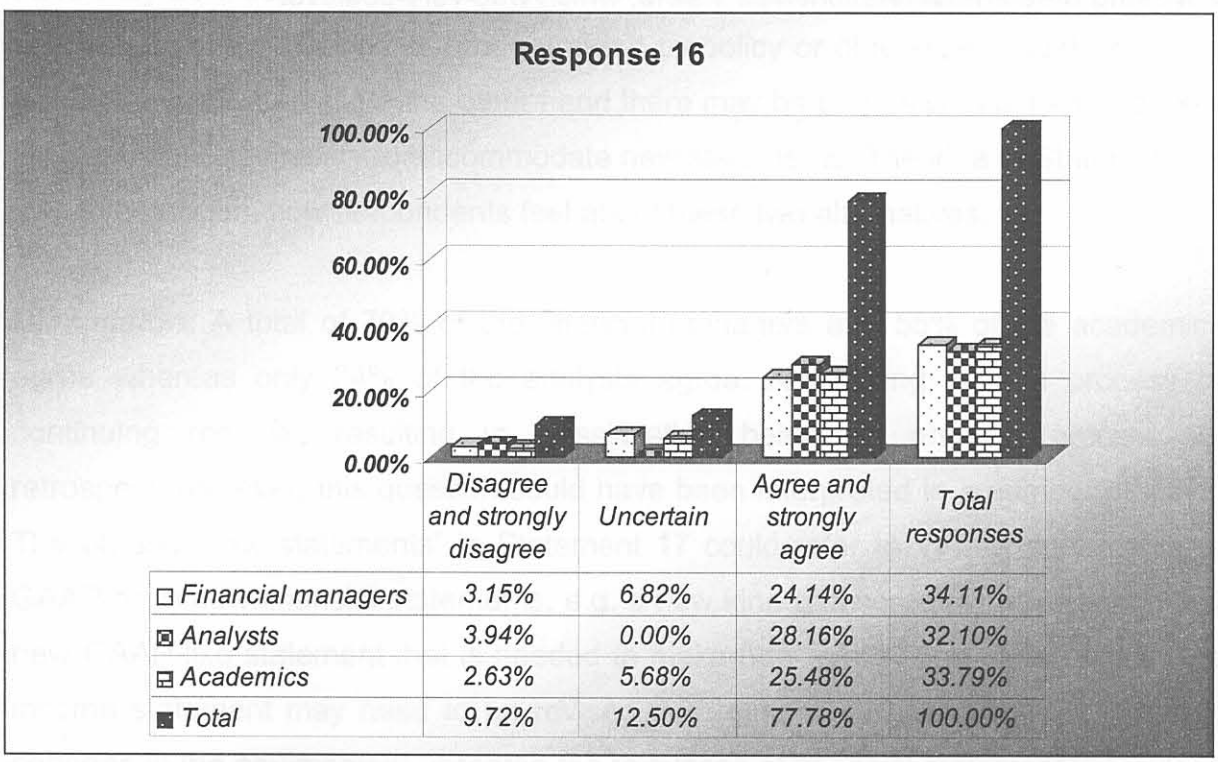
Motivation: In this thesis it is argued that classification is performed for reasons of accountability or decision usefulness. The semantics and awareness created by these concepts are functions of society. For example, as the needs of society change, the degree to which a certain piece of accounting information is useful or not, also changes. The same may hold true for the semantics or even the definitions of these two concepts. Heath (1978:52) has the following to say about definitions: "A definition is a means of identifying the partitioning attribute or attributes of a class of items, concepts, qualities, or events". In essence, society may attach different definitions to the same concepts over time. Hence classifications may change over time.

Discussion: A total of 59% of financial managers, 73% of analysts and 77% of academics agree with this statement. The positive response may be as a result of the fact that respondents understand that the classification system for accounting information should be flexible to accommodate various interest groups. Part of the driving force behind classification is to satisfy the needs of the user of financial

statements. Heath (1978:52) used the example of human death to explain the change in definition. For clarity the author includes the following non-accounting example: a new definition of death was essential when society had to decide when a vital organ could be removed for a transplant from a dead body. Society's needs changed and, therefore, the definition needed to change. The same may hold for definitions in accounting.

The responses to Statement 4 (new types of transactions emerge continually, rendering the current classification system inadequate) appear to contradict responses to Statement 15. A possibility is that respondents could not construct scenarios where new kinds of transactions (as in Statement 4) would necessitate changes (additions, deletions and amendments) to present classification mechanisms, but could easily foresee situations where changing societal needs necessitate change. This result (i.e. negative response to Statement 4 but positive response to Statement 15) may indicate a shift from technical awareness to issues of humanity in the South African context.

Statement 16: Presenting accounting information to assist in determining relevant relationships forms part of ascertaining the truth (Goldberg 1964:6)



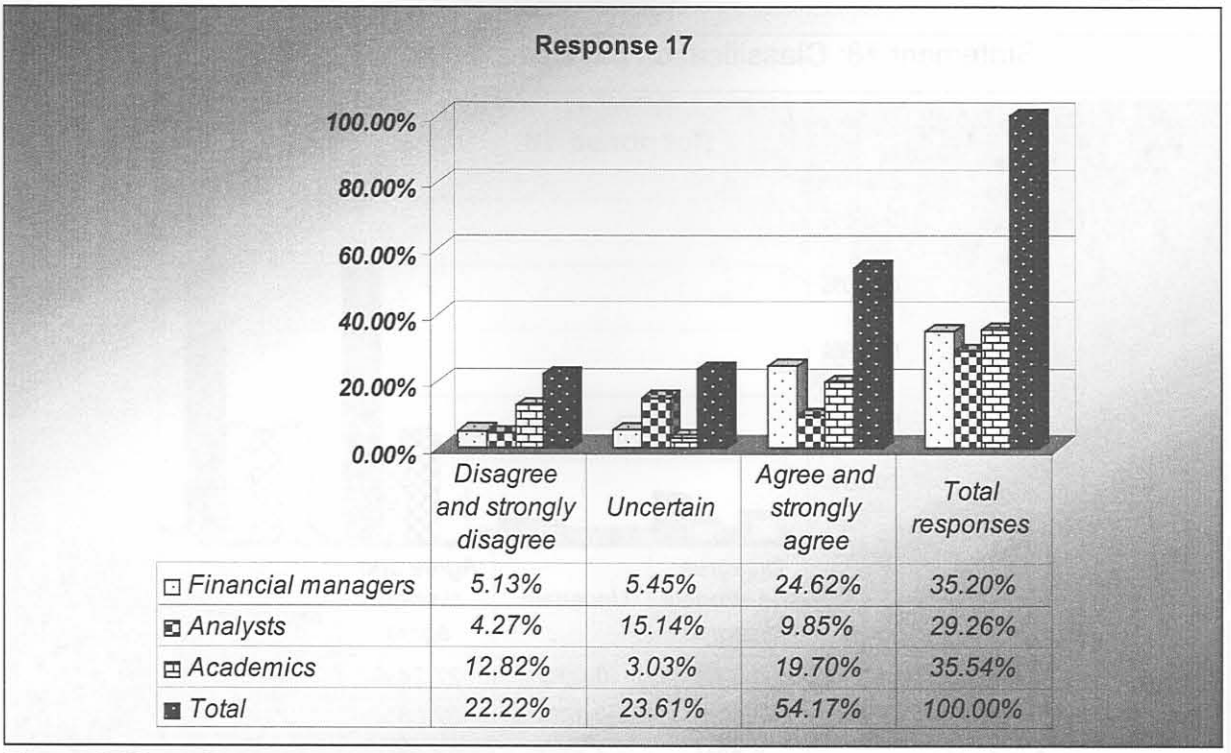
	Disagree and strongly disagree	Uncertain	Agree and strongly agree	Total responses
Financial managers	3.15%	6.82%	24.14%	34.11%
Analysts	3.94%	0.00%	28.16%	32.10%
Academics	2.63%	5.68%	25.48%	33.79%
Total	9.72%	12.50%	77.78%	100.00%

Figure 6.19 Response to Statement 16

Motivation: Financial managers as well as analysts need to be reasonably certain of the truth when analysing the statements of a company and when predicting the future. In a way this statement makes a claim which may be regarded as an obvious consequence of determining relevant relationships among entities. A relationship that indeed exists between two entities certainly brings about new knowledge of the system and, therefore, contributes to establishing a larger body of true claims about the system, i.e. it ascertains truth.

Discussion: A total of 71% of the financial managers, 88% of the analysts and 75% of the academics agree. Respondents seem to recognise the importance of establishing true relationships. There may be too many relationships among accounting entities to reveal them all but great care and effort should be exercised to discover those relationships which have the largest impact and relevancy. Gordon (1999:1) states that the process of classification is involved in the exploration of relationships among a "set of objects" to enable the confirmation of whether or not the data can be represented reliably in a small number of classes of related objects. The objective of classification is to reveal relevant relationships which in turn will reveal the truth, thereby changing data into information. The positive responses to this statement are rather similar to that of Statement 8, namely, classification is a way of making meaningful relationships visible, which was very positive.

Statement 17: New classifications must be developed to facilitate any new statements



	Disagree and strongly disagree	Uncertain	Agree and strongly agree	Total responses
Financial managers	5.13%	5.45%	24.62%	35.20%
Analysts	4.27%	15.14%	9.85%	29.26%
Academics	12.82%	3.03%	19.70%	35.54%
Total	22.22%	23.61%	54.17%	100.00%

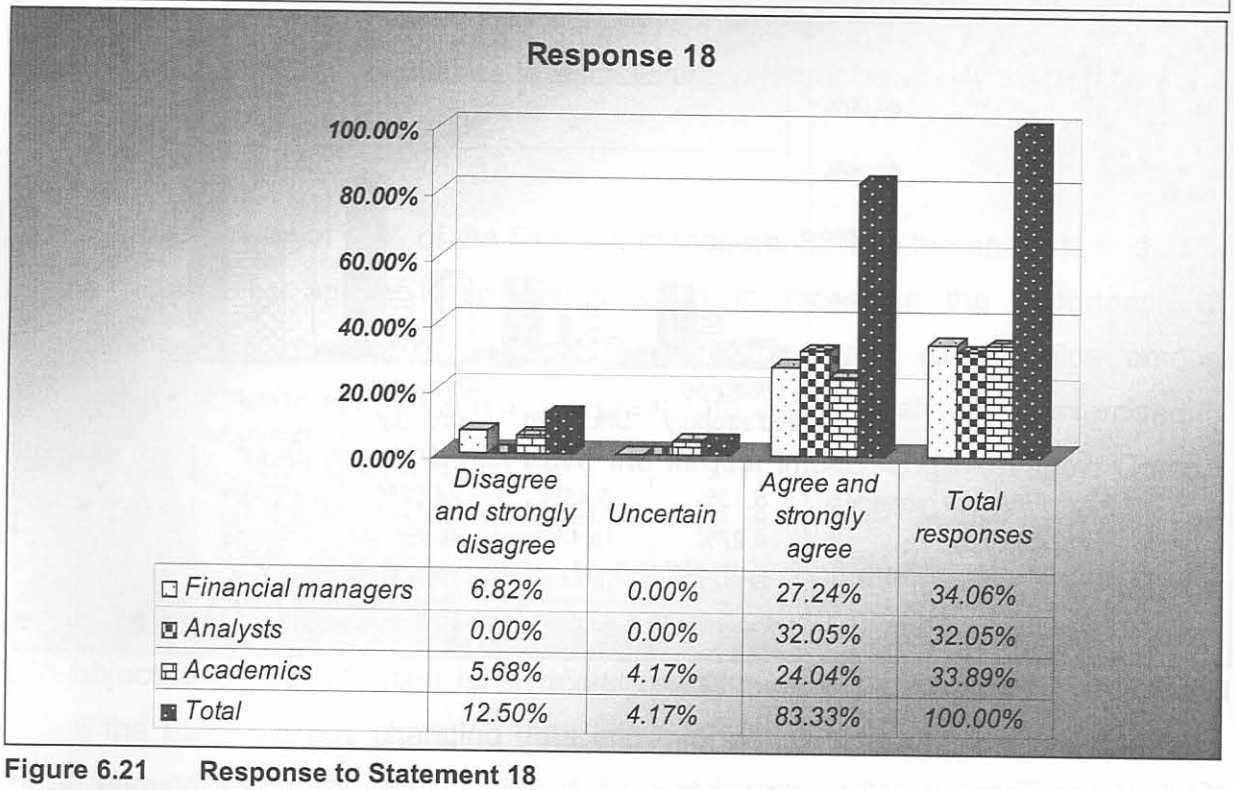
Figure 6.20 Response to Statement 17

Motivation: There may be two schools of thought on this idea. On the one hand there may be those who believe that current classifications ought not to be changed and that any new statements brought about by policy or otherwise should be forced into existing structures. On the other hand there may be groups who believe that new structures are necessary to accommodate new statements. The idea of Statement 17 was to determine how respondents feel about these two alternatives.

Discussion: A total of 70% of the financial managers and 55% of the academics agree whereas only 34% of the analysts agree. Accounting is in a process of continuing renewal, resulting in classification being an ongoing process. In retrospect, however, this question could have been interpreted in a number of ways: The phrase "new statements" in Statement 17 could refer to 1) new statements of GAAP or 2) new financial statements, e.g. a new kind of income statement or 3) any new GAAP-like statement that is needed to make new information more useful. The income statement may need to be revised according to AICPA (1994:50) because changes in the environment "threaten the relevance of financial statements". Revised

new statements, for instance, deferred taxation, could lead to the development of a new way to classify deferred taxation.

Statement 18: Classification principles should be disclosed



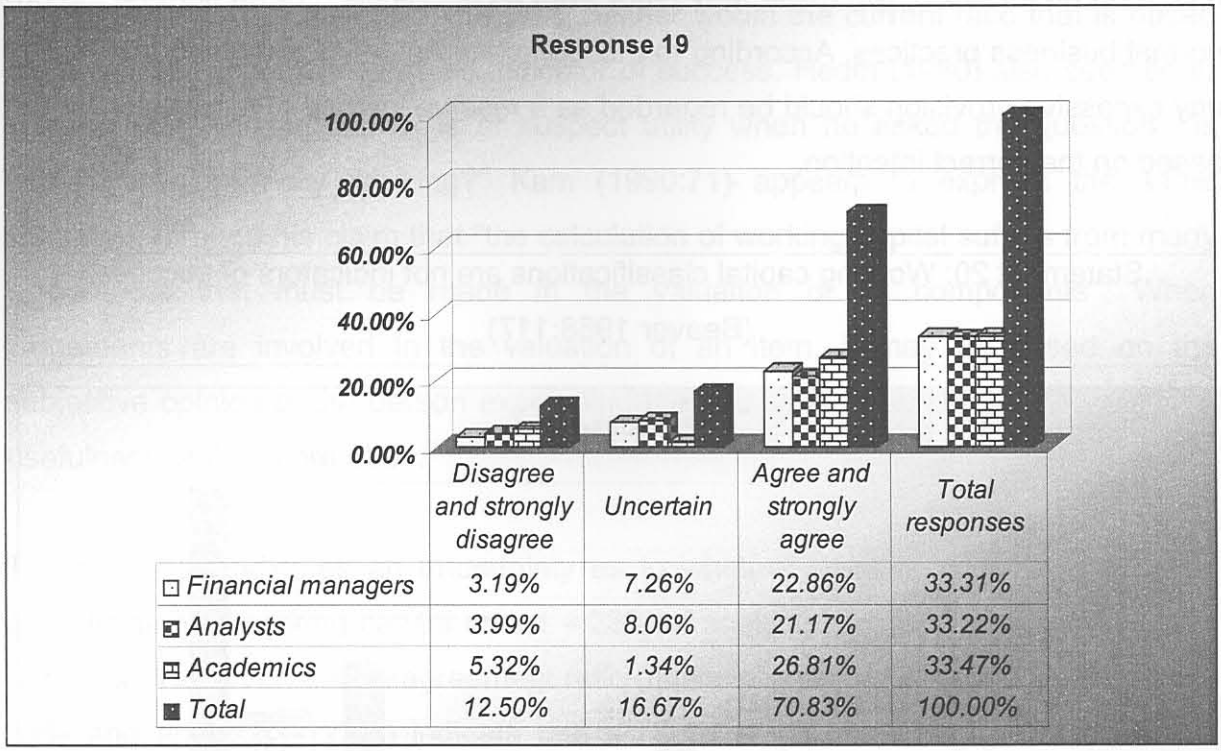
	Disagree and strongly disagree	Uncertain	Agree and strongly agree	Total responses
Financial managers	6.82%	0.00%	27.24%	34.06%
Analysts	0.00%	0.00%	32.05%	32.05%
Academics	5.68%	4.17%	24.04%	33.89%
Total	12.50%	4.17%	83.33%	100.00%

Figure 6.21 Response to Statement 18

Motivation: To enable users of financial statements to use the information contained in the financial statements for decisions, they may need to know which classification principles were used. If a user assumes that a certain classification principle was used which may not have been used, it could lead to a misinterpretation of the information.

Discussion: A total of 80% of the financial managers, 100% of the analysts and 71% of the academics agree. The positive response indicates that there may be a need to disclose the classification principles that were used. For example, when a relationship is revealed, the principle on which it relies ought to be disclosed as well, leading to the creation of new knowledge. If a user knows which classification principle was used, more meaningful decisions may be inferred. Otherwise, the user may take a decision based on an incorrect idea, assuming the use of a different classification principle.

Statement 19: Intentions, which are in contrast with normal business practices, should be classified accordingly



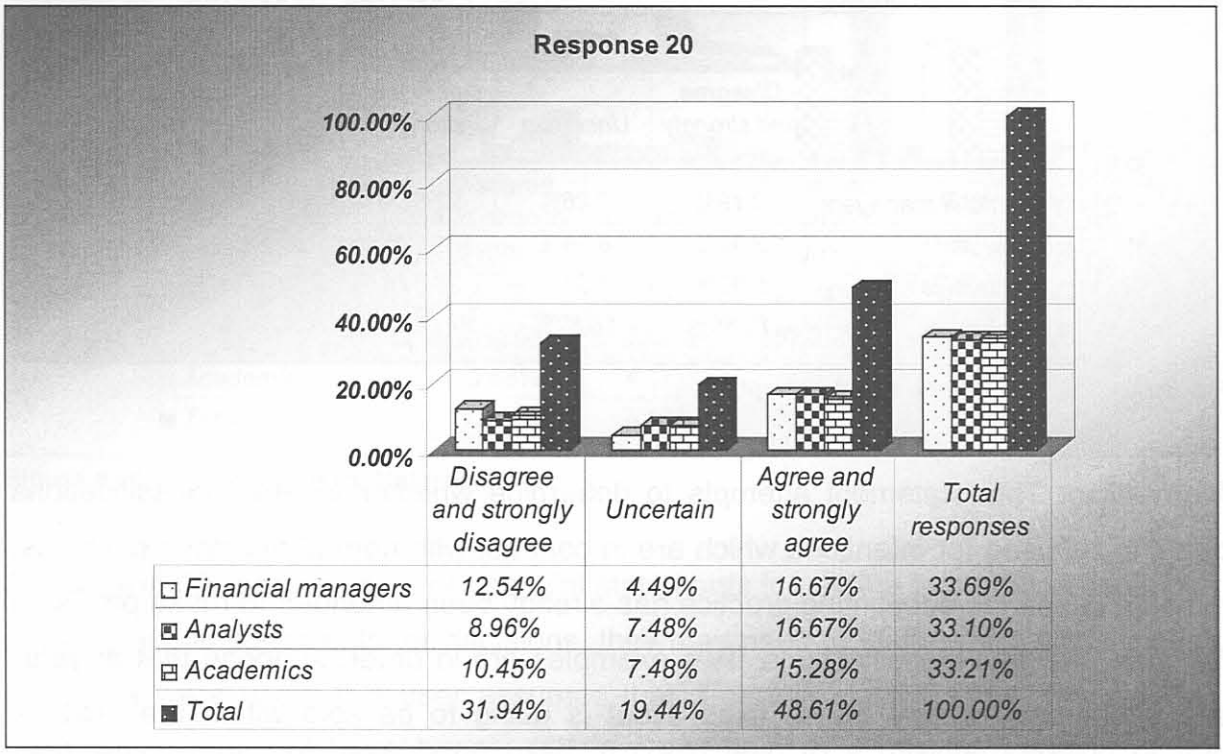
	Disagree and strongly disagree	Uncertain	Agree and strongly agree	Total responses
Financial managers	3.19%	7.26%	22.86%	33.31%
Analysts	3.99%	8.06%	21.17%	33.22%
Academics	5.32%	1.34%	26.81%	33.47%
Total	12.50%	16.67%	70.83%	100.00%

Figure 6.22 Response to Statement 19

Motivation: This statement attempts to determine whether different classifications ought to be used for intentions which are in contrast with normal business practices. In some cases the accounting practice has already been amended to make provision for such alternate classifications. Two examples are in order: suppose that at year-end a company knows that a fixed asset is going to be sold within the next 12 months. Therefore, the fixed asset should be disclosed as a *non-current asset to-be-sold* (directly after the other *non-current assets* still held for use) if based on the company's intention. Another example is where the current portion of a long term liability is shown as a *current liability* based on the intention to repay this amount within the next 12 months.

Discussion: The general response was positive as 69% of financial managers, 64% of analysts and 80% of academics agreed. When a decision to classify an item is based on an intention, the result may differ from a classification of an item based on normal business practices. According to the Company Act 1973 (Butterworths 2006), any excessive provision should be regarded as a reserve instead of a provision when based on the correct intention.

Statement 20: Working capital classifications are not indicators of success (Beaver 1968:117)



	Disagree and strongly disagree	Uncertain	Agree and strongly agree	Total responses
Financial managers	12.54%	4.49%	16.67%	33.69%
Analysts	8.96%	7.48%	16.67%	33.10%
Academics	10.45%	7.48%	15.28%	33.21%
Total	31.94%	19.44%	48.61%	100.00%

Figure 6.23 Response to Statement 20

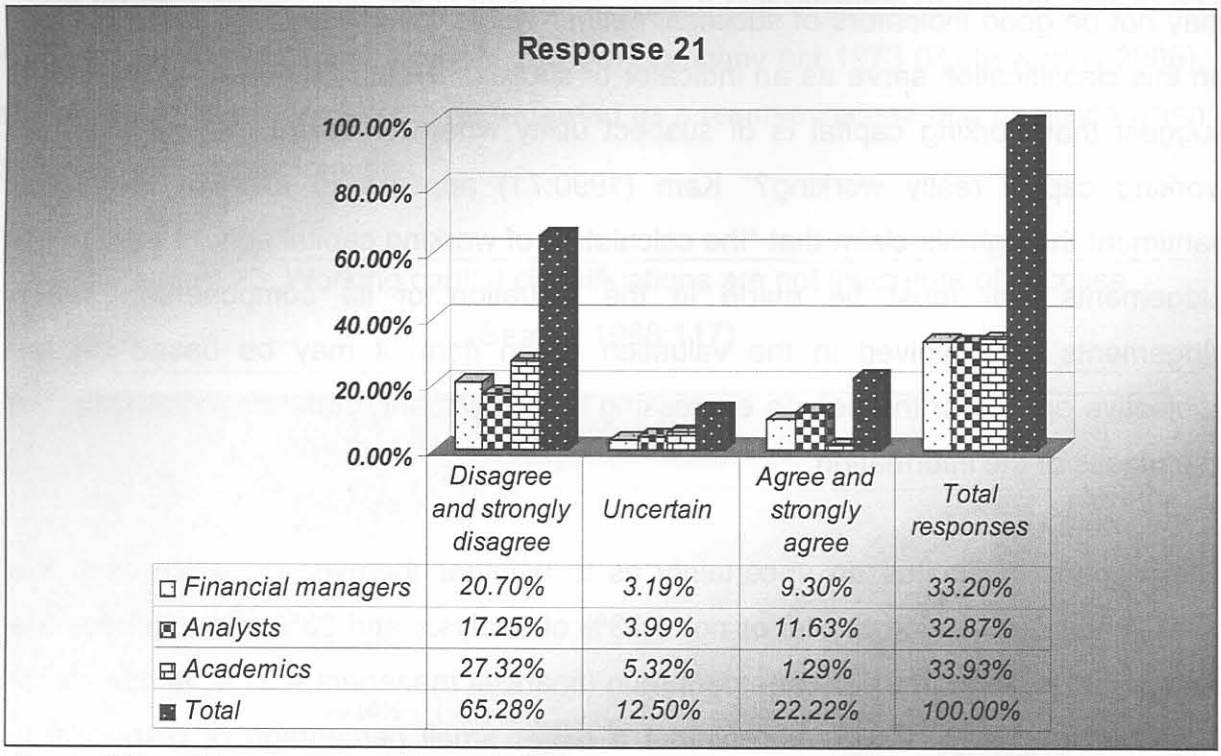
Motivation: In an analysis of results by Schroeder *et al.* (2005:264), they point out the "weakness of evaluating a company's liquidity by focusing solely on its working capital position". The success of a company may also be measured according to the liquidity of a company. If the liquidity of a company cannot be established based on the working capital position alone, it may not be a good indicator of the success of the company.

Discussion: Only 49% of the financial managers and 50% of the analysts agreed whereas only 46% of the academics agreed. Beaver (1968) conducted research on

which ratios are indicators of success. He found that the ratios based on the current classification are not the best indicators. Therefore, working capital classifications may not be good indicators of success; neither would the current ratio that is based on this classification serve as an indicator of success. Heath (1980) also seemed to suggest that working capital is of suspect utility when he asked the question: "Is working capital really working?" Kam (1990:71) appears to express the same sentiment through his claim that "the calculation of working capital suffers from many judgements that must be made in the valuation of its components". When judgements are involved in the valuation of an item, it may be based on the subjective opinion of the person expressing the judgement, therefore influencing the usefulness of the information.

The response indicates an uncertainty as to whether there is a problem with the classification of working capital or not – 23% of analysts and 23% of academics are uncertain. However, the disagreement ratio (financial managers – 37%, academics – 31% and analysts – 27%) indicate that a rather small percentage of respondents believe that the present working capital classification is correct. Lev (1974) warns that the ratios based on working capital used for decisions are not useful as they are based on a position at a specific point in time and need to be changed to incorporate the changes in working capital over time. Samuels, Wilkes and Brayshaw (1999:42) also state that it can be "dangerous to judge the liquidity and gearing position of a company" based on the information supplied in the balance sheet as the information relates to only one day in the year. Working capital positions vary among companies in industry and are, therefore, not good indicators of success. It is difficult to control all the components of working capital and in times of growth the working capital position can deviate quite substantially from the norm, resulting in upsets in the market (Samuels *et al.* 1999). When additional information is made available to users, these upsets may not realise in the market.

Statement 21: The current working capital classification is not useful for decision-making



	Disagree and strongly disagree	Uncertain	Agree and strongly agree	Total responses
Financial managers	20.70%	3.19%	9.30%	33.20%
Analysts	17.25%	3.99%	11.63%	32.87%
Academics	27.32%	5.32%	1.29%	33.93%
Total	65.28%	12.50%	22.22%	100.00%

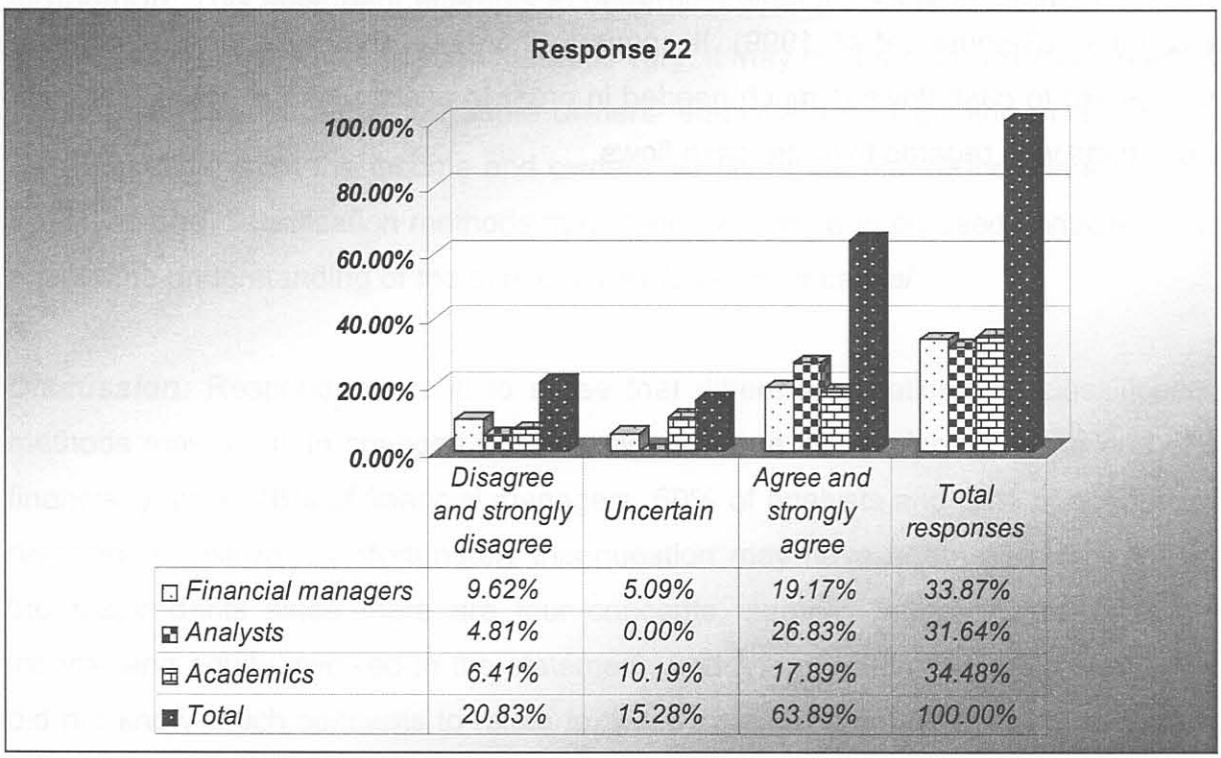
Figure 6.24 Response to Statement 21

Motivation: Heath (1978) argues that the working capital concept was developed for the credit grantor and, since they are no longer the only primary users of financial statements, the needs of other users should be taken into account to provide information that may be used in making decisions. Because the working capital concept is based on earlier periods when there was a focus on the balance sheet and on the capability of a company to repay its debt, working capital did not develop fast enough to keep up with users' needs, i.e. decision-making (Schroeder *et al.* 2005). Schroeder *et al.* (2005) motivate the use of monetary items to suit user needs to enhance decision-making based on the working capital concept.

Discussion: A total of 28% of financial managers, 35% of analysts and 4% of academics agree with this statement. The responses to this statement agree with those of the previous Statement 20, namely, respondents tend to feel that the present classification of working capital is in order, despite the fact that numerous researchers indicate otherwise, as discussed below.

Ratios are used to make decisions and, if the ratios are based on a classification that is not a good indicator of success, the decisions to be taken may also be of doubtful nature. If the current working capital classification is not a good indicator of success, it follows that it may not be useful for decision-making purposes either. The negative response may be because of the fact that the working capital classification is almost part of the accounting *tradition* as it started in 1947 (Miller and Bahnson 2002). The respondents may have answered this question out of a habitual accountability viewpoint instead of a decision-making viewpoint. Working capital ratios were used to determine the credit worthiness of a company in the early days of accounting (Lev 1974). However, analysts have now shifted their attention to more economically meaningful indicators, for instance, the determination of technical solvency (Walter 1957). To overcome the problem of working capital being not useful for decision-making purposes, it is proposed that operating cycles are to be included in the supplements to the financial statements. This will provide additional information that may indicate why the ratios based on the working capital deviate considerably at certain stages in the life cycle of a company.

Statement 22: Working capital must be classified in terms of future cash flow realisation (Heath 1978:73)



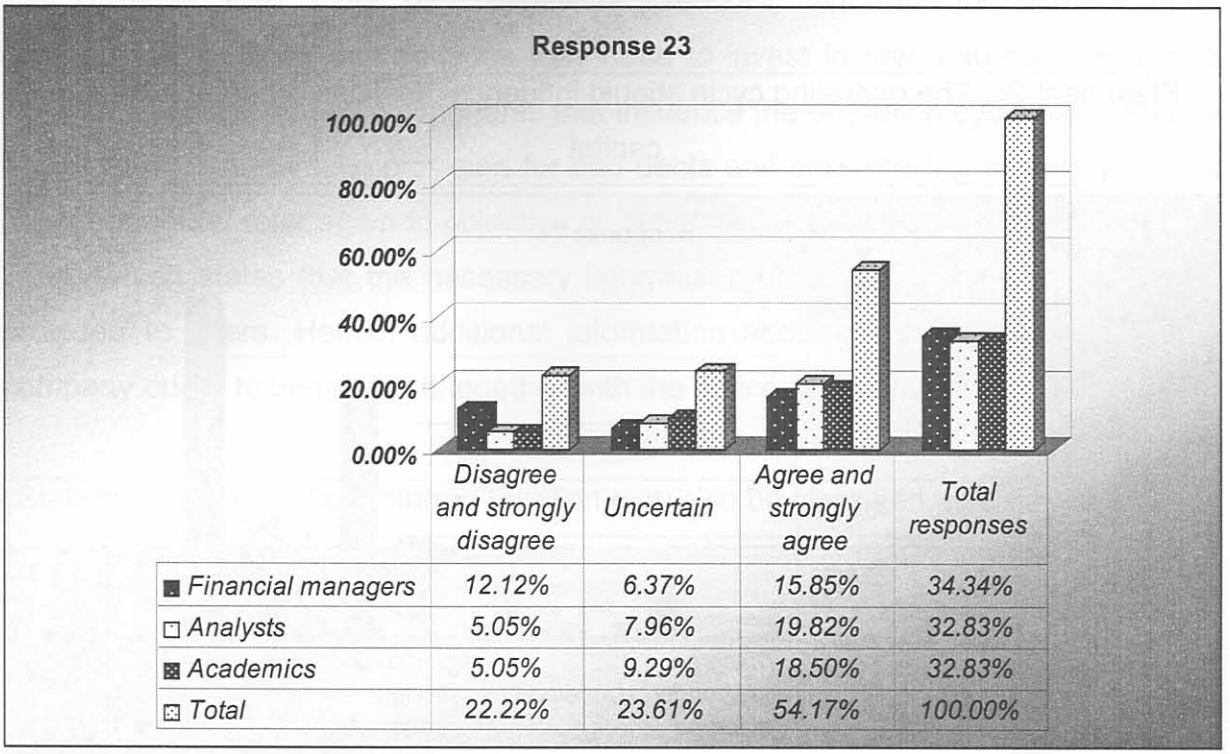
	Disagree and strongly disagree	Uncertain	Agree and strongly agree	Total responses
Financial managers	9.62%	5.09%	19.17%	33.87%
Analysts	4.81%	0.00%	26.83%	31.64%
Academics	6.41%	10.19%	17.89%	34.48%
Total	20.83%	15.28%	63.89%	100.00%

Figure 6.25 Response to Statement 22

Motivation: According to Heath (1978) the analyst is concerned with how much cash the company will receive and when, rather than whether the receivable is part of the working capital. The Trueblood Committee (Trueblood 2004) also states that the supplying of information to predict, compare and evaluate future cash flows is as an objective of financial statements. As the working capital classification is part of the financial statements, it goes without saying that it ought to provide the same information.

Discussion: A total of 57% of the financial managers, 85% of the analysts and 52% of the academics agree. The analysts agree more with this statement than financial managers and academics. This may be as a result of different objectives and decision-making needs. Working capital classification is not based on future cash flow realisation since there are too many hybrids and valuation methods involved (Schroeder *et al* 2005; Wild *et al.* 2001). The uncertainty of cash flow is based on the future, and there are degrees of uncertainty which leads to prudence. The Trueblood Committee (objective nr 3.) recommended that useful information should be provided to users for the prediction, comparison and evaluation of potential cash flows, and should include information about the amount, timing and related uncertainty of the cash flows (Wolk *et al.* 2004). Most investment decisions are based on cash flow data, but accounting ratios are based on accrual accounting and not cash flow accounting (Samuels *et al.* 1999). It appears, therefore, that supplying information with regard to cash flows is much needed in order to assist users to make their own predictions with regards to future cash flows.

Statement 23: Because valuation and classification methods vary, owners' equity at the start of a financial year may lead to different income and equity figures at the end of the financial year (Mattessich 1995:111)



	Disagree and strongly disagree	Uncertain	Agree and strongly agree	Total responses
Financial managers	12.12%	6.37%	15.85%	34.34%
Analysts	5.05%	7.96%	19.82%	32.83%
Academics	5.05%	9.29%	18.50%	32.83%
Total	22.22%	23.61%	54.17%	100.00%

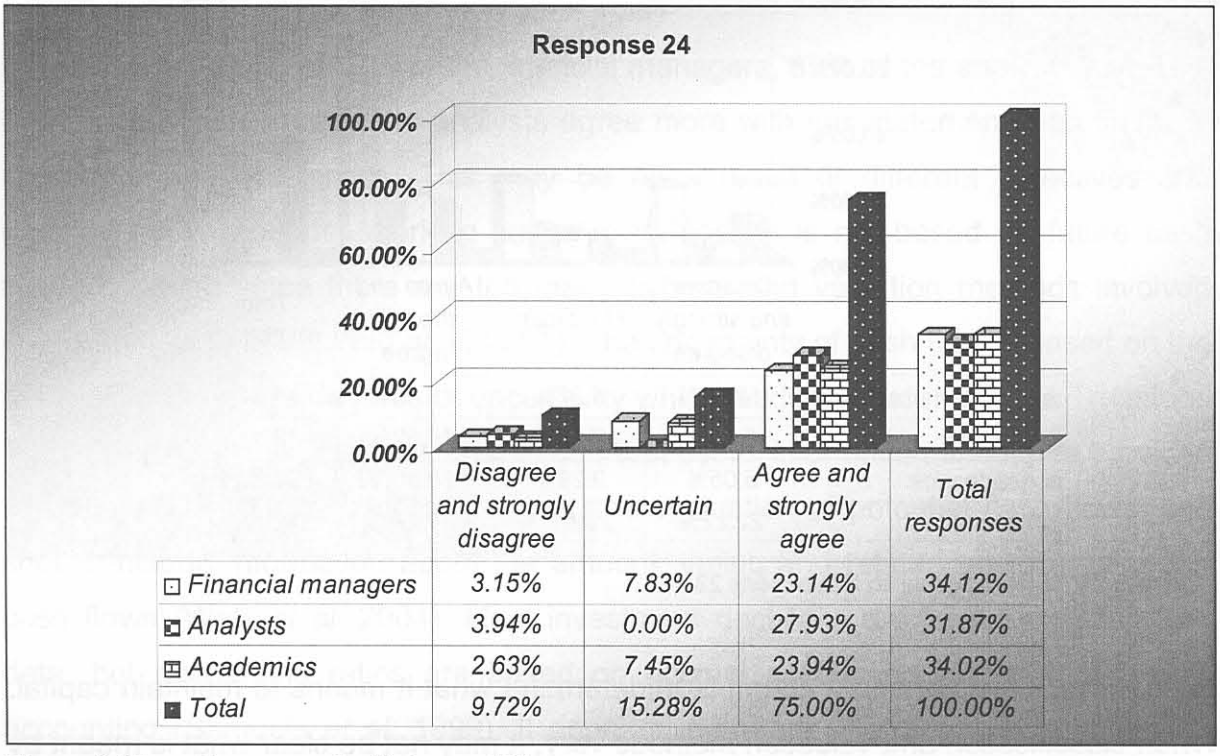
Figure 6.26 Response to Statement 23

Motivation: This statement attempts to determine what it means to maintain capital. When classification and valuation methods vary, it may not be clear what is meant by capital maintenance since the same owners' equity at the beginning of a financial year may differ from the income and owners' equity at the end of the financial year. Valuation and classification methods may, therefore, need to be used consistently to enable the understanding of the concept *maintenance of capital*.

Discussion: Respondents tend to agree that different valuation and classification methods may result in changes in equity figures from the beginning to the end of a financial year as 46% of financial managers, 60% of analysts and 56% of academics responded positively. Unfortunately this question may have been misinterpreted by the respondents since there are four concepts, namely, valuation, classification, income and equity involved in the statement, and it is possible that the respondents did not know which concepts to relate to. It may therefore not be sensible to include

these responses in a final analysis. The large number of uncertain responses, 19% of the financial managers, 24% of the analysts and 28% of the academics gives further motivation not to include these responses. Nevertheless, classification does influence the quality of the information contained in financial statements.

Statement 24: The operating cycle should influence the classification of working capital



	Disagree and strongly disagree	Uncertain	Agree and strongly agree	Total responses
Financial managers	3.15%	7.83%	23.14%	34.12%
Analysts	3.94%	0.00%	27.93%	31.87%
Academics	2.63%	7.45%	23.94%	34.02%
Total	9.72%	15.28%	75.00%	100.00%

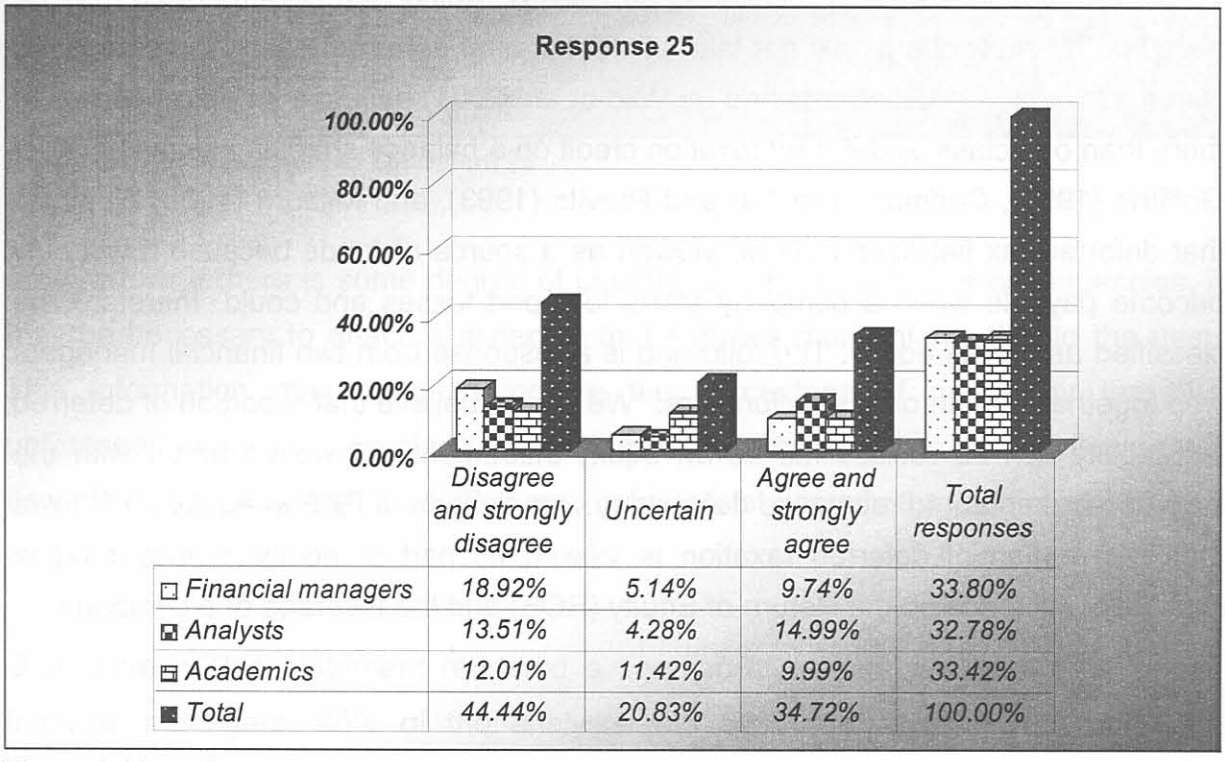
Figure 6.27 Response to Statement 24

Motivation: The operating cycles of companies differ: for instance, a retail company dealing with cash sales may very well have a different operating cycle to that of a manufacturing company (Schroeder *et al.* 2005). The question, however, is whether a different operating cycle ought to lead to a different classification of working capital.

Discussion: A total of 68% of the financial managers, 88% of the analysts and 70% of the academics agree with Statement 24. The operating cycle is the difference in time between the cash outflow and the cash inflow of a company. The operating cycles of companies do vary and should therefore influence the classification of working capital (Herrick 1954:627). Some companies have an operating cycle that is longer while others have a cycle that is shorter than a year. Samuels *et al.* (1999)

suggest that a company should reveal the operating cycle for the year and for the quarters as these may differ quite substantially, especially in companies with seasonal business. The working capital levels of retailing companies are relatively low because they have high levels of creditors, whereas for manufacturing companies it is fairly high because they need to invest in raw materials. In current accounting practices two components that influence the operating cycle have already been addressed, namely, provision for bad debts and slow moving inventory. In this regard one may refer again to objective nr. 3 of the Trueblood Committee (Trueblood 2004) which states that the necessary information on future cash flows should be provided to users. Hence, additional information about the operating cycles of a company ought to be provided together with the financial statements.

Statement 25: A part of deferred taxation may also be classified as a part of equity



	Disagree and strongly disagree	Uncertain	Agree and strongly agree	Total responses
Financial managers	18.92%	5.14%	9.74%	33.80%
Analysts	13.51%	4.28%	14.99%	32.78%
Academics	12.01%	11.42%	9.99%	33.42%
Total	44.44%	20.83%	34.72%	100.00%

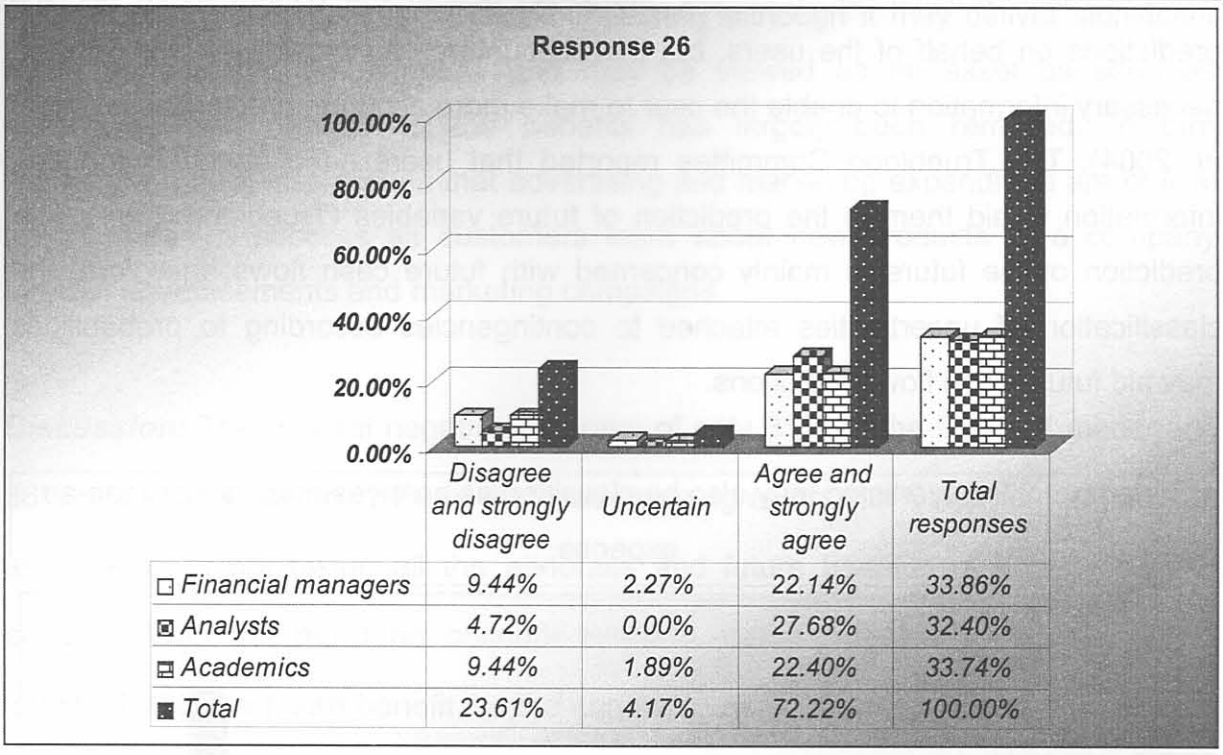
Figure 6.28 Response to Statement 25

Motivation: According to Wild *et al.* (2001), deferred tax liabilities will only become payable when a company starts to report losses. Since this future reversal is only a remote possibility, for instance, with timing differences due to accelerated depreciation, the deferred credit that exists may be viewed as a source of funds and therefore be classified as equity. Graul and Lemke (1976) advocate that a deferred

taxation credit may be viewed as an investment by government in a company, the reason being that government wants to stimulate growth in the business. This kind of argument will result in a deferred taxation credit classified as part of owners' equity because it is viewed as a capital investment. A further motivation to classify a part of deferred taxation as equity may be because the company will never pay back this "liability" unless the company starts to make losses and doesn't recover and become a going concern again. CFA (2006:235) states that "if **deferred tax liabilities** are expected to reverse in the future, then they are best classified as liabilities. If, however, they are not expected to reverse in the future, they are best classified as equity". It may be argued that in most cases it is unlikely for companies to start reporting losses continually because of the going concern assumption and, therefore, this part of deferred taxation should be classified as equity.

Discussion: The general negative outcome of only 54% of the financial managers, 41% of the analysts and 36% of the academics agreeing with Statement 25 may be because the respondents did not take all attributes of deferred taxation into account. Deferred taxation is called a hybrid by Wild *et al.* (2001) because it has properties of more than one class. A deferred taxation credit on a balance sheet is a known hybrid. Griffiths (1995), Coffman, Tondkar and Previts (1993), and Milburn (1985) all argue that deferred tax liabilities may be viewed as a source of funds because it will only become payable when a company starts to report losses and could, therefore, be classified as part of equity. The following is a response from two financial managers who together filled in one questionnaire: "We do not believe that a portion of deferred tax liability can be reclassified as an equity instrument but we do agree with the current requirement to recognise deferred tax revaluation of PPE in equity". It follows that if a portion of deferred taxation is viewed as part of equity, it may have a significant influence on the Return of Equity (ROE) and the leverage of a company.

Statement 26: Uncertainties attached to contingencies should be classified according to probabilities



	Disagree and strongly disagree	Uncertain	Agree and strongly agree	Total responses
Financial managers	9.44%	2.27%	22.14%	33.86%
Analysts	4.72%	0.00%	27.68%	32.40%
Academics	9.44%	1.89%	22.40%	33.74%
Total	23.61%	4.17%	72.22%	100.00%

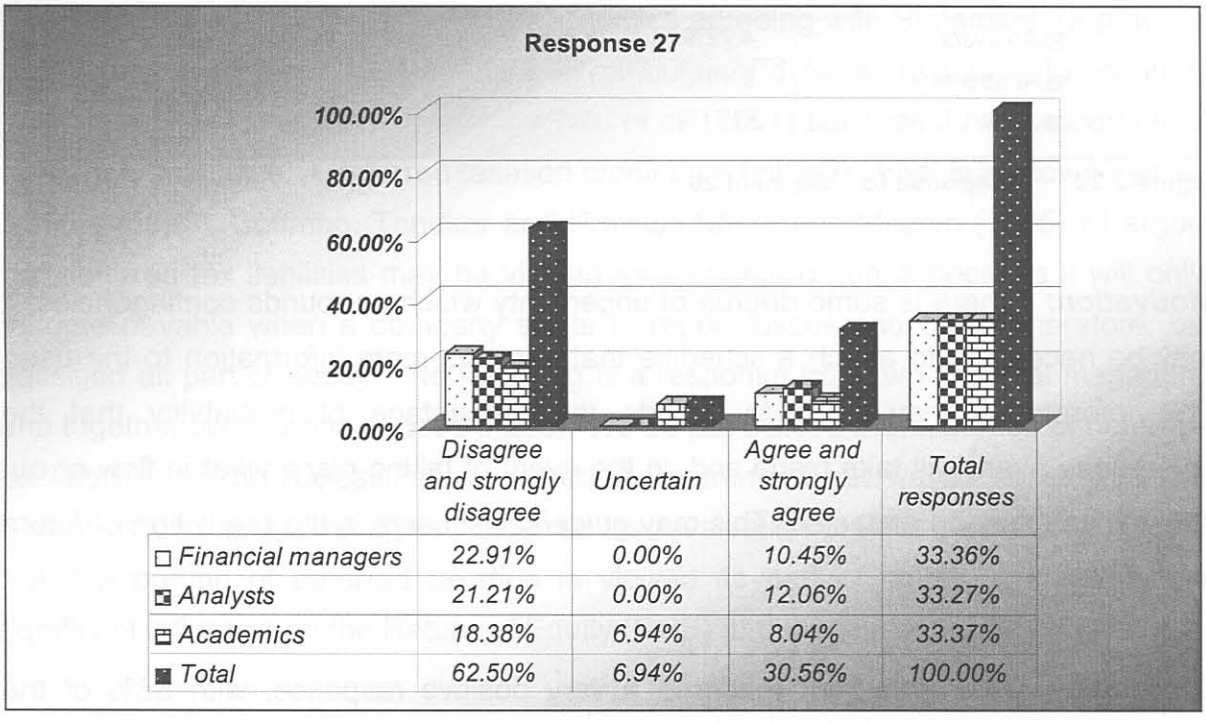
Figure 6.29 Response to Statement 26

Motivation: If there is some degree of uncertainty which surrounds contingencies, it may be necessary to attach a schedule that supplies more information to the user. This information may need to include the percentage of probability that the unforeseen event will take place and, in the event of taking place what in flow or out flow of cash may be expected. This may guide/assist users in the prediction of future cash flows.

Discussion: This statement rendered a very positive response, with 65% of the financial managers, 85% of the analysts and 66% of the academics agreeing. Respondents do agree that this classification may lead to more useful information. This may be because they experience the need for more information to be revealed with regards to contingencies. When the measurement of assets and liabilities are largely based on assumptions about a future event, the precision of the measurement is influenced (AICPA 1994). AICPA (1994) recommends that where there are significant uncertainties, the following should be disclosed: 1) how the amount was derived, 2) how estimates were arrived at, and 3) assumptions and

judgements. This statement is linked with the future and therefore uncertainty will necessarily be part of the classification. As ASOBAT (Chambers 1998) stated, users need to make predictions about the future. An accountant cannot make specific predictions on behalf of the users, but the accountant can provide a user with the necessary information to enable the user to make more accurate predictions (Wolk *et al.* 2004). The Trueblood Committee reported that users need useful accounting information to aid them in the prediction of future variables (Trueblood 2004). The prediction of the future is mainly concerned with future cash flows; therefore, the classification of uncertainties attached to contingencies according to probabilities may aid future cash flow predictions.

Statement 27: Advertising may also be classified as an investment rather than an expense



	Disagree and strongly disagree	Uncertain	Agree and strongly agree	Total responses
Financial managers	22.91%	0.00%	10.45%	33.36%
Analysts	21.21%	0.00%	12.06%	33.27%
Academics	18.38%	6.94%	8.04%	33.37%
Total	62.50%	6.94%	30.56%	100.00%

Figure 6.30 Response to Statement 27

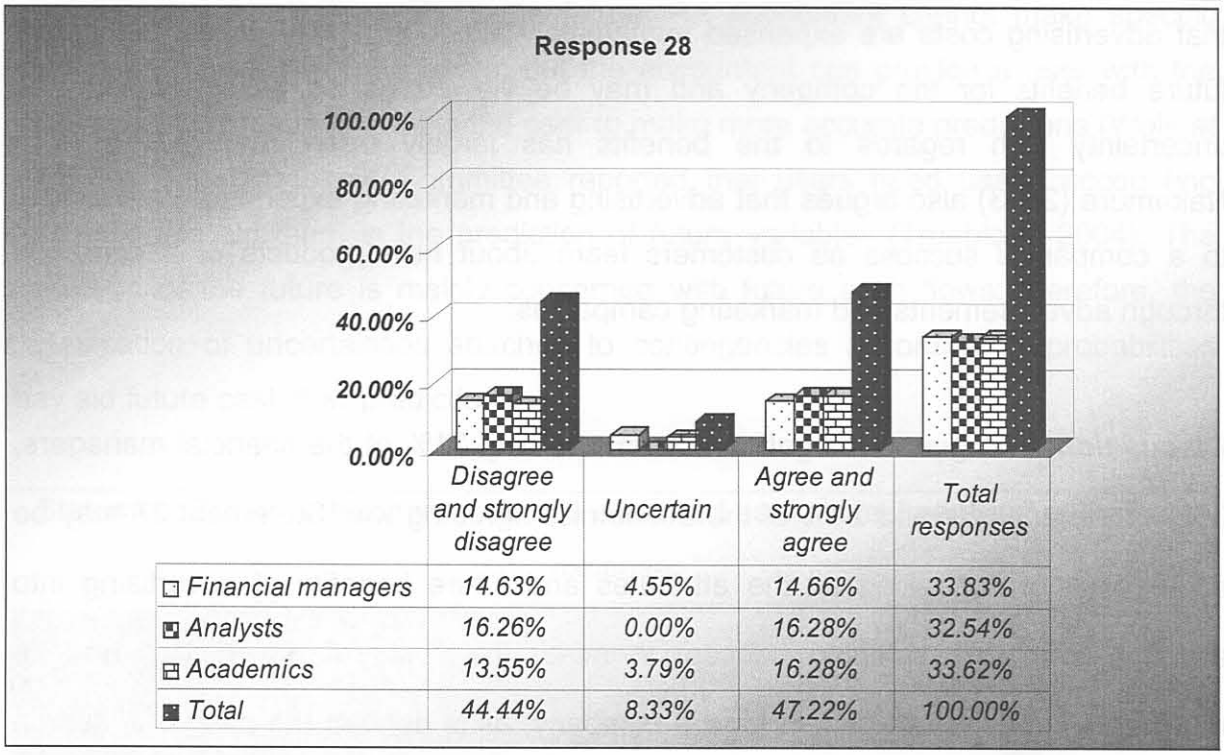
Motivation: Like R&D, advertising expenses promise benefits for a number of years to come, therefore it is logical according to Higgins (2004) to record the expenses as assets and then distribute the costs over the useful life of the asset. Instead, "because the magnitude and duration of the prospective payoffs from research and development (R&D) and marketing expenditures are difficult to estimate, accountants

duck the problem by forcing companies to record the entire expenditure as an operating cost in the year incurred" (Higgins 2004:13). Lev and Zarowin (2003) state that advertising costs are expensed immediately although it may deliver significant future benefits for the company and may be viewed as an asset as soon as uncertainty with regards to the benefits has largely been removed. In turn Nakamura (2003) also argues that advertising and marketing expenditure are crucial to a company's success as customers learn about new products of a company through advertisements and marketing campaigns.

Discussion: The general negative outcome of only 31% of the financial managers, 36% of the analysts and 24% of the academics agreeing with Statement 27 may be as a result of not taking all the attributes and future benefits of advertising into account. With the matching concept in mind, the costs of advertising may be matched with the future benefit for the company, as is done in the case of research and development. When companies advertise themselves or their product, it is an investment in their future. Responses from two different financial managers are:

1. *"We believe that sometimes there is a future benefit from advertising, but the measurement, amortisation and impairment issues associated with this benefit are too subjective to justify recognition".* If a future benefit may be derived from a certain action, for example advertising, it may need to be classified as an investment when all relevant attributes are taken into account, even if the measurement, amortisation and impairment issues are subjective.
2. *"I don't believe that there is a tangible measure for advertising, and therefore the classification as an investment would make me nervous".* When all the relevant attributes of advertising are taken into account, it may be viewed as an investment in the future of a company and it may be classified accordingly.

Statement 28: Cash should be earmarked in anticipation of the purchase/replacement of a fixed asset



	Disagree and strongly disagree	Uncertain	Agree and strongly agree	Total responses
Financial managers	14.63%	4.55%	14.66%	33.83%
Analysts	16.26%	0.00%	16.28%	32.54%
Academics	13.55%	3.79%	16.28%	33.62%
Total	44.44%	8.33%	47.22%	100.00%

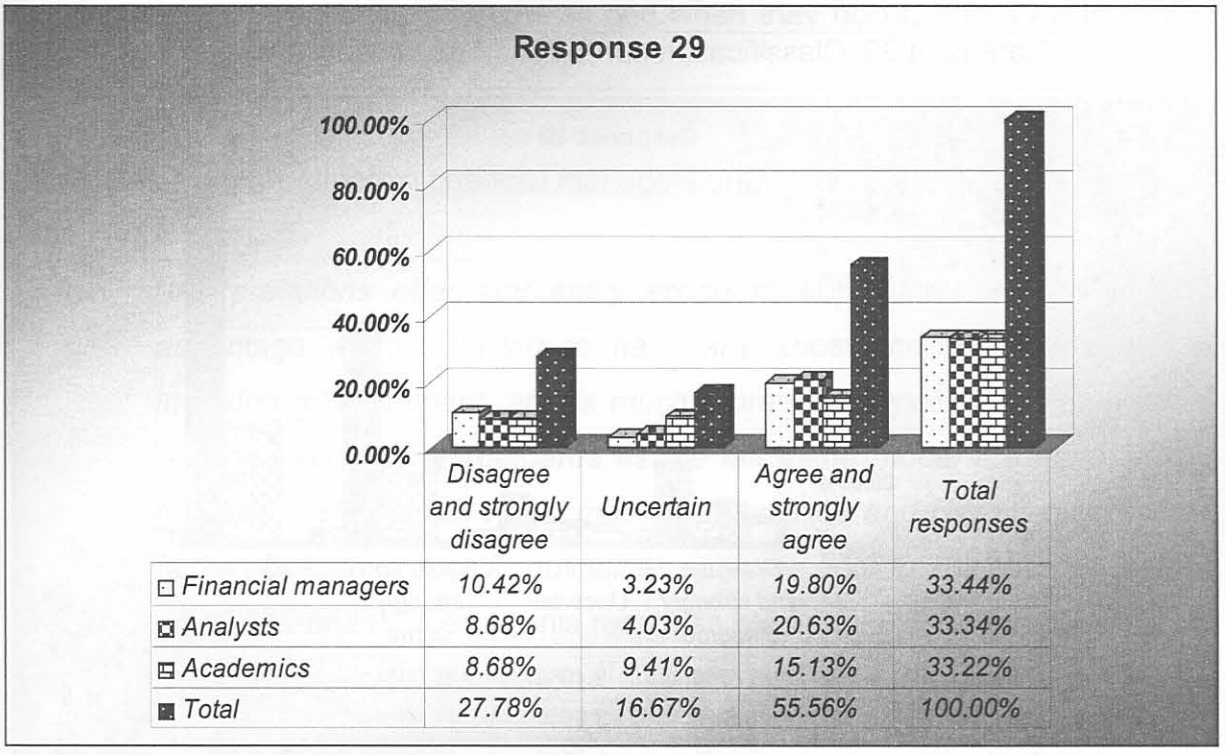
Figure 6.31 Response to Statement 28

Motivation: The provision for depreciation "has no place" in the income statement, because it cannot be matched with income according to Fitzgerald and Fitzgerald (1947:217). If an amount equal to the depreciation is withdrawn from income and placed in a fund to provide for the replacement of fixed assets, it may be placed in the income statement. Miller and Bahnson (2002:74) argue that "the usefulness of information produced by allocating a historical cost (measured in historical dollars) over a predicted but unobserved future period" should be questioned. Hence, a more useful suggestion may be the earmarking of cash (internal fund) for the future replacement of an asset instead of allocating a historical cost.

Discussion: The outcome of this question is slightly negative with 43% of the financial managers, 50% of the analysts and 48% of the academics agreeing with Statement 28. The current practice is to write-down an asset by depreciating the asset. Instead of using the depreciation provision to match the expense of the asset with the revenue earned, a provision for the replacement of the asset should be created (van der Poll 2003). If the provision does not earmark the cash for the future

replacement of the asset, the cash may have been used for operating expenses when replacement takes place, and the company may then need to borrow cash to replace the asset instead of making use of an internal fund. The respondents seem to be more inclined to follow the traditional depreciation provision approach and do not seem to realise the benefits of this earmarking or creation of an internal fund.

Statement 29: The behaviour of bank overdrafts may lead to a different classification



	Disagree and strongly disagree	Uncertain	Agree and strongly agree	Total responses
Financial managers	10.42%	3.23%	19.80%	33.44%
Analysts	8.68%	4.03%	20.63%	33.34%
Academics	8.68%	9.41%	15.13%	33.22%
Total	27.78%	16.67%	55.56%	100.00%

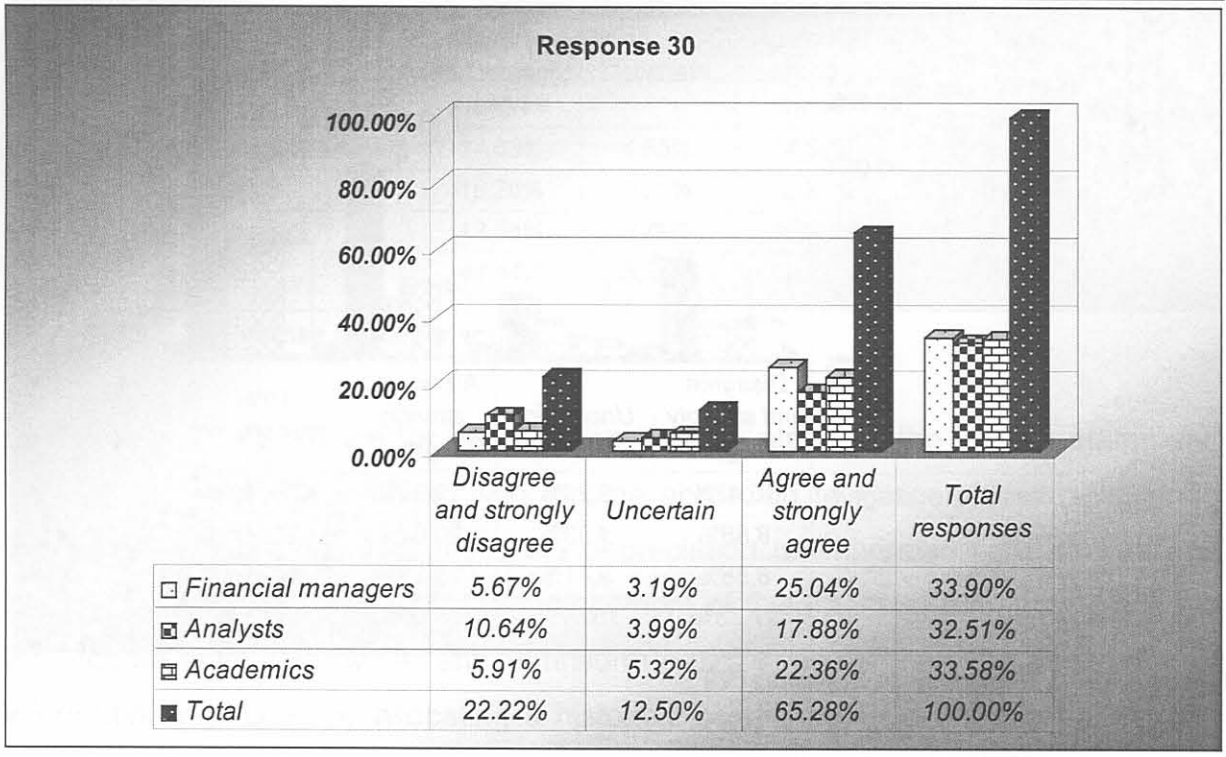
Figure 6.32 Response to Statement 29

Motivation: This statement attempts to determine whether the classification of a bank overdraft may be based on the behaviour of the bank overdraft, i.e. short or long term behaviour. If a company has a bank overdraft which carries on over the years, it may be viewed as a long term liability based on the intention to fund the company from an overdraft. If a bank overdraft cannot be repaid by a company without "destroying" the company financially, then it may be viewed as a long term liability rather than a *current asset* based on the attributes involved.

Discussion: A total of 59% of the financial managers and 62% of the analysts agree with Statement 29 and this may be because of their experience in practice. Only 46%

of the academics agreed whereas 29% of the academics were uncertain. If a company operates on a bank overdraft over an extensive period, it may be regarded that the intention of the company is to make use of a bank overdraft facility as a long-term borrowing mechanism. This classification would differ between the two viewpoints, namely, decision-making and accountability. Some bank overdrafts cannot be repaid without destroying the company (Most 1982). This may lead to the classification of a bank overdraft as long term rather than as a *current asset* based on the behaviour/attributes of the overdraft.

Statement 30: Classification can be used for window dressing



	Disagree and strongly disagree	Uncertain	Agree and strongly agree	Total responses
Financial managers	5.67%	3.19%	25.04%	33.90%
Analysts	10.64%	3.99%	17.88%	32.51%
Academics	5.91%	5.32%	22.36%	33.58%
Total	22.22%	12.50%	65.28%	100.00%

Figure 6.33 Response to Statement 30

Motivation: Classification may be used to smooth out the volatility of results (Miller and Bahnson 2002, Wolk *et al.* 2004). This may be done through timing transactions or, put differently, classifying transactions through the use of time. Classificatory smoothing may be done by moving items between operating and non-operating income (Wolk *et al.* 2004). The practice of classification for window dressing needs to be addressed in a classification framework for accounting information.

Discussion: A total of 74% of the financial managers, 55% of the analysts agree and 67% of the academics agree with Statement 30. The response from financial managers may be as a result of their direct involvement with the classification of financial information and their experience in the field. Financial analysts feel that reclassification is their prerogative, and that companies do not need to hide the truth through window dressing. Analysts believe it is much better to report and explain the volatility than to smooth it out (AIMR 1993; AICPA 1994) since analysts may need to do their own predictions based on the information supplied to them. Hence companies should report transactions as and when they occur. This view is shared by Knutson (1993).

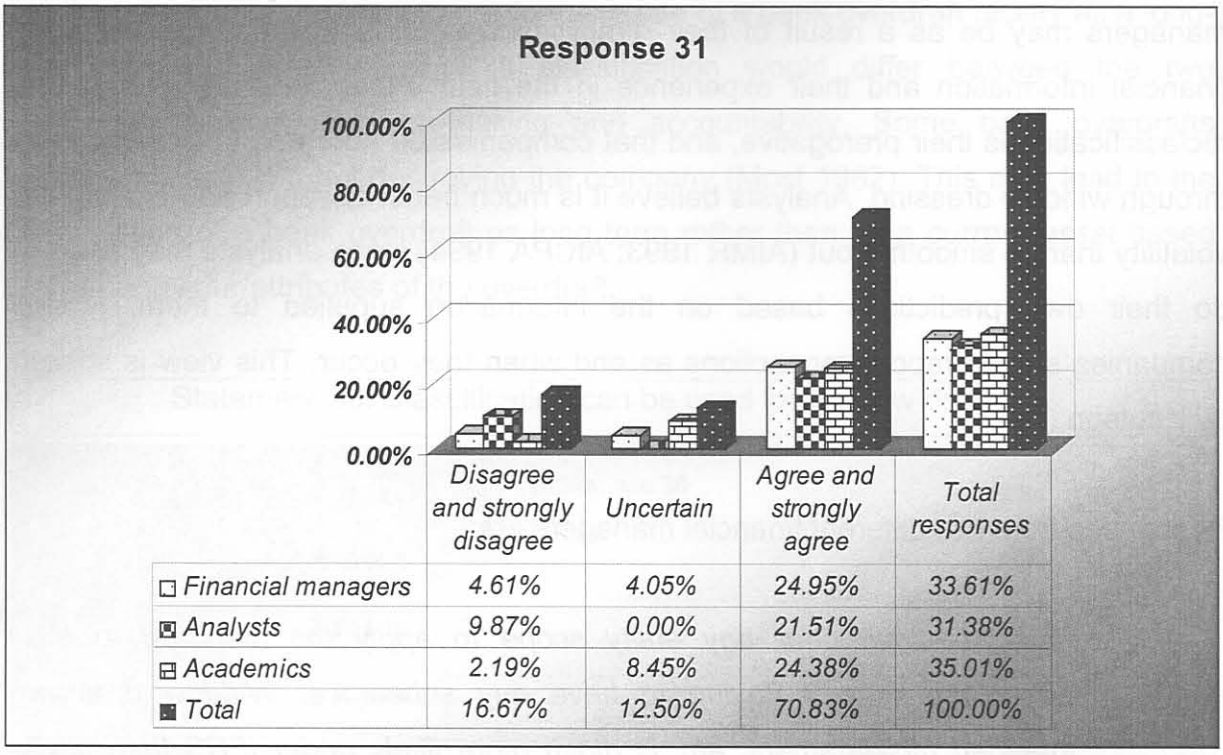
Responses from two different financial managers are:

1. *"Interpretations offer any entity scope to apply the standard to their advantage without having to have any substance. Window dressing, intended misstatement, etc. is much more likely under IFRS than under previous accounting standards as the fair value model are more closely followed. Using a 'fair value' model to recognise and classify transactions in the absence of specific guidelines open the door to any possible method of misstatement".* Hence, this response blames IFRS for the possibility of window dressing classification.

2. *"Fair value accounting legitimises manipulation. I believe in matching and prudence. Academics/auditors are to busy forcing everyone into boxes!"* Quality financial reporting may stem from the development of a classification framework for accounting information which may in turn supply more useful information to the users of financial statements.

Enron is one of the companies who paid the price because they attempted to "make them [selves] look better than they really [were]" (Miller and Bahnson 2002:11). Griffiths (1995) claims that creative accountants classify numbers in such a way that they influence important figures in a company. Therefore, a company may need to classify transactions as and when they occur, and leave the smoothing and prediction to the users.

Statement 31: Classifying items as non-recurring may be a key to developing adjusted earnings (Mulford & Comiskey 2002)



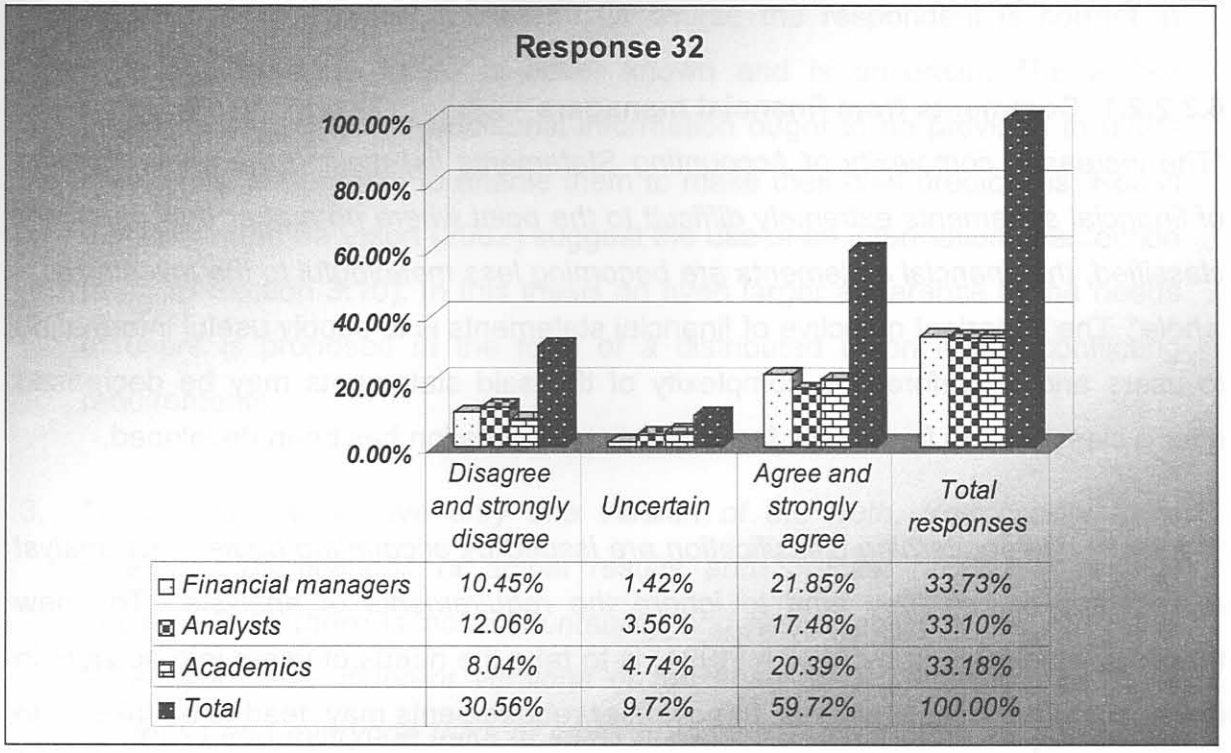
	Disagree and strongly disagree	Uncertain	Agree and strongly agree	Total responses
Financial managers	4.61%	4.05%	24.95%	33.61%
Analysts	9.87%	0.00%	21.51%	31.38%
Academics	2.19%	8.45%	24.38%	35.01%
Total	16.67%	12.50%	70.83%	100.00%

Figure 6.34 Response to Statement 31

Motivation: As suggested by Mulford and Comiskey (2002), companies may classify items as non-recurring to adjust their earnings. The variability of earnings per share before extraordinary items may be increased and while the predictive ability of earnings may be decreased by the classification of nonrecurring items (Cameron and Stephens 1991). This may result in adjusted earnings through classification of accounting information.

Discussion: A total of 74% of the financial managers, 69% of the analysts and 70% of the academics agreed with Statement 31. This calls for the separation of activities that occur in the normal business of a company and those that do not occur regularly. It is easier to manage normal transactions and activities than abnormal. The outcome of this question agrees with the outcome of the previous statement (30) which is based on window dressing. This is to be expected since the classification of non-recurring items to adjust earnings (the subject of Statement 31) is viewed as a form of classification for window dressing, which is the subject of Statement 30.

Statement 32: Classification can be done according to authoritative principles laid down by governing bodies



	Disagree and strongly disagree	Uncertain	Agree and strongly agree	Total responses
Financial managers	10.45%	1.42%	21.85%	33.73%
Analysts	12.06%	3.56%	17.48%	33.10%
Academics	8.04%	4.74%	20.39%	33.18%
Total	30.56%	9.72%	59.72%	100.00%

Figure 6.35 Response to Statement 32

Motivation: This statement attempts to establish whether authoritative principles laid down by governing bodies such as SAICA and the FASB may be used for the classification of accounting information.

Discussion: A total of 65% of the financial managers, 53% of the analysts and 58% of the academics agree with Statement 32. External users had a significant influence on the development of the *current/non-current* classification system, especially the credit grantor (Heath 1978). The relevant requirements of external users may need to be taken into account when authoritative principles are laid down by governing bodies. Griffiths (1995:viii) argues that companies have flexibility to their advantage when they apply accounting rules and regulations, not because standard setters are "lax", but because flexibility is built into the regulations for relevance. The outcome of this statement seems to suggest that rules and regulations laid down by governing bodies may need to be incorporated into a classification framework for accounting information.

6.3.2.2 General comments from respondents

In this section a number of general comments received from the respondents are listed and discussed.

6.3.2.2.1 Comments from financial managers

"The increased complexity of Accounting Statements [is] making the understanding of financial statements extremely difficult to the point where no matter how items are classified, the financial statements are becoming less meaningful to the investor as a whole". The important objective of financial statements is to supply useful information to users and, therefore, the complexity of the said statements may be decreased after a classification framework for accounting information has been developed.

"Typically rules governing classification are issued by accounting bodies, not analyst representatives, so they tend to ignore the requirements of analysts". The new tendency as displayed by AICPA (1994) is to take the needs of users into account in developing financial statements, hence, user requirements may need to be taken into account when a classification framework for accounting information is developed. This objective has been stated a number of times in this work.

Below is a lengthy response from a financial manager, divided into four parts:

1. *"Your questionnaire does not take into account IFRS. IFRS dictates classification to [a] large extent. Also IFRS has moved away from historical accounting to fair value accounting. The classification of fair value accounting is stipulated in the IFRS standards".* IFRS was taken into consideration in quite a number of statements in the questionnaire. Even though IFRS is rather prescriptive, a classification framework guiding the compilers of financial statements is still needed. Naturally, an initial measurement to determine relevant attributes may have to precede the classification.
2. *"Accounting should be recording actual results and not future or forecasted results. You can use the actual results for future or forecast models, but the classification must be the same. You should not account for the future or forecast, as the future is never known or certain and invariably cannot be accurately predicted. It is for this reason that USA stock exchange filers*

include a forward looking statement in all publications of results or financial information, which effectively give a disclaimer on the future or forecasted information ever being achieved". Of course the respondent is correct in observing that the future is never known and is uncertain. The author therefore suggests that additional information ought to be provided to users of financial statements to enable them to make their own predictions. Recall that Miller and Bahnson (2002) suggest the use of an information intersection (refer to Section 3.10). In this thesis an even larger adherence to the needs of users is proposed in the form of a distributed union minus conflicting requirements.

3. *"You should also have only one version of the truth. You cannot have different classifications of actual results and forecast or budget results, because then there is no accountability and responsibility in the business. When you have different versions of the 'truth' then chaos reigns in the business and everyone talks at cross purposes to each other, or you waste time explaining matters over and over again".* Only one generic classification framework will be the outcome of this thesis, namely, a distributed union of the requirements of all stakeholders, minus the requirements that are in conflict with any other. This process is illustrated in Example 1.1 and taken further in Chapter 7.

4. *"Your internal accounting classifications should be the same as your external accounting classifications as this focuses all staff and stakeholders on the same matters requiring attention or explanation or action".* As in point 3 above, a single generic classification framework providing information that satisfies some subset of the needs of all users, together with supplementary information is proposed in this thesis.

6.3.2.2.2 Comments from an analyst

Statements 11-14 and 16: *"In my experience accountants give financial statements to mislead and for tax purposes".* The tax regulator may have a significant influence on accounting principles, and it is plausible that in some instances companies do classify for window dressing. Hence users may be misled in a subtle way. However,

with the proposed classification framework the needs of users may be taken into account more than has been the case previously which should result in more useful information.

Statements 20-24 and 30: *"We cannot even get comparable heps [Headline earnings per share], Tangible NAV/share or free cash flow from companies – why bother with working capital? The auditors do not help either – the same auditor approved (company = CCN) tangible NAV and then issued a fair and reasonable statement to take out minorities at a fraction of TNAV/share".* Again, the generic classification framework takes users' needs into consideration and so should provide users with the information they require to make decisions.

6.4 Summary

In this chapter the research results from the literature survey were linked up through figures 6.2 and 6.3 with the questionnaire and the analysis of financial statements. The 32 statements in the questionnaire were presented and discussed. The results strongly support the need for the development of a classification framework for accounting information to enable the provision of useful information for decision-making.

From the analysis of the financial statements the following was observed:

- Little conformity is displayed in the balance sheets as well as the income statements when categories are named. In general, however, companies tend to adhere strictly to the rules and regulations prescribed to them by GAAP and IFRS.

Results from the questionnaire indicated the following:

1. Accountability versus decision usefulness
   - The respondents generally agree on the historical reason for classifying, namely, accountability.
   - From the responses it is apparent that accountability and useful in terms of decision-making are viewed by the respondents as the same idea.

- If analysts and other users reclassify financial statements for useful decisions and accountants classify for accountability, it follows that there may have to be a difference in the classification system used.

2. New developments
   - New kinds of transactions may introduce new attributes and relationships and may not fit into the present classification structure; therefore, the need may arise to develop a classification framework that takes attributes into consideration.
3. Classifying like with like: relationships and common attributes
   - A proposed classification framework for accounting information should take into account that elements of different kinds (types) ought not to be grouped together.
   - Relationships among the various items of the financial statements are very important when classification takes place and respondents seem to acknowledge the importance of relationships in classification. New relationships may be revealed when reclassification takes place. Economic reality is often the personal perceptions of the user. The objective of classification is to reveal relevant relationships; these should in turn reveal more 'truth' about the system, thereby changing data into information (refer to Corollary 3.1).
   - Items are classified according to their common attributes and, looking at the issue of measurement at a more detailed level, one may argue that, before being classified, attributes have to be identified. This may be viewed as "measuring" or evaluating the item to determine relevant attributes (refer to Corollary 3.2).
4. Skill
   - The respondents indicated that skill is necessary for the classification of accounting information.
5. Time
   - A proposed classification framework for accounting information may need to take time (i.e. past, present and future) into account.
   - Analysts are concerned with a company's future earnings and cash flows. Hence it would be to the benefit of analysts if accounting information could

be classified in such a manner that it facilitates this forecasting. It appears, therefore, that supplying information with regard to cash flows is much needed for users to make their own predictions with regards to future cash flows. The prediction of the future is mainly concerned with future cash flows and the classification of uncertainties attached to contingencies according to probabilities may, therefore, aid future cash flow predictions.

6. Uncertainty
   - People's views of uncertainty will necessarily be different since it is based on human judgement. Therefore, the degree to which the prudence principle will be practised varies from one person to the next resulting in degrees of uncertainty and ultimately a different classification.
7. Classification that may mislead users
   - The objective of financial reports is to provide useful information but if it is classified in a manner that hides the nature of the data or even omits data, then the objective may not be reached.
8. Miscellaneous
   - If a user knows what classification principle was used, more meaningful decisions may be inferred from the information given.
   - When a decision to classify an item is based on an intention the result may differ from the classification of an item based on normal business practices.
   - Valuation and classification methods may need to be used consistently to enable the understanding of the concept *maintenance of capital*.
   - The relevant requirements of external users may need to be taken into account when authoritative principles are laid down by governing bodies.
9. Working capital
   - To overcome the problem of working capital not being useful for decision-making purposes, it is proposed that operating cycles are to be included in the supplements to the financial statements.
   - Samuels *et al.* (1999) suggest that a company should reveal the operating cycle for the year and for the quarters as these may differ quite substantially, especially in companies with seasonal businesses.

10. Proposed reclassifications
    - Deferred tax liabilities may be viewed as a source of funds because these will only become payable once a company starts to report losses and could, therefore, be classified as part of equity.
    - With the matching concept in mind, the costs of advertising may be matched with the future benefit for the company, as is done in the case of research and development (R&D).
    - The respondents seem to be more inclined to follow the traditional depreciation provision approach and do not seem to appreciate the benefits of the earmarking of cash for the replacement of a fixed asset or the creation of an internal fund.
    - Some bank overdrafts cannot be repaid without destroying the company (Most 1982). This may lead to the classification of a bank overdraft as long term rather than as a *current asset* based on the behaviour/attributes of the overdraft.
11. Window-dressing
    - Analysts believe it is much better to report and explain the volatility than to smooth it out (AIMR 1993; AICPA 1994) since analysts may need to do their own predictions based on the information supplied to them.

In the next chapter previous and present accounting frameworks are presented and discussed, following which a comprehensive classification framework for accounting information is developed for the balance sheet as well as for the income statement.

CHAPTER 7 TOWARDS A CLASSIFICATION FRAMEWORK FOR ACCOUNTING INFORMATION

7.1 Introduction

Previous chapters in this thesis explored various issues regarding the presentation of accounting information in the financial statements of companies. It was argued that stakeholders often find it difficult to utilise the information in the form currently presented in the balance sheet and income statement. Broadly speaking the main reason is that the classification currently in use does not take the needs of users into account fully. A further reason may be because of a lack of direct guidelines as to how accounting information is to be classified. The outcomes of the questionnaire, discussed in Chapter 6, further motivated this observation. Statements in the questionnaire were based on certain problem areas surrounding the current classification of accounting information. It was, therefore, observed that an alternative way of classifying and presenting accounting information may be needed, i.e. an enhanced accounting classification scheme is called for.

7.1.1 Goal of this chapter

The main objective of this chapter is to develop a new classification framework for accounting information. Previous work in this area are the framework proposed by Fitzgerald and Schumer (1962), a recent framework put forward by AICPA (1994) and also the current accounting structure used to prepare financial statements. These frameworks are discussed and debated in this chapter. Thereafter a framework for the classification of accounting information portrayed in the balance sheet and income statement is proposed. The proposed framework embraces a 3-valued notion of time, namely, the time of recording a transaction (past), the time of reporting at year end (present) and reporting of events/happenings with a future component. For both the balance sheet and the income statement a normative subframework is defined which incorporates a number of attributes (properties) for a transaction. In the case of the balance sheet a further subframework, called a decision structure is linked to the normative one. The decision structure is discussed further in this chapter and it shows in an algorithmic fashion how information is ultimately imbedded in a static structure. The static framework is inspired by the work

of Yourdon and Constantine (1978) as well as Jackson (1975) in system design. In the case of the income statement an alternative structure is proposed, based on previous criticisms of the income statement as well as improving the cohesion of the arithmetic (additions and subtractions) operations in the income statement.

7.1.2 Layout of this chapter

Following this introduction a previous attempt at defining a classification framework for accounting (Fitzgerald and Schumer 1962) is discussed in Section 7.2. Also in Section 7.2, a proposed framework (AICPA 1994) as well as the current accounting structure (Wolk *et al.* 2004; Cilliers *et al.* 2004) are presented. A classification framework for the balance sheet is developed in Section 7.3. This framework is composed of three subframeworks – a normative subframework including a temporal dimension, a decision subframework and finally a static subframework. An example of the utility of these subframeworks for the balance sheet is illustrated for R&D. In Section 7.4 a discussion of future work on a more detailed classification for equity and liabilities is presented. Section 7.5 gives a short, preliminary summary while in Section 7.6 the focus moves to the classification of items in the income statement. A normative subframework as well as a static subframework for the income statement is developed and an alternative structure for the income statement is proposed. The chapter concludes with a summary.

The above layout is represented in Figure 7.1.

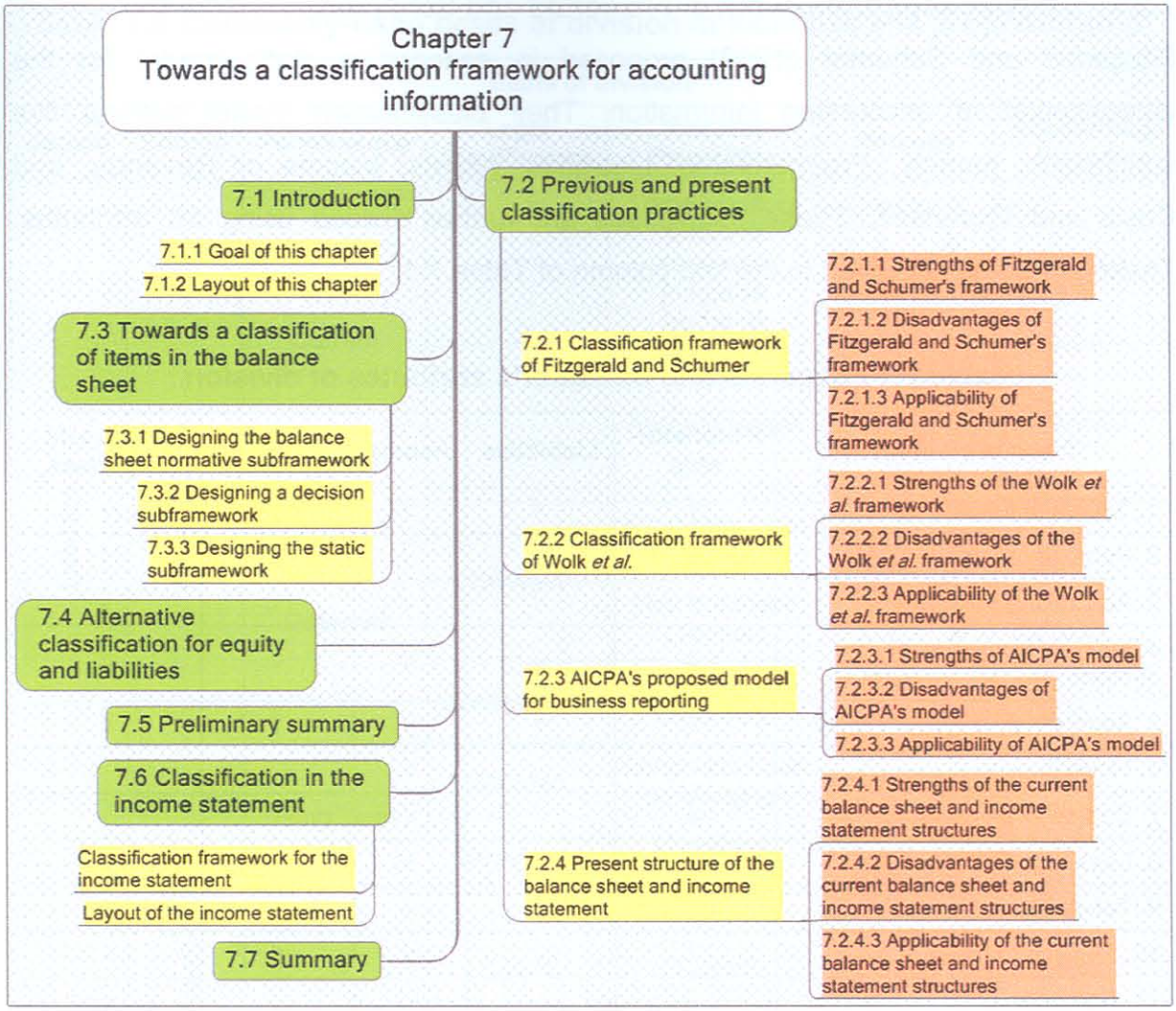


Figure 7.1 A visual representation of the layout of Chapter 7

7.2 Previous and present classification practices

Classification is a continuous research issue in accounting and has been debated since the early 1900s when the *current/non-current* classification first came into being. This theme was discussed and developed in previous chapters. In the subsections that follow three classification schemes are discussed and their contributions and shortcomings are debated. In Section 7.2.1 the classification framework for accounting information as proposed by Fitzgerald and Schumer (1962) is considered. A structure based on the accounting equation (3.1) by Wolk *et al.* 2004) is discussed in Section 7.2.2 and the model for business reporting proposed by AICPA (1994) is presented in Section 7.2.3. The accounting structure as the final product of classifying accounting information currently used in practice (Cilliers *et al.* 2004) is discussed in Section 7.2.4.

7.2.1 Classification framework of Fitzgerald and Schumer

Fitzgerald and Schumer (1962) proposed in essence a static model for the classification of accounting information. Their classification model defines five subclasses, namely, Proprietorship; Liabilities; Assets; Income or Revenue; and Costs and Expenses. These subclasses are further divided using 16 attributes. These attributes are given in the first column of Table 7.1.

Table 7.1 Fitzgerald and Schumer's attributes of division

Basis of division	Proprietor-ship	Liabilities	Assets	Income or Revenue	Costs and Expenses
1. Source of funds	√	√	√	√	√
2. Purpose or intended use	√	√	√	√	√
3. Accounting periods	√	√	√	√	√
4. Inherent properties or qualities	√	√	√	√	√
5. Administrative responsibility	√	√	√	√	√
6. Liquidity			√		
7. Degree of permanence	√	√	√		
8. Legal significance	√	√	√	√	√
9. Tangibility			√		
10. Relation to major activities	√	√	√	√	√
11. Normality				√	√
12. Relation to volume of activity	√	√	√	√	√
13. Controllability					√
14. Taxability			√	√	√
15. Units of activity				√	√
16. Persons	√	√	√	√	√

Source: Fitzgerald and Schumer (1962:81)

The attributes listed in Table 7.1 constitute only a small number of the attributes that are currently used for the classification of accounting information. Nevertheless, from the divisions in Table 7.1 Fitzgerald and Schumer (1962) built a framework for the classification of relevant subclasses. Their classification structure is presented in the form of a number of multi-level tables, spread horizontally across a page. The first basis for division suggested by Fitzgerald and Schumer is 1) sources of funds and 2) accounting periods. These two (2) divisions apply to equity, liabilities, assets, revenue/income; and costs and expenses. An example of a multi-level table, namely, the one for liabilities and proprietorship is given in Table 7.2.

Table 7.2 Commonly-used bases of division of liabilities and proprietorship

Basis of division						
Source	**Source**	**Permanence**	**Legal Significance**	**Inherent Properties**	**Persons**	**Accounting Periods**
Liabilities	Creditors	Current	–	Trade creditors discount receivable (negative account)	Creditor A " B " C etc.	Period 1
				Accrued wages	Employee A " B " C etc.	Period 2
		Deferred	Secured	Short-term Loan on Mortgage	Creditor X	Period 3 etc.
				Hire Purchase Creditors	Creditor Y " Z	
			Unsecured	Bank* Overdrafts	Bank L " M	
		Long Term	Secured	Long-term Loan on Mortgage	Creditor N	
			Unsecured	Unsecured Loan	Creditor A	
Proprietorship	Capital	–	Capital	Capital	Owner	Period 1
	Income and other Profits	Merged with capital	Capital	Profit Capitalised	Owner	Period 2
		Temporarily Retained	Capital	Profit and Loss A/c, items Drawings (negative account)	Owner	Period 3

Source: Fitzgerald and Schumer (1962:102)

From tables 7.1 and 7.2 it is observed that not all 16 attributes are applicable to each class, for instance creditors who are current have no legal significance while capital has no permanence. According to Fitzgerald and Schumer (1962) bank overdrafts are a good example of an item where all attributes cannot be displayed in a *static* structure as indicated by * in Table 7.2 because these may be secured or unsecured, current, deferred or even long-term depending on the arrangements with the bank. The basis of classifying according to legal significance may supply a more accurate picture if users are aware of whether a liability is secured or unsecured. The

classification according to permanence may also supply more information to users for predictions in the sense that they will be able to distinguish between items that are current, deferred, and even long term.

7.2.1.1 Strengths of Fitzgerald and Schumer's framework

The framework of Fitzgerald and Schumer (1962) follows a new approach in the sense that they identify attributes and take these into account for the development of a classification framework for accounting information. Based on attributes, the framework, therefore, gives more guidelines for the classification of information.

7.2.1.2 Disadvantages of Fitzgerald and Schumer's framework

One of the shortcomings of the proposed framework identified by Fitzgerald and Schumer themselves, is that an item, for instance bank, may have multiple values for a particular attribute, leading to an ambiguous classification in the final structure. For example, bank may be secured or unsecured; or deferred; or current, leading to different classifications in each case. A fixed structure may not be able to accommodate this situation satisfactorily. A further problem with their framework is that it does not take time and the reclassification of information at year-end into account.

7.2.1.3 Applicability of Fitzgerald and Schumer's framework

Applying this framework would yield a more accurate classification than using only the end product (i.e. the outcome of the classification) as a guideline, but as noted above there are some shortcomings which may need to be addressed before this framework may be successfully employed in practice.

From the multi-level table presentation (Table 7.2) of Fitzgerald and Schumer (1962) the author of this thesis synthesised a static structure as presented in Appendix F. In the proposed classification framework presented in this chapter more attributes are added to those in Table 7.1 to facilitate the development of the proposed framework.

7.2.2 Classification framework of Wolk *et al.*

An accounting classification system that stems from the work of Pacioli is presented by Wolk *et al.* (2004:318). This system is given in Figure 7.2. It utilises the accounting

equation (3.1) in Section 3.3.1 of Chapter 3, namely, *assets – liabilities = owner's equity* as basis. Owners' equity is further classified as contributed capital, retained earnings and unrealised capital adjustments. Contributed capital is made up of legal and other. They furthermore classify retained earnings into income statement accounts, prior period adjustments and dividends whereafter they split income statement accounts into debits and credits. Debits are classified into expenses and losses while losses in turn may be viewed as ordinary or extraordinary. Credits are divided into revenues and gains whereafter gains are further subdivided into ordinary and extraordinary.

7.2.2.1 Strengths of the Wolk *et al.* framework

This framework has a rather simple structure and is based on a familiar basis, namely, the fundamental accounting equation: assets – liabilities = owner's equity. The framework is also rather dated which may indicate that it has a sound basis, even though it has some disadvantages discussed below.

7.2.2.2 Disadvantages of the Wolk *et al.* framework

The relative simplicity of this classification leads to problems where complex transactions are involved (Wolk *et al.* 2004). Complex transactions cannot always be categorised precisely into one of these classes because a transaction may sometimes have attributes of more than one class. A further problem is that new transactions for new scenarios are developed continuously and these might not easily fit into the structure of Figure 7.2. As noted in Statement 4 in Section 6.3.2.1, Wolk *et al.* (2004:318) make the important point: "It is remarkable that the categoric[al] framework used to classify accounting transactions is virtually unchanged since Pacioli's time". In their work they propose either the addition of information supplementary to financial statements, or the development of an entirely new classification framework. The supplying of additional information may not be the answer to the problem as transactions with different attributes may need to be forced into (incorrect) classes; therefore, the approach of developing a classification framework is taken in this thesis.

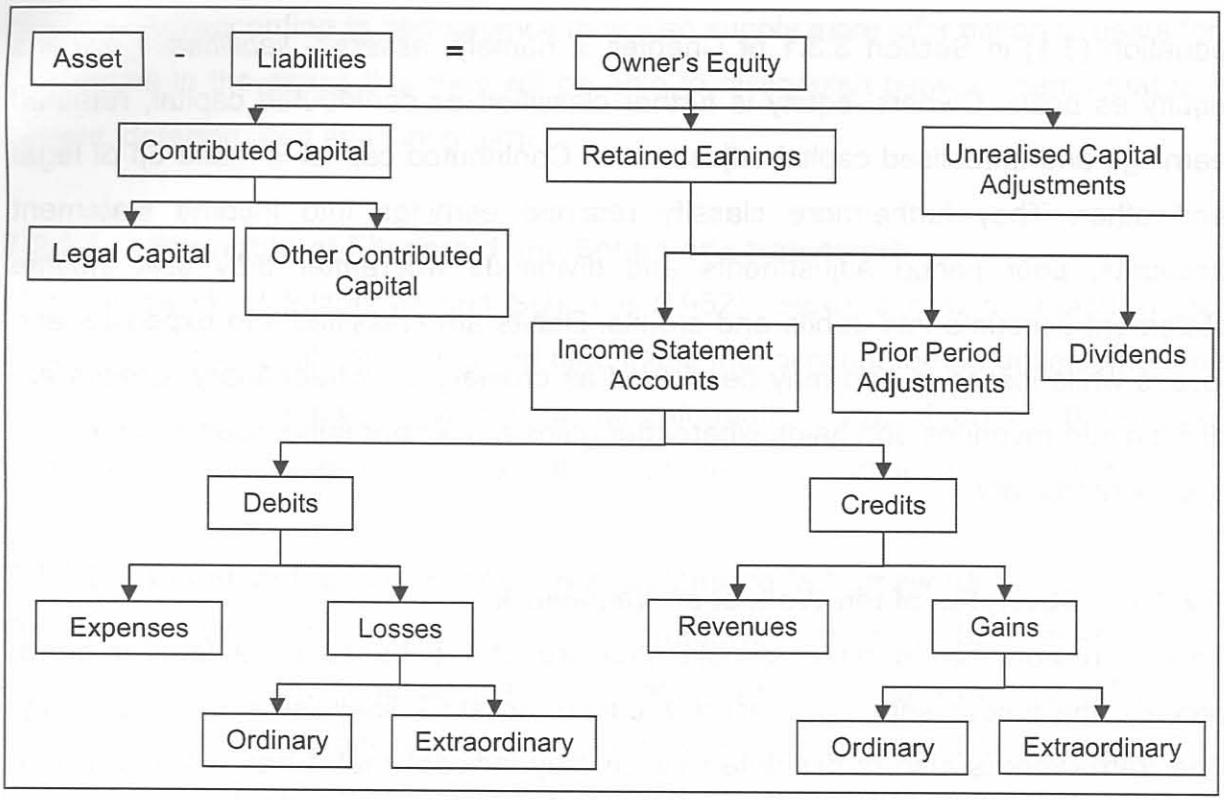


Figure 7.2 Static accounting classification system (Wolk *et al.* 2004:318)

Figure 7.2 is furthermore a fixed structure and does not incorporate any feedback; neither does it incorporate the notion of time or relationships. Hence Figure 7.2 may be viewed as a *static* structure. Guidance on how to determine the attributes of a transaction or event for classifying information is lacking in this structure. In other words it may not be clear to an accountant what the sequence of steps would be from analysing a transaction to finally placing its entities into the boxes in Figure 7.2. In this regard the author is of the opinion that both the normative and decision subframeworks proposed in sections 7.3.1, 7.3.2 and 7.6.1 go a long way in assisting an accountant with this task.

7.2.2.3 Applicability of the Wolk *et al.* framework

The classification presented in Figure 7.2 may have a limited applicability since it does not address the issue of attribute identification and does not, starting with a transaction provide guidelines as to where items should be classified. In essence the classification is static, simply showing where items end-up after being classified.

7.2.3 AICPA's proposed model for business reporting

In this section a model proposed by a special committee appointed by AICPA (American Institute of Certified Public Accountants) is presented. The purpose of this AICPA committee was to investigate issues surrounding financial reporting (AICPA 1994). The special AICPA committee also paid particular attention to the needs of the users of accounting information. The model they came up with is presented in a variety of notations, namely, natural language and a textual description of the content of some financial statements. Their layout of the balance sheet is given in Appendix G, while the layout of the income statement appears in Appendix H.

The balance sheet and the income statement are two of the main financial statements addressed in the AICPA model. The following are some of their recommendations:

- *A comprehensive model should be developed for business reporting indicating the types and timing of information needed by users.* In this AICPA statement it is noted that mechanisms are needed for giving useful information to users of financial statements. The issue of timing is also addressed – it may be necessary for a company to report more often, rather than just at year end. The development of such a model is, however, beyond the scope of this thesis. Nevertheless, it is plausible that the development of a classification framework may go some way in addressing these two problems mentioned (somewhat implicitly) by AICPA.
- *A distinction is made between core and non-core activities (includes financing activities). Core activities are the usual or recurring activities, transactions and events.* Classifying information as core and non-core activities may present more relevant information about trends in the business. For example, users may need information based on whether the transactions are part of the day-to-day transactions of the company or an exception. Such knowledge may enable users to make predictions of future cash flows more easily.
- *Extraordinary items are classified as non-recurring or debt if related to financing costs.* If an item does not recur regularly in a company, it may be better to classify the item as part of non-recurring as it does not affect the regular business or core activities of the company. Users may need

information for the reclassification and forecasting of information. Extra-ordinary items may not affect the future cash flow of a company whereas financing costs may influence the predictions made by users.

7.2.3.1 Strengths of AICPA's model

A strength of the AICPA framework is that the needs of users are taken into account when information is classified into for instance core and non-core activities. Core activities may be seen as the day-to-day activities of a company. This division may supply users with more useful information and facilitates the reclassification of items to satisfy their own needs. AICPA suggests that additional information may be supplied to users to enable them to make their own forecasts of future cash flows.

7.2.3.2 Disadvantages of AICPA's model

The recommendations of the AICPA committee prescribe static structures for the classification of information but they do not provide classification guidelines on how to use attributes of entities embedded in a transaction to arrive at such static structures. As discussed before a static structure on its own is an end product of classification and does not show how to analyse a transaction or how to subsequently locate the place in the static structure where the item is to be placed.

7.2.3.3 Applicability of AICPA's model

The AICPA model appears to be an improvement on the current structure as well as compliance with users needs. AICPA recommends the division between core and non-core earnings which is welcomed by the users of financial reports (AICPA 1994). The AICPA model, therefore, seems to be more applicable than the others discussed before. However this model also supplies just the end product without clear guidelines to the accountant or compiler of financial statements on how to classify (at the time of recording) and reclassify at year end (at the time of reporting) specific transactions, based on their attributes.

7.2.4 Present structure of the balance sheet and income statement

The classification structures currently in use for the balance sheet and income statement are described in Cilliers *et al.* (2004). The current balance sheet structure is given in Appendix I while the structure for the income statement appears in

Appendix J. The current structures combine the requirements of the Companies Act 61 of 1973, GAAP and also the IFRS for the reporting of accounting information in financial statements.

7.2.4.1 Strengths of the current balance sheet and income statement structures

The current structures have the advantage that they explicitly separate out information to be classified in the balance sheet and the income statement while the previous two frameworks did not. They also have the advantage of being current, i.e. they embody the way accounting information is currently classified and presented. The balance sheet effectively partitions assets and liabilities into the subclasses *current* and *non-current*.

7.2.4.2 Disadvantages of the current balance sheet and income statement structures

As was the case with the previous two classification structures, the present classification structures are also not models of how to classify but rather the end-product of the classification of accounting information. Although the balance sheet effectively partitions assets and liabilities into *current* and *non-current*, both the balance sheet and the income statement have a number of shortcomings that were discussed in chapters 3 and 4. Among these shortcomings were: 1) the *current/non-current* classification, 2) the classification of research and development, 3) the classification of deferred assets, and 4) classification for window dressing.

The notion of time is also largely absent in these structures. The results of the questionnaire discussed in Chapter 6 also indicate a general dissatisfaction with the classification model. For example, in the questionnaire the respondents mostly agreed (60%) that an accountant's classification system may preclude others from much needed information. Through the questionnaire it was also established that relationships play an important part in the classification of accounting information.

7.2.4.3 Applicability of the current balance sheet and income statement structures

The current structures may be applicable to some users but the information may not be what users need in general. These structures have some shortcomings (refer to Section 7.2.3.2) that need to be addressed when a classification framework for accounting information is proposed to make such structures more applicable.

In the sections that follow the classification framework for accounting information proposed by the author of this thesis is developed. The proposed framework is developed for items in the balance sheet and income statement. It incorporates the notion of time and is made up of three subframeworks that are combined into a larger, comprehensive framework. The three subframeworks are a *normative* subframework, a *decision* subframework and a *static* subframework, all developed below. The classification of items in the balance sheet is addressed first.

7.3 Towards a classification of items in the balance sheet

In this section a proposed classification framework for the balance sheet is developed following Mitroff's (1974) 4-*phase* model for problem-solving. The Mitroff, model, introduced in Chapter 1, prescribes four phases of development and these are described next in the context of the frameworks to be developed.

Phase I stipulates the identification of a reality problem situation. In this thesis the problem situation may be contextualised as follows:

- Various *criticisms* of the balance sheet were put forward in Chapter 4, following a *literature survey* of this topic. Of the main criticisms were the issue of *current/non-current* classification; the classification of R&D in the sense that possible future benefits are not easily measured and problems with the classification of inventory being current.
- Outcomes of the *questionnaire* in Chapter 6 reveal that the classification of accounting information currently in use may not yield the necessary outcome as needed by the users of accounting information. Based on these findings, a classification framework may be called for in accounting, especially when it comes to the balance sheet.

- The *analysis* of the financial statements in Chapter 6 revealed that the same item is called many different names by accountants over various companies. A further problem is that the current structures are closely followed, leading to the classification problems discussed before, e.g. *current/non-current* classification, the classification of R&D and so forth.

Phase II of Mitroff *et al.* (1974) is the development of a conceptual model of the problem. This defines the problem to be solved in broad terms and specifies any field variables that will be used to define the nature of the problem. Problems with current accounting models were discussed in chapters 4 and 6. The field variables identified in these chapters concern mainly the following items and their current classifications:

- *Accountability* versus *decision usefulness.* Currently financial statements are drawn up for the purpose of accountability. In this thesis criticisms have been put forward, making out a case for decision usefulness as well;
- Diverse *needs of users.* Related to the needs that users have is the problem that users may be misled by the way information is currently reported on at year end;
- *Ratios* may be suspect as a result of the way information is grouped together, i.e. classified;
- *Assets* and *liabilities*, in particular the partition between being *current and non-current*, the liquidity measure and the solvency inadequacy;
- *Advertising* being viewed as an expense or an investment. Currently advertising is viewed as an expense, which in certain circumstances may be an incorrect classification;
- *Inventory* problems, e.g. valuations, the place of where to classify it in an accounting system;
- *Contingencies*, in particular uncertainties attached to these using a probability;
- *Deferred taxation*: The question arises whether a portion of deferred taxation ought to be classified as equity instead of classifying all of it as an asset or a liability;
- *Bank overdrafts* – should be classified according to their behaviour;
- *Temporal items*: How should past, present and future items be classified?

- *Current structures* may not be able to handle new kinds of transactions.

Phase III of Mitroff *et al.* (1974) is the building of a scientific model of the problem. For the problem at hand it is the definition of an abstract model of the balance sheet framework proposed in this thesis. The recording of a transaction may be considered as the starting point of the proposed classification framework. A transaction takes place in the past, relative to reporting at year end which may be viewed as the present. The first event to occur after a transaction has taken place is the taking of an initial measurement to identify the attributes of the transaction (refer to Corollary 3.2). However, the values of some attributes of a transaction may not yet be available when the transaction is first recorded. For example, at the time an R&D expense is recorded, it is not known whether the R&D project will yield no benefit, an actual (i.e. present) benefit or a future benefit. The attributes of the transaction may, therefore, need to be reviewed on reporting at year end. At the time of both recording and reporting, the attributes of a transaction determine whether an *asset,* a *liability, equity*, a *cost,* an *expense,* a *profit* or a *loss* and *revenue* are involved. The first three items listed (i.e. asset, liability and equity) concern the balance sheet while the rest are to do with the income statement.

Below is an example of a transaction and its attributes.

Example 7.1

Consider the following transaction for a hypothetical manufacturing company:

> Buy raw materials from supplier Raw Materials Incorporated to manufacture a product named Adjustable monkey wrench.

Suppose also that the product Adjustable monkey wrench has a high turnover. Through inspection and analysis of the transaction, an accountant determines that the transaction has the attributes: *core*, *current*, *regular*, *entry*, *benefit* and *immediate*.

End of Example 7.1

IASB (2004:33) claim that "the definitions of an asset and a liability identify their essential features but do not attempt to specify the criteria that need to be met before they are recognised in the balance sheet". Therefore, for both the time of recording (past) and the time of subsequent reporting (present and future), a normative subframework indicating the attributes of items (i.e. the *criteria* mentioned by IASB (2004) above) addressed in the transaction under consideration is to be defined. Such criteria or attributes in turn determine the kind of object (*asset*, *liability*, etc.) the accountant is dealing with, leading to the consultation of a decision subframework for that object. The decision subframework thereafter guides the accountant as to how and where in a static subframework the entity embedded in the original transaction is to be classified.

Phase IV gives an implemented solution, i.e. the proposed framework of the scientific model (**Phase III**) abstracted above in natural language. For the balance sheet the following three classification subframeworks, already mentioned in the discussion of **Phase III**, are proposed:

1. *A normative* subframework, built around attributes of a transaction known at the time of recording (past) and again at reporting (present and future). Using these attributes, the normative subframework identifies an entity (e.g. an *asset*). Such entity identifies which part of a decision subframework (see point 2 below) is to be used to make next-level decisions regarding the transaction and the ultimate classification of its entities (e.g. the asset is classified as a *fixed asset*).
2. *A decision* subframework which considers various additional properties of each entity identified in point 1 above. The decision structure ultimately determines where in the static structure (see point 3 below) each entity will be classified.
3. *A static* subframework which explicitly shows the ultimate classification performed in points 1 and 2 above.

The above three sub classification frameworks make up a larger, comprehensive framework which is the framework proposed in this thesis. Looking ahead, a meta-level view of the sub classification frameworks combined into the comprehensive framework is given further on in Figure 7.7, Section 7.3.3.

An example of how the comprehensive framework is used to classify a transaction will also be given in Section 7.3.3, but first the development of a normative subframework for the balance sheet is presented.

7.3.1 Designing the balance sheet normative subframework

Different transactions have different sets of attributes and in Table 7.3 a comprehensive set of attributes with possible opposites for each attribute is listed (a * next to an entry identifies such entry in the discussion that follows Table 7.3).

Table 7.3 General accounting concepts and opposites

	Property	Opposite of property
1	Allocated	Unallocated
2	Benefit	Sacrifice
3	Cash	Non-cash
4	Convertible	Non-convertible
5	Core activity	Non-core activity
6	*Current asset/liability*	*Non-current asset/liability*
7*	Debit	Credit
8	Direct cost	Indirect cost
9	Discretionary funds	Non-discretionary funds
10	Distributable funds	Non-distributable funds
11*	Entry	Book-entry
12	Financing activities	Non-financing activities
13	Fixed cost	Variable cost
14	Immediate	Deferred
15	Impaired	Not impaired
16	Monetary	Non-monetary
17	Moveable asset	Non-moveable asset
18	Normal item	Abnormal item
19	Ordinary item	Extra-ordinary item
20	Predictable	Unpredictable
21*	Provision	Reserve
28	Realised	Unrealised
23	Recurring item	Non-recurring item
24	Regular activity	Non-regular activity
25	Restricted cash	Unrestricted cash
26	Short-term	Long-term

	Property	Opposite of property
27	Tangible asset	Intangible asset
28	Temporary	Permanent

The use of debit and credit (7*) as opposites is in line with the double-entry bookkeeping. Entry 11* is a real transaction taking place and being recorded. It is opposed to a book-entry which usually refers to an artificial transaction, e.g. depreciation provision (van der Poll 2003). When a provision (21*) is made it is based on the matching of a cost over time whereas a reserve may be seen as funds earmarked for future benefit.

Next the normative subframework is developed in line with Mitroff *et al.* (1974). Recall that the problem situation (i.e. a classification framework for accounting information) was presented in **Phase I** above. Classification takes place from the moment a transaction is recorded, and thereafter reclassification may take place at reporting (year-end). When a transaction is first recorded (past), all the attributes may not be known and therefore a reclassification, based on more attributes known than before, may take place at the time of reporting (present and future).

First a definition is stated to facilitate the discussion that follows:

Definition 7.1

An attribute is said to be *enabled* for an entity if and only if such attribute applies to the entity. An attribute is *disabled* for an entity if and only if it is not enabled for the entity in question.

Example 7.2

In Example 7.1 above, the attributes *core*, *current*, *regular*, *entry*, *benefit* and *immediate* are all enabled for the given transaction while the attribute (say) *non-regular* is disabled for the transaction. Note that in terms of Table 7.3, an attribute is disabled whenever its opposite is enabled. It is also possible that neither an attribute, nor its opposite is applicable to a transaction, in which case both the attribute and its opposite are disabled for the transaction.

End of Example 7.2

From the list of properties and their opposites in Table 7.3, a normative subframework is constructed by following the three steps in Algorithm 7.1 below:

Algorithm 7.1: Design a normative subframework

Input: Table 7.3 of attributes and opposites

Begin

Step 1: Consider exhaustively various valid combinations of the attributes in Table 7.3.

Step 2: Decide for each valid combination of attributes in *Step 1*, which *main entity* (e.g. assets) is being described by this particular combination of enabled and disabled attributes.

Step 3: Partition each main entity identified in *Step 2* into sub entities – one sub entity for each unique combination of attributes that are enabled and disabled for the main entity.

End

Algorithm 7.1 was used by the author to generate Table 7.4 which is the normative subframework for the balance sheet proposed in this thesis. As prescribed by Algorithm 7.1, this subframework is the result of repeatedly considering combinations of enabled and disabled attributes, and for each combination (i.e. row in the table) a main entity group (assets, liabilities or equity) is identified, and for each main entity a number of sub entities are identified (e.g. cash and cash equivalents, etc.).

A particular set of enabled and disabled attributes may conveniently be represented as a row in the table. A *Y* in Table 7.4 denotes yes (the attribute is enabled) while an *N* stands for no (the attribute is disabled). Hence, given a particular row, when an *N* is indicated in the column for an attribute, it means that the opposite of the attribute (see Table 7.3 for a list of opposites) in Table 7.4 is true for the transaction under consideration. A dash ("-") in an attribute column in the table means that neither the attribute nor its opposite applies to the entity. In this thesis Table 7.4 is called a *normative subframework* for the balance sheet.

Table 7.4 Normative subframework

NORMATIVE FRAMEWORK - Balance sheet																				
Core/Normal/Ordinary	Realised	Restricted	Tangible	Current	Moveable	Distributable	Impaired	Convertible	Predictable	Regular	Financing	Reserve	Short-term	Entry	Benefit	Immediate	Permanent	Recurring	Sub Entity	Entity
Y	–	–	Y	N	Y	–	Y	–	–	–	–	–	–	Y	Y	Y	–	–	Fixed assets	ASSETS
N	–	–	Y	N	Y	–	Y	–	–	–	–	–	–	Y	Y	Y	–	–	Fixed assets	
Y	–	–	Y	N	N	–	Y	–	–	–	–	–	–	Y	Y	Y	–	–	Fixed assets	
N	–	–	Y	N	N	–	Y	–	–	–	–	–	–	Y	Y	Y	–	–	Fixed assets	
Y	–	–	N	N	–	–	–	–	–	–	–	–	–	Y	Y	Y	–	–	Deferred assets	
Y	–	–	N	N	–	–	–	–	–	–	–	–	–	Y	Y	N	–	Y	Deferred assets	
Y	–	–	–	N	–	–	–	Y	–	–	–	–	–	Y	Y	Y	–	–	Other financial assets	
Y	–	–	–	N	–	–	–	–	–	Y	–	–	–	Y	Y	Y	–	–	Loans & security to directors and employees	
Y	–	–	–	N	Y	–	–	–	–	–	–	–	–	Y	Y	N	–	–	Slow moving inventory and minmum inv level	
N	–	–	–	N	–	–	–	–	–	–	–	–	–	Y	Y	N	–	N	Past due trade and other receivables	
Y	–	–	–	N	–	–	–	–	–	–	–	–	–	N	N	Y	–	Y	Deferred taxation - debit balances	
Y	Y	–	–	Y	Y	–	–	–	–	–	–	–	–	Y	Y	Y	–	–	Inventory	
N	–	–	–	Y	–	–	–	–	–	–	–	–	–	Y	Y	Y	–	N	Due trade and other receivables	
Y	–	–	–	N	–	–	–	–	–	–	–	–	–	Y	Y	N	–	Y	Other current assets	
Y	–	Y	–	Y	–	–	–	–	–	–	–	–	–	Y	Y	N	–	–	Cash and cash equivalents	
Y	–	N	–	Y	–	–	–	–	–	–	–	–	–	Y	Y	Y	–	–	Cash and cash equivalents	
Y	–	–	–	N	–	–	–	–	–	Y	Y	–	–	Y	Y	N	–	–	Investments	
Y	–	–	N	N	–	–	–	–	–	–	–	–	–	Y	Y	Y	–	–	Deferred assets	
Y	–	–	N	N	–	–	–	–	–	–	–	–	–	Y	Y	N	–	Y	Deferred assets	
Y	–	–	–	Y	–	–	–	–	–	–	–	–	–	Y	Y	Y	–	N	Non-recurring receivables	
Y	–	–	–	N	–	–	–	–	–	N	–	–	N	Y	Y	N	–	–	Deferred liabilities	LIABILITIES
Y	–	–	–	N	–	–	–	Y	–	Y	Y	–	N	Y	N	Y	–	–	Debentures and redeemable instruments	
N	–	–	–	N	–	–	–	Y	–	N	Y	–	N	Y	N	Y	–	–	Debentures and redeemable instruments	
Y	–	–	–	N	–	–	–	–	–	Y	Y	–	N	Y	N	Y	–	–	Long-term borrowings	
N	–	–	–	N	–	–	–	–	–	N	Y	–	N	Y	N	Y	–	–	Long-term borrowings	
Y	–	–	–	N	–	–	–	–	–	–	–	–	–	N	N	Y	–	Y	Deferred taxation - credit balances	
Y	–	–	–	N	–	–	–	–	–	Y	–	N	N	N	N	Y	–	–	Long-term provisions	
N	–	–	–	N	–	–	–	–	–	N	–	N	N	N	N	Y	–	–	Long-term provisions	
Y	–	–	–	N	–	–	–	–	–	Y	–	–	–	Y	N	Y	–	–	Indebtedness to subsidiaries	
N	–	–	–	N	–	–	–	–	–	N	–	–	–	Y	N	Y	–	–	Indebtedness to subsidiaries	
Y	–	–	–	N	–	–	–	–	–	Y	Y	–	Y	Y	N	N	–	–	Current borrowings	
N	–	–	–	N	–	–	–	–	–	N	Y	–	Y	Y	N	N	–	–	Current borrowings	
Y	–	–	–	Y	–	–	–	–	–	Y	–	–	–	N	N	Y	–	–	Current income tax liabilities	
Y	–	–	–	Y	–	–	–	–	–	Y	Y	–	Y	N	N	Y	–	–	Current portion of interest bearing borrowings	
N	–	–	–	Y	–	–	–	–	–	N	Y	–	Y	N	N	Y	–	–	Current portion of interest bearing borrowings	
Y	–	–	–	Y	–	–	–	–	–	Y	–	–	–	N	N	Y	–	–	Dividends recommended	
Y	–	Y	–	Y	–	–	–	–	–	Y	–	–	Y	Y	N	Y	–	–	Short-term bank overdraft	
Y	–	N	–	Y	–	–	–	–	–	Y	–	–	Y	Y	N	Y	–	–	Short-term bank overdraft	
N	–	–	–	N	–	–	–	–	–	N	Y	–	–	Y	Y	Y	–	–	Mortgage non-core investment property	
N	–	–	–	Y	–	–	–	–	N	N	–	–	–	N	N	N	–	–	Contingent liability	
Y	–	Y	–	N	–	–	–	–	–	Y	–	–	N	Y	N	N	–	–	Non-recurring payables	
–	–	–	–	–	–	–	–	–	–	Y	–	–	–	Y	Y	Y	–	–	Share capital	EQUITY
–	–	–	–	–	–	–	–	–	–	Y	–	–	–	Y	Y	Y	–	–	Share premium	
–	–	–	–	–	–	Y	–	–	–	Y	–	N	–	N	Y	N	N	–	Reserves	
–	–	–	–	–	–	N	–	–	–	Y	–	N	–	N	Y	N	–	–	Reserves	
–	–	Y	–	–	–	–	–	–	–	Y	–	–	–	N	Y	Y	–	–	Retained earnings	
–	–	N	–	–	–	–	–	–	–	Y	–	–	–	N	N	Y	–	–	Retained earnings	
–	–	–	–	–	–	–	–	–	–	Y	–	–	–	Y	Y	Y	–	–	Minority interest	

The sub entities in the normative subframework (Table 7.4) are based on the structure and content of the financial statements as discussed in International Accounting Standard 1 (IAS 1: para 42-126) – Presentation of Financial Statements (IFRS 2004).

Next, an example on how to use Table 7.4 follows.

Example 7.3

Suppose an accountant identified the following combination of attributes enabled ('Y' - yes) and disabled ('N' - no) for a particular transaction:

Core	Restricted	Current	Entry	Benefit	Immediate
Y	Y	Y	Y	Y	N

Suppose further that the other attributes and opposites in Table 7.3 are not applicable to the transaction under consideration (i.e. these are all disabled for the transaction). A comparison of the Y/N row in the above table with a corresponding row in Table 7.4 reveals that the entity described by the above combination of attributes enabled (Y) and disabled (N) is an *asset* and the particular sub entity is *cash and cash equivalents*.

End of Example 7.3

When classifiers use the normative subframework, they first decide which attributes are applicable and enabled or disabled for the relevant transaction (refer to Example 7.1). This is done through an initial measurement (Riahi-Belkaoui 2004) as prescribed by Corollary 3.2 in Section 3.9.1 of Chapter 3. Thereafter the set of enabled and disabled attributes may be matched with a row in Table 7.4. The matching row will determine the entity (ASSETS, LIABILITIES or EQUITY) as well as the sub entity embedded in the transaction (as in Example 7.3).

Next the *decision* subframework for the balance sheet is designed. The decision subframework is the next step after the normative subframework has been consulted. The purpose of the decision subframework is to further determine the position in a static structure where an item will be placed.

7.3.2 Designing the decision subframework

Once the relevant entity and its sub entity grouping have been identified through the use of the normative subframework discussed in Section 7.3.1, a classifier may then use the decision subframework developed in the current section.

The decision subframework is built around the entities defined in the last column of Table 7.4 above. A decision subframework takes the form of a *flowchart structure* (Hollander, Denna and Cherrington 2000) which further classifies entities and sub entities of a transaction to show how such items find their way into a static subframework. This is the last part of the comprehensive framework proposed in this thesis. A decision subframework is defined for each balance sheet entity. In line with the fundamental accounting equation (3.1) in Section 3.3.1 in Chapter 3, these entities are Assets, Equity and Liabilities.

The decision subframeworks for the above entities are rather involved and are given in full in Appendix K. As an example, a fragment of the decision subframework for Assets is given in Figure 7.3 and explained below.

As soon as a combination of enabled and disabled attributes according to the normative subframework indicates that the transaction should be classified as an asset (say), the classifier is referred to the decision subframework for assets for guidance as to where the item may be classified. Referring to Figure 7.3, if the item is a *core asset* (first test indicated by the diamond-shaped box) then the next attribute to consider is whether it is *current* or *non-current*. If the *non-current* attribute is enabled (say), the next test is whether it is a *fixed asset* (again a diamond-shaped box). If the answer is No (say), a test for the next sub entity, namely, *deferred assets* is performed. Suppose the enablement and disablement of its attributes define it to be a *deferred asset*, the next question is which deferred asset is the relevant one. If it turns out to be *R&D* then this is where the transaction will be classified in the static structure (Appendix L), having taken the relevant attributes into consideration.

The *error* boxes in Figure 7.3 indicate that one or more earlier decisions taken in the decision framework (or even the normative framework during the initial

measurement) were incorrect; hence the classifier has to backtrack on some earlier decisions.

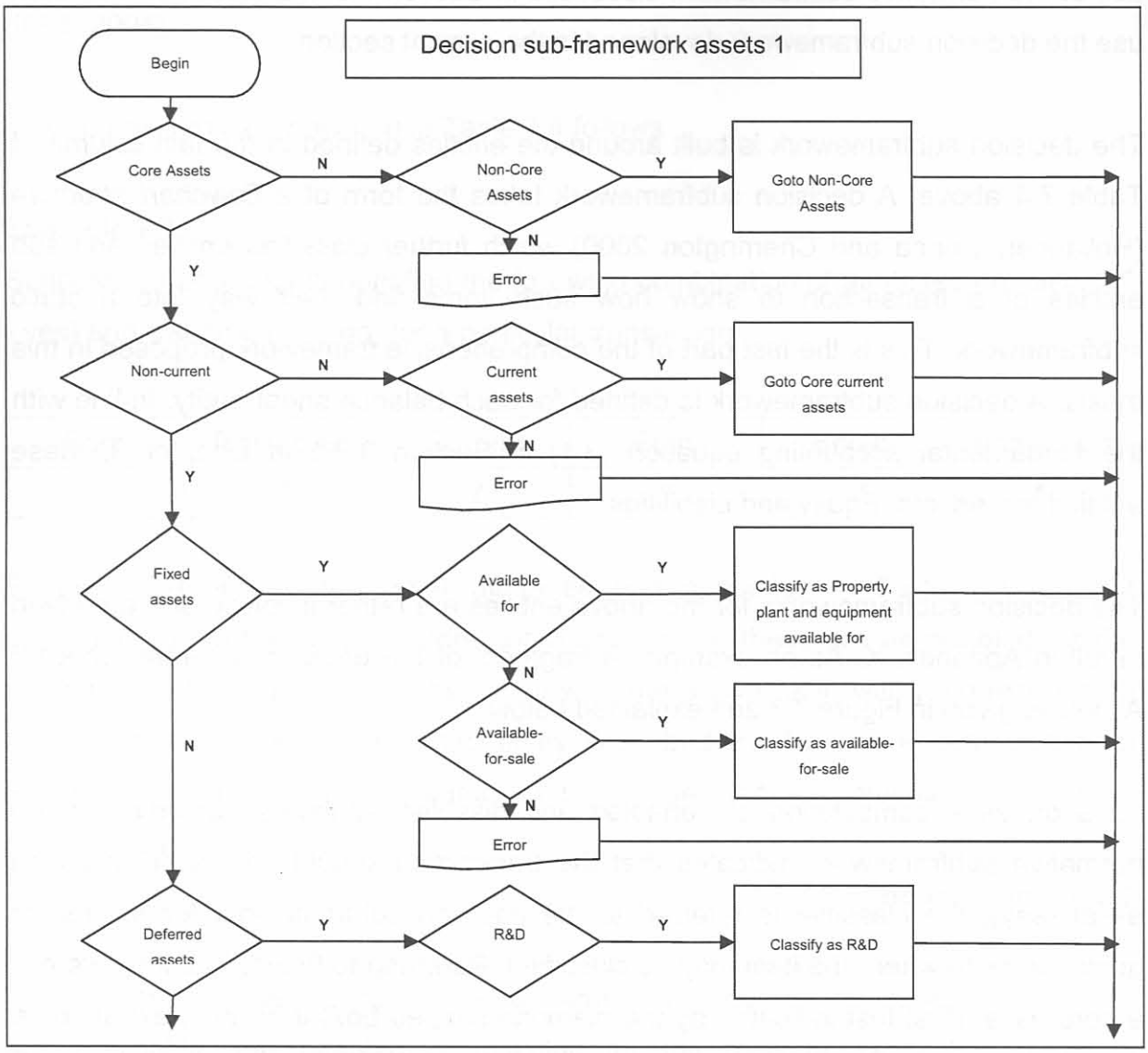


Figure 7.3 Fragment of decision subframework of assets (Appendix K)

In Figure 7.4 some of the symbols used in the decision frameworks in this thesis are explained.

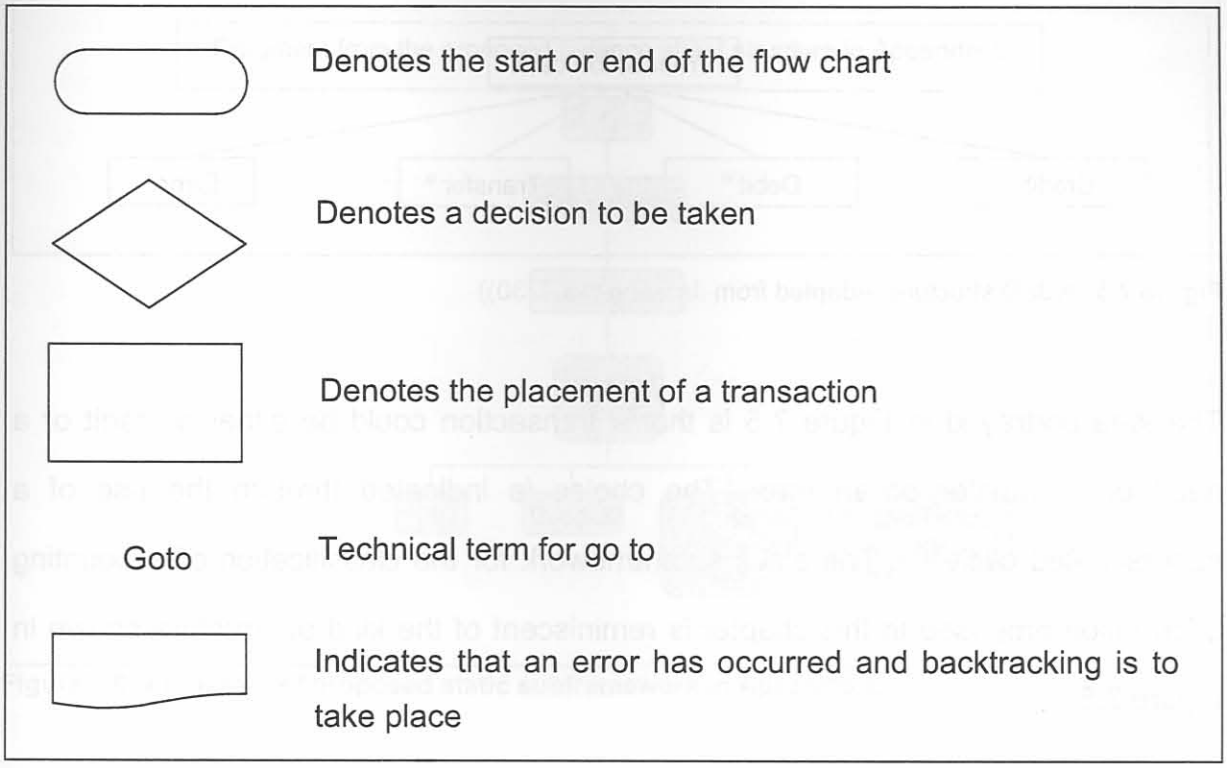


Figure 7.4 Explanation of symbols used in decision frameworks

Example 7.4 further on in Section 7.3.3 shows how (amongst other things) the decision subframework in Figure 7.3 is used to classify a transaction as belonging to the subclass R&D.

In the next section the *static component* of the proposed framework is developed.

7.3.3 Designing the static subframework

In this section a static subframework is developed. It should be noted that most of the classification proposals put forward in the literature were in essence static structures. Examples of static frameworks are those currently in use and described by Cilliers *et al.* (2004) and Wolk *et al.* (2004). These static structures as well as the proposed static framework in the current section are reminiscent of the work done in the area of software system design. Examples of such design structures appear in Jackson's (1975) JSD (Jackson Systems Development) methodology as well as the work done by Yourdon and Constantine (1978). An example of a small JSD structure is given in Figure 7.5 below:

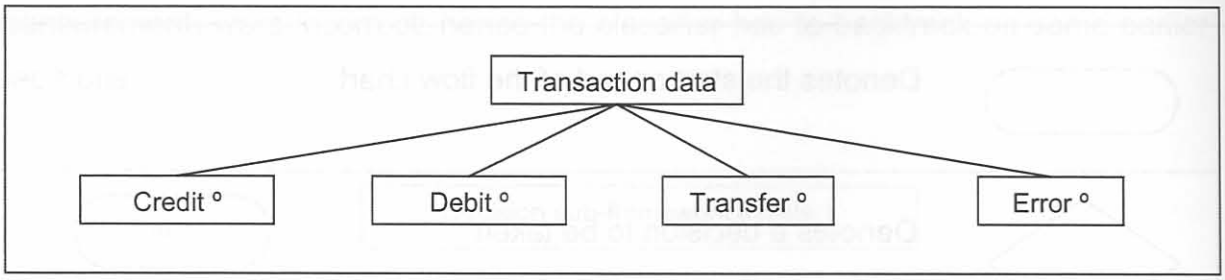


Figure 7.5 A JSD structure (Adapted from Jackson (1975:30))

The idea portrayed in Figure 7.5 is that a transaction could be either a credit or a debit or a transfer or an error. The choice is indicated through the use of a superscripted circle (°). The static subframework for the classification of accounting information proposed in this chapter is reminiscent of the kind of structure shown in Figure 7.5.

The full static subframework proposed by the author of this thesis is rather comprehensive, hence in the current section just a fragment of the static subframework is presented in Figure 7.6. The full static subframework proposed in this thesis is given in Appendix L. The decision subframework discussed in the previous section (and given in full in Appendix K), specifies where in the static structure each entity will ultimately be classified. Figure 7.6 will be used in Example 7.4 below when the utility of the proposed classification framework defined thus far is illustrated.

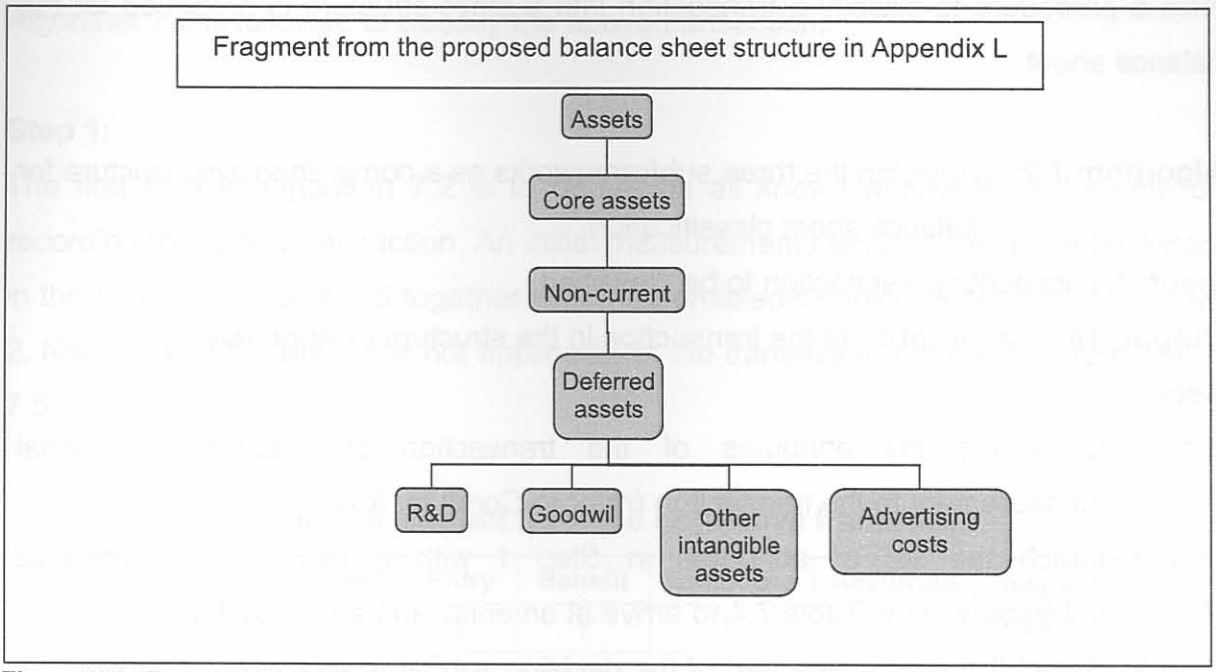


Figure 7.6 Fragment of proposed static subframework in Appendix L

Finally, then, the three subframeworks, namely, *normative*, *decision* and *static* are combined into a comprehensive framework for the classification of accounting information. This framework is presented in Figure 7.7 and a procedure on their use for the balance sheet is given in Algorithm 7.2 below.

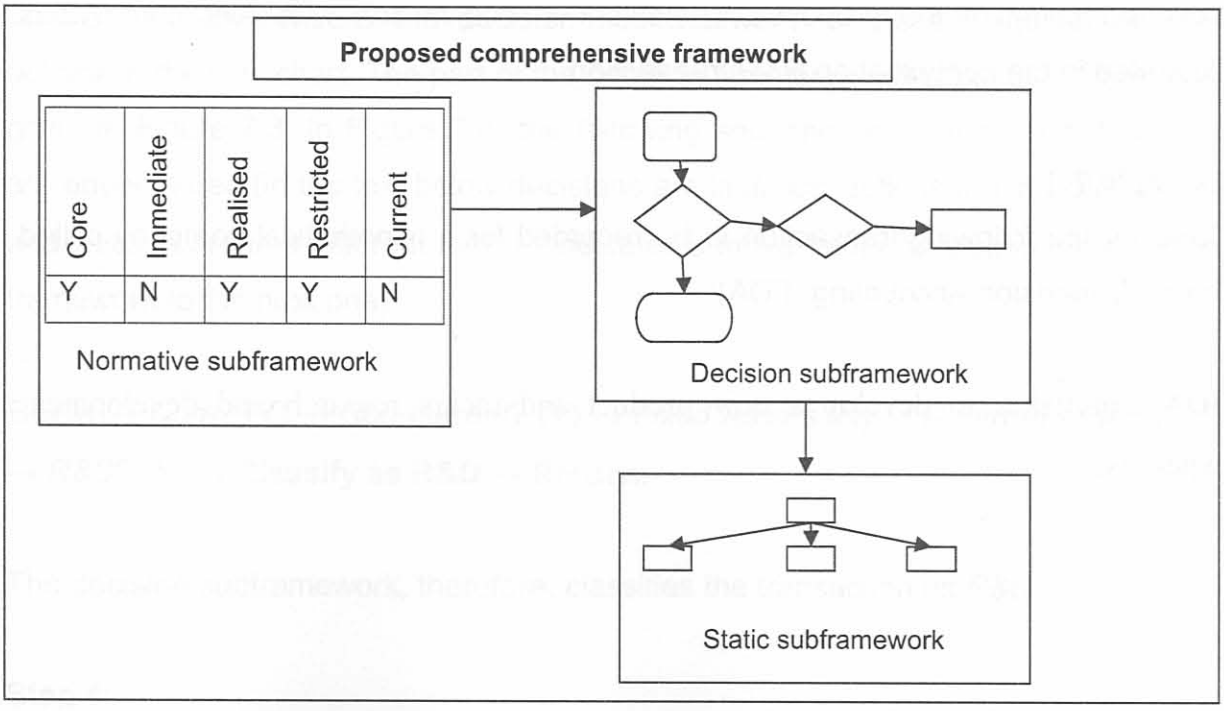


Figure 7.7 Meta-level view of the comprehensive framework

Next a procedure to classify a transaction into a static structure is proposed for the balance sheet.

Algorithm 7.2: Applying the three subframeworks as a comprehensive structure for balance sheet classification.

Input: An accounting transaction to be classified.

Output: The classification of the transaction in the structure of Appendix L.

Begin

Step 1: Determine the attributes of the transaction by applying an initial measurement to the transaction (refer to Corollary 3.2).

Step 2: Match the set of attributes in *Step 1* with a row in the normative subframework in Table 7.4 to arrive at an entity and a sub entity.

Step 3: Select the appropriate part of the decision subframework which corresponds to the entity identified in *Step 2*. Follow the sequence of tests and decisions in the appropriate subframework.

Step 4: Classify the transaction into the static subframework as determined by the outcome of *Step 3*.

End

Next the utility of the proposed framework in conjunction with Algorithm 7.2 is illustrated in the context of an R&D transaction.

Example 7.4

Consider the following transaction to be recorded for a hypothetical company called Fourth Dimension Accounting (FDA):

FDA undertakes to develop a new product and incurs research and development expenses.

Algorithm 7.2 is followed to classify the above transaction:

Step 1:

The first step in Algorithm 7.2 is to determine all known attributes at the time of *recording* the above transaction. An initial measurement identifies the attributes listed in the first row of Table 7.5 together with their enabled/disabled (Y/N) settings in row 2. Note that all the attributes not applicable to the transaction are omitted from Table 7.5.

Table 7.5 Extract from the normative framework

Core	Tangible	Current	Entry	Benefit	Immediate	Recurring	Deferred Assets	Assets
Y	N	N	Y	Y	N	Y		

Step 2:

Through inspection it is observed that the second row of Table 7.5 matches one of the rows in Table 7.4, and the accountant determines that the entity is that of *Assets* while the sub entity is *Deferred Assets*.

Step 3:

The accountant consults the decision subframework for *Assets* and follows the actions in the flow chart. The part of the decision structure relevant to this example is given in Figure 7.3. In Figure 7.3, the following sequence of actions and decisions are encountered (in the text below decisions are in *italics*; actions are in **bold**; Begin and Return are in a different font; → indicates a move from one step in the decision framework to the next one):

Begin → *Core*? (Y) → *Non-current*? (Y) → *Fixed Assets* (N) → *Deferred assets*? (Y) → *R&D*? (Y) → **Classify as R&D** → Return.

The decision subframework, therefore, classifies the transaction as *R&D*.

Step 4:

Classify the transaction *R&D* in the static subframework of Figure 7.6.

In this example, when the R&D transaction took place in the past (time of recording), it was classified as an expense based on the attributes that could be identified at that particular time. As time passes by more attributes are revealed and the transaction gets reclassified at the time of reporting (present). In this example the classification was done at the time of reporting and it was assumed that future benefits would be realised based on the feasibility of the project, hence the transaction was considered to be a *deferred asset* as confirmed by the proposed comprehensive framework.

At year end when reporting (present time) takes place, the company may reclassify the transaction as one of two other options, depending on the known attributes at the time of reporting. These two possibilities are portrayed in Figure 7.8: 1) if no benefits are realised at the time of reporting and there is no likelihood that the project is feasible, then the FDA transaction would have been viewed as incurring a *loss* (if the benefit is less than the expense incurred) to the company (see Figure 7.8), and 2) if the transaction yielded a current benefit (if the sacrifice (expense) rendered an equal amount of income) but it is indicated that the project would not be feasible, it would have been looked upon as a *cost* (refer to Figure 7.8).

End of Example 7.4

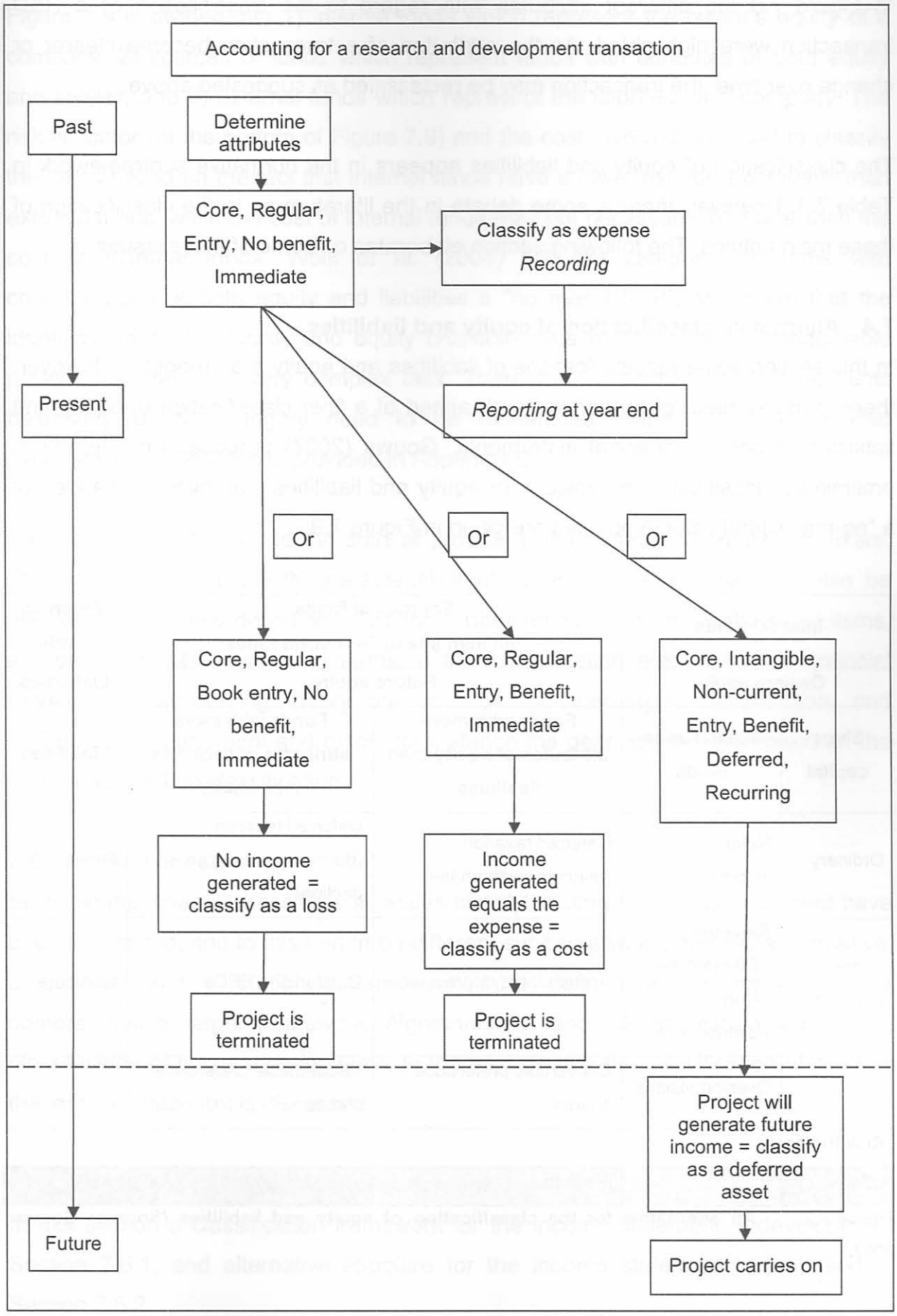


Figure 7.8 Example of the application of the normative framework

In Figure 7.8 the different attributes with regard to the classification of a R&D transaction were highlighted. As the attributes of a transaction become clearer or change over time, the transaction may be reclassified as suggested above.

The classification of equity and liabilities appears in the normative subframework in Table 7.4. However, there is some debate in the literature as to the classification of these main entities. The following section elaborates on some of these issues.

7.4 Alternative classification of equity and liabilities

In this section some reclassifications of liabilities and equity are proposed. However, there is much need for further research aimed at a finer classification of equity and liabilities, especially financial instruments. Gouws (2007) proposes an alternative, preliminary classification framework for equity and liabilities that involves the idea of a "no-man's land". Some pointers are given in Figure 7.9:

Internal funds		**Sources of funds "no man's land" or Hybrid funds**		**External funds**
Owners equity		**Future equity**		**Liabilities**
Share capital	**Maintenance funds**	**Funds with more attributes of equity than liabilities**	**Funds with more attributes of liabilities than equity**	**Liabilities**
Ordinary	Retained income	Deferred taxation (during growth phase)	Deferred taxation (during no growth or decline)	Core
Share premium	Reserves: Distributable Non-distributable	Accumulated depreciation	Outstanding ESOs	Non-core
	Over-provisions	Convertible preference shares	Redeemable preference shares	

Risk indicator

Low		Medium		High

Figure 7.9 An alternative for the classification of equity and liabilities (Source: Gouws 2007.)

Figure 7.9 is divided into 1) internal funds which represent the owner's equity of a company, 2) sources of funds which represent funds with attributes of both equity and liability, and 3) external funds which represent the liabilities of a company. The risk indicator (at the bottom of Figure 7.9) and the cost involved are used to classify the items based on the fact that internal funds have a lower risk for a company than external funds, while the cost of internal funds may not necessarily be lower than the cost of external funds. Wolk *et al.* (2004) call the category for items with characteristics of both equity and liabilities a "no man's land", and claim that the identification of the liability and equity characteristics of, for instance, redeemable preferred shares is a very complex task. Therefore, as pointed out before, items belonging to this category need to be researched further. A more detailed classification of liabilities is provided in Appendix L.

The above classification is the start of providing more useful information to users. The problem of items with characteristics of more than one class may also be alleviated when new definitions, through further research of the attributes of items, are developed. Challenges in terms of this classification are: 1) current financial models and accounting theory are built on the stereotype classification, and 2) financial management and ratios, for instance the gearing ratio, are based on the current accounting classification.

7.5 Preliminary summary

So far in this chapter classification issues largely relating to the balance sheet have been addressed, and to this end three different subframeworks, namely, a normative, a decision and a static subframework were defined and combined into a comprehensive, larger framework. Algorithms 7.1 and 7.2 are instrumental in the classification of balance sheet items. In the next section the classification of items in the income statement is discussed.

7.6 Classification in the income statement

In this section a classification framework for the income statement is developed in Section 7.6.1, and alternative structure for the income statement is proposed in Section 7.6.2.

7.6.1 Classification framework for the income statement

To a large extent the classification of items in the income statement follows a similar route to those in the balance sheet. A normative subframework is defined, and to this end Algorithm 7.1 may be used to draw up the normative structure for the income statement. Table 7.6 is the result of applying this algorithm to the income statement.

Table 7.6 Normative subframework for the income statement

NORMATIVE FRAMEWORK - Income statement															
Core	Realised	Predictable	Regular	Financing	Entry	Benefit	Immediate	Distributable	Fixed	Direct	Permanent	Allocated	Recurring	Sub entity	Entity
Y	N	–	Y	–	Y	Y	N	N	–	–	–	–	Y	Revenue	REVENUE/ INCOME
N	N	–	N	–	Y	Y	N	N	–	–	–	–	N	Revenue	
Y	Y	–	Y	–	Y	Y	Y	Y	–	–	–	–	Y	Revenue	
N	Y	–	N	–	Y	Y	Y	Y	–	–	–	–	N	Revenue	
N	N	–	N	–	Y	Y	N	–	–	–	–	–	N	Income from subisdiaries	
Y	N	–	Y	–	Y	Y	N	–	–	–	–	–	Y	Income from subisdiaries	
Y	Y	–	Y	–	Y	Y	Y	–	–	–	–	–	Y	Income from subisdiaries	
N	Y	–	N	–	Y	Y	Y	–	–	–	–	–	N	Income from subisdiaries	
N	N	–	Y	–	Y	Y	N	N	–	–	–	–	Y	Other income	
N	Y	–	Y	–	Y	Y	Y	Y	–	–	–	–	Y	Other income	
N	–	–	Y	Y	Y	Y	Y	Y	–	–	–	–	Y	Income from other financial assets	
N	–	N	N	–	Y	Y	Y	Y	–	–	–	–	N	Exceptional income	
Y	–	–	Y	–	Y	Y	Y	–	Y	Y	–	Y	Y	Cost of sales	COSTS
Y	–	–	Y	–	Y	Y	Y	–	N	Y	–	–	Y	Cost of sales	
Y	–	–	Y	–	Y	Y	Y	–	Y	Y	–	–	Y	Distribution costs	
Y	–	–	Y	–	Y	Y	Y	–	N	N	–	–	Y	Distribution costs	
N	–	–	Y	Y	Y	Y	Y	–	–	–	–	–	Y	Finance costs	
N	–	–	N	Y	Y	Y	Y	–	–	–	–	–	N	Finance costs	
Y	–	–	Y	–	Y	Y	Y	–	–	–	–	–	–	R&D costs	
Y	N	–	Y	–	Y	Y	N	Y	–	–	–	–	Y	Share of profit of associates	PROFIT/ LOSS
Y	Y	–	Y	–	Y	Y	Y	Y	–	–	–	–	Y	Share of profit of associates	
Y	–	–	Y	–	N	N	Y	–	–	–	–	–	–	R&D costs (Loss)	
N	–	–	N	–	N	–	Y	–	–	–	–	–	N	Loss from discontinuing operations	
Y	–	–	Y	–	Y	–	Y	–	–	–	–	–	Y	Selling expenses	EXPENSES
Y	–	–	Y	–	Y	–	Y	–	–	–	–	–	Y	Selling expenses	
Y	–	–	Y	–	Y	–	Y	–	–	–	–	–	Y	General & administrative expenses	
Y	–	–	Y	–	Y	–	Y	–	–	–	–	–	Y	General & administrative expenses	
Y	–	–	Y	–	N	–	Y	–	–	–	–	–	Y	Depreciation expense	
Y	–	–	Y	–	N	–	Y	–	–	–	–	–	Y	Amortisation	
N	–	–	Y	–	Y	–	Y	–	–	–	–	–	Y	Other expenses	
N	–	N	N	–	Y	–	Y	–	–	–	–	–	N	Exceptional expenses	
Y	–	–	Y	–	Y	N	Y	–	–	–	–	–	–	R&D Expenses	
Y	–	–	Y	–	N	N	N	–	–	–	N	–	Y	Taxation	
Y	–	–	Y	–	N	N	Y	–	–	–	Y	–	Y	Taxation	

The income statement is less complex than the balance sheet and for this reason a decision subframework has not been defined for it. Instead it is possible to move from the normative subframework in Table 7.6 directly to the static structure given in Table 7.9. Note that the main income statement entities in Table 7.6 are: Revenue/Income, Costs, Profit/Loss, and Expenses.

The sequence of steps to determine the position of an income statement item in the static subframework is somewhat similar to that of balance sheet items and is defined by Algorithm 7.3:

Algorithm 7.3: Applying the comprehensive framework to classify an income statement item.

Input: An accounting transaction to be classified.

Output: The classification of the transaction in the structure of Table 7.9.

Begin

Step 1: Determine the attributes of the transaction by applying an initial measurement to the transaction.

Step 2: Match the set of attributes in *Step 1* with a row in the normative subframework (Table 7.6) to arrive at an entity and sub entity.

Step 3: Classify the transaction into the static subframework as determined by the outcome of *Step 2*.

End

Next an example that classifies items in the income statement is presented.

Example 7.5

Consider a transaction to be captured for the hypothetical company called Vehicle Transportation (VT):

VT is a company that transports new vehicles from Cape Town to Johannesburg as their core business. The transaction that occurs is the filling up of the truck with diesel.

Algorithm 7.3 is followed to classify the above transaction:

Step 1:

Determine all known attributes at the time of *recording* the above transaction. An initial measurement identifies the attributes listed in the first row of Table 7.7 together with their enabled/disabled (i.e. Y/N) settings in row 2. Attributes that do not apply to the above transaction have been omitted from Table 7.7.

Table 7.7 Attributes enabled/disabled for the transaction

Core	Regular	Entry	Benefit	Immediate	Fixed	Direct	Recurring	Cost of sales	Costs
Y	Y	Y	Y	Y	N	Y	Y		

Step 2:

The second row of Table 7.7 is matched with a corresponding row in Table 7.6 to determine the matching entity (Revenue/Income, Costs, Profit/Loss, or Expenses). Through inspection, the classifier determines that the entity is *Costs* while the sub entity is *Cost of sales*.

Step 3:

Classify the transaction as *Cost of sales* in the static subframework in Table 7.9.

When the Cost of sales transaction took place in the past (time of recording) it was classified as a cost based on the known attributes at that particular time. At year end when reporting (present time) takes place, the company does not reclassify the transaction as the attributes stayed the same as at recording. When the income statement is drawn up at the end of the month, quarter, or year, this item will be placed in the revised format of the income statement as described in this section.

End of Example 7.5

Next, the functional cohesion of the current format of the income statement is debated.

7.6.2 Layout of the income statement

The current layout (Cilliers *et al.* 2004) of the income statement is presented in Appendix J. In this section this structure is analysed and discussed. It is argued that the current structure of the income statement may have to be changed. On the strength of the arguments proposed, an alternative way of presenting the information in the income statement is proposed.

In previous chapters some criticism of the income statement was put forward. Among these were 1) the classification of items in such a way that users may not be able to distinguish between core and non-core activities which may influence their opinion of future cash flows, and 2) creative income statement classifications e.g. earnings management. Humans also have a natural trait of wanting to put (i.e. classify) similar items or even actions together in groups. Example 7.6 is a simple illustration of this phenomenon.

Example 7.6

Suppose one has to calculate the sum of the following list of numbers:

23, -189.56, 78.25, 67, -113.67, -945.2, 435.46

If one were to do this with a calculator, then despite the fact that the specification is to calculate a *sum*, one may be inclined to add and subtract the numbers in the order given above, i.e. 23 - 189.56 + 78.25 + 67 - 113.67 - 945.2 + 435.46 = -644.72.

Alternatively, if the list becomes large, one may be inclined to apply a more cohesive approach and first group and add all the positives together (say group1 = 23 + 78.25 + 67 + 435.46 = 603.71), and then group and add all the negatives together (group2 = 189.56 + 113.67 + 945.2 = 1248.43). Then the second group is subtracted from the first, i.e. 603.71 – 1248.43 = -644.72 which is (again) the final answer.

In this section it is argued that a similar procedure as described in this example may be followed for the income statement.

End of Example 7.6

Items in the income statement have various attributes, as defined in Table 7.6. As is the case with the balance sheet above, in the case of the income statement, attributes in this table are used to determine whether a given transaction is to be classified as a profit or loss, cost, expense, revenue or income.

If one looks at the current format of the income statement at face value, it is presented as a sequential document in which a number of items are added together and/or subtracted from subtotals. At a conceptual level, however, income and expense items are matched in an organised manner. The current layout of the income statement displaying both these formats (i.e. a sequential document and matched items) in one structure is given in Appendix J.

Looking at the income statement as a sequential document, the *additions* and *subtractions* are not cohesively grouped together, rather they tend to be somewhat mixed. At various points in the income statement, intermediate totals are calculated through alternating additions and subtractions, a concept which the human mind may not be as comfortable with as pure additions or pure subtractions. A possibly more cohesive way of performing such calculations in the income statement may be to first accumulate all items to be added together in an implicit subtotal, then accumulate all items to be subtracted into another implicit subtotal, and thereafter perform a single subtraction instead of performing a sequence of alternating additions and subtractions (Norman 1998). In this way one further step is taken in grouping (i.e. classifying) like with like, only this time it is in terms of operations rather than items. Example 7.6 discussed this process for a simple list of numeric values.

Figure 7.10 represents the arithmetic operation that is performed in the income statement to finally arrive at the profit for the period, further attributed as equity holders of the parent and minority interest (:= indicates an assignment of calculated values to a field variable, i.e. it is a mathematical calculation, while ≡ indicates an equivalence, i.e. no actual assignment is performed):

Income Statement (by function)

Gross Profit := Revenue – Cost of Sales;

Profit before Tax :=

Gross Profit + Other Income – Distribution Cost – Administrative Expenses – Other Expenses – Finance Costs + Income from Subsidiaries + Share of Profit of Associates + Income from Other Financial Assets;

Profit for Period from Continuing Operations := Profit before Tax – Taxation;

Profit for the Period :=

Profit for the Period from Continuing Operations – Loss for the Period from Discontinuing Operations

Also, Profit for the period is shown in the income statement as (≡ denotes an equivalence rather than assignment as above):

Profit for the period Attributable ≡ Equity Holders of the Parent + Minority Interest.

Figure 7.10 Current layout of the income statement (Cilliers *et al.* 2004)

Note that the consistent use of the term 'profit' above (and indeed throughout this thesis) implies that it could also be a 'loss' instead.

If the operations in Figure 7.10 are unfolded into just the additions and subtractions, and all intermediate denotations (e.g. Profit before Tax) are removed, then the following basic formula results:

Profit for the period :=

(Revenue – Cost of Sales) + Other Income – Distribution Cost – Administrative Expenses – Other Expenses – Finance Costs + Income from Subsidiaries + Share of Profit of Associates + Income from Other Financial Assets – Taxation – Loss from Discontinuing Operations

The above definition of *Profit for the period* shows how additions and subtractions *alternate* as opposed to keeping additions together in a group and subtractions together in another group.

Consider the current structure of the income statement. Such structure may be amended through the following changes:

1. Partition continuing operations between core and non-core activities. This partition has the following effects:
   a. Finance cost, Other income, Other expenses and Income from other financial assets are all shown later in the income statement.
   b. Exceptional income, Exceptional expenses and other unique transactions are shown as non-core activities.
2. Show Selling expenses separately.
3. Rename Administrative expenses to General and Administrative expenses.
4. Show Depreciation expense separately.
5. Show Amortisation expense separately.
6. Show R&D cost separately.
7. Group more of the additions and more of the subtractions together, thereby increasing the functional cohesion of the income statement.

Point 7 above prescribes the grouping of similar operations. According to **Phase II** of the Mitroff model (refer to Section 7.3) the field variables are represented by a possible renaming of the descriptive items in the income statement to facilitate a subsequent manipulation of such items. The purpose of such renaming is just to simplify the working with such variables during the derivation of new formulae. For example, the constants a, b, c and the variable x in the quadratic equation $ax^2 + bx + c = 0$, *for* $a \quad 0$ could easily have been given longer and more descriptive names, but that would make the manipulation of such a formula very tedious.

Similarly, in developing an alternative format for the income statement, some temporary field variable substitutions (i.e. renaming of variables) are made, simply by giving the long and descriptive names shorter names to ease their manipulation.

Once the new format has been arrived at, the longer names will be substituted back into the result.

The substitutions are indicated in Table 7.8. For every row, the column on the left contains the long name while the short name (alias) appears next to it on the right.

Table 7.8 Field variable substitutions

Original name	**Alias**
Revenue	C1
Cost of Sales	C2
Gross Profit	C3
Income from Subsidiaries	Ci1
Share of Profit of Associates	Ci2
Distribution Costs	Cc1
R&D Costs	Cc2
Selling Expenses	Ce1
General and Administrative Expenses	Ce2
Depreciation Expense	Ce3
Amortisation Expense	Ce4
Profit before Non-Core and Financing Activities	C4 [C4 is a new field variable]
Other Income	Nci1
Income from Other Financial Assets	Nci2
Exceptional Income	Nci3
Other Expenses	Nce1
Exceptional Expenses	Nce2
Finance Costs	Ncc1
Unique Transactions	Ncu1
Profit before Taxation	C5
Taxation	T
Profit for the Period from Continuing Operations	C6
Loss from Discontinuing Operations	Ldo
Profit for the Period	C7
Equity Holders of the Parent	Eh
Minority Interest	Mi

Next, following Mitroff **Phase III** the original names in Table 7.8 are substituted and the new shortened formulae manipulated, aimed at ultimately increasing the functional cohesion in the income statement, in line with **Phase IV** of Mitroff.

The new proposed format for the income statement is:

C3 := C1 – C2;

[Calculate Gross Profit]

C4 := (C3 + Ci1 + Ci2) – (Cc1 + Cc2) – (Ce1 + Ce2 + Ce3 + Ce4);

[Calculate Profit before non-core and financing activities]

C5 := (C4 + Nci1 + Nci2 + Nci3) – (Nce1 + Nce2) – Ncc1 – Ncu1;

[Calculate Profit before Taxation]

C6 := C5 – T;

[Calculate Profit for the period from continuing operations]

C7 := C6 – Ldo; Also, C7 ≡ Eh + Mi

[Calculate Profit for the period and attribute between two shareholders]

The new proposed format (after the calculation of Gross Profit ≡ C3) groups all core income items (Ci1 and Ci2) together, all the core costs (Cc1 and Cc2) together and all the core expenses (Ce1, Ce2, Ce3 and Ce4) together, and arrives at Profit before non-core and financing activities (C4). Then all non-core items are grouped together as follows: all non-core incomes (Nci1, Nci2 and Nci3), all the non-core expenses (Nce1 and Nce2), all the non-core costs (Ncc1) and all the non-core unique transactions (Ncu1), to arrive at Profit before taxation (C5). Thereafter, the profit for the period from continuing operations (C6) is calculated as the difference between C5 and Tax (T). At the end, Profit for the period (C7) equals C6 minus Loss from Discontinuing Operations.

Finally, the last part of the solution to an alternative format for the income statement is to substitute back for the above short variable names, the names of the well-known items in the income statement. The result is shown in Table 7.9, which is the proposed static subframework for an income statement in this thesis.

Table 7.9 The proposed static subframework for an income statement

	Core activities
	Revenue
-	Cost of sales
=	**Gross profit**
+	Income from subsidiaries
+	Share of profit from associates
-	Distribution costs
-	Selling expenses
-	General and administrative expenses
-	Depreciation expense
-	Amortisation
-	R & D loss/cost
=	**Profit before Non-Core and Financing Activities**
+	Other income
+	Income from other financial assets
+	Exceptional income
-	Other expenses
-	Exceptional expenses
-	Finance costs
+/-	Other unique transactions
=	**Profit before taxation**
-	Taxation
=	**Profit for the Period from Continuing Operations**
-	Loss from Discontinuing Operations
=	**Profit for the period**
	Attributable to:
	Equity holders of the parent
	Minority interest

7.7 Summary

In this chapter a comprehensive framework for both the balance sheet and the income statement is proposed. The proposed framework consists of three subframeworks, namely, a normative subframework, a decision subframework and a

static subframework. The decision subframework is applicable to the balance sheet only. The notion of time is imbedded in the comprehensive framework in the sense that the recording of a transaction takes place in the past, reporting takes place in the present (i.e. at year end), and transactions with a future component are reported and valued at year end. For the balance sheet, attributes defined in the normative subframework determine whether a transaction will be classified as an asset, or a liability or equity. A subsequent decision subframework thereafter places a transaction into a static subframework, which is the third subframework.

For the income statement a similar normative subframework, to classify a transaction as revenue/income, profit/loss, cost or expense, was developed. The transaction is thereafter classified into a static subframework. In addition, a new structure for the income statement was suggested. These suggestions take into account various criticisms of the income statement mentioned before as well as an attempt to increase the functional cohesion of the two kinds of operations, namely, addition and subtraction in an income statement.

Algorithm 7.1 was defined to construct the normative frameworks for both the balance sheet and income statement. Algorithms 7.2 and 7.3 are used to classify items in the balance sheet and the income statement, respectively.

The next chapter is the final one in this thesis. It takes a look at what has been achieved and gives some pointers for future work in this area.

CHAPTER 8 CONCLUSIONS AND FUTURE WORK

8.1 Introduction

In this chapter stock is taken about what was set out to be done in this thesis and to what extent it has been achieved. Towards the end of the chapter some pointers are given for future work in this area.

8.1.1 Goal of this chapter

In this final chapter, the author takes a look at the objectives stated in Chapter 1 of this thesis and evaluates to what extent these goals have been met. The hypothesis is revisited and directions for future work in this area are explored.

8.1.2 Layout of this chapter

Following this introduction, the contributions of this thesis are synthesised in Section 8.2. Consideration is given, to accounting hybrids, the *current/non-current* classifications, information overload, the role of measurement, the importance attached to attributes and relationships, and the classifications proposed for the balance sheet and the income statement. In Section 8.3, the justifications for some of the decisions taken throughout this work are presented. In Section 8.4, it is shown very briefly how the classification framework presented in Chapter 7 ties up with the accounts into which a transaction is captured. Section 8.5 presents some future work in this area, in particular refining the ideas of the distributed union and measurement as defined in this thesis.

The above layout is represented in Figure 8.1.

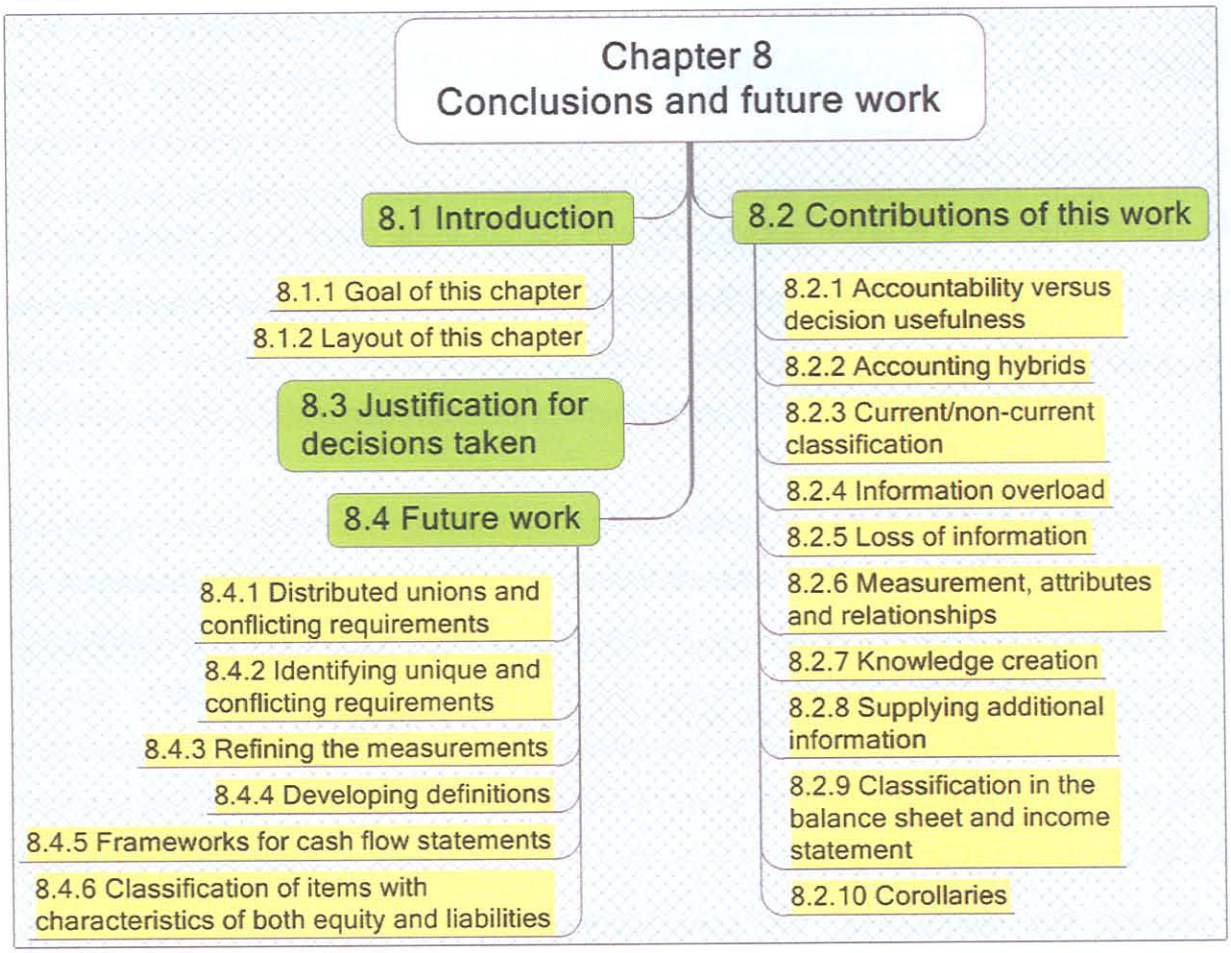


Figure 8.1 A visual representation of the layout of Chapter 8

8.2 Contributions of this work

The hypothesis of this thesis was:

> The current classification of accounting information, from the recording phase to reclassification in the reporting phase, does not supply users of such information with the necessary information for decision-making purposes. In this regard a comprehensive classification framework for accounting information is proposed, with the following properties:

- A well-defined set of attributes will be used, ultimately to classify a transaction into a static subframework to aid decision-making.
- Time will be used to classify a transaction at the time of recording and later to reclassify it at the time of reporting.
- The proposed framework will guide the classifier as to how an item finds its way into a static structure.

Therefore, the aim of this thesis was to develop a comprehensive classification framework for accounting information.

In Chapter 1 and throughout Chapter 4, many criticisms of present classification systems for accounting information were identified. These criticisms were also tested through the use of a comprehensive 32-statement questionnaire and the outcome mostly supported the view of researchers in the literature, namely, that a new classification framework is much needed for accounting. Similarly, an analysis of the financial statements of 93 companies revealed that a standard for drawing up these statements is called for.

In the following sections the various problems and criticisms of present accounting classifications are synthesised and the author indicates to what extent these criticisms are addressed by the proposed classification framework in Chapter 7 of this work.

8.2.1 Accountability versus decision usefulness

Accountability is one of the oldest objectives of accounting (Mattessich 1995:9) and respondents to the questionnaire supported this view. Classification based on accountability is a way to cut-off and report on a certain stage in the past and is practical for accountants. To classify for useful decisions, the classification needs a forward-looking (future) perspective.

Throughout this thesis the requirement that a classification framework ought to assist users of financial statements to make decisions was brought to the fore. Coupled with this requirement is the need for a classification system to be flexible enough to adapt to changes in the business environment and new business transactions as well as the changing needs of users. This was duly recognised by one of the leading accounting standard setters: "Today, more than ever, business reporting must keep up with the changing needs of users or it will lose its relevance" (AICPA 1994:2). A further requirement in this regard is that uncertainty for users of financial statements ought to be reduced, for example, where there is uncertainty concerning an assertion in the financial statements, the implied conditions may need to be clearly revealed by the classification framework for accounting information.

In the framework proposed in Chapter 7, information in both the balance sheet and the income statement was classified into core and non-core activities based on the needs of users as determined by AICPA (1994). This change to the financial statements was proposed to aid decision makers to make more informed decisions and reduce uncertainty.

To further aid users in making more informed decisions, the author supports the inclusion of one of the AICPA (1994) recommendations in the comprehensive framework, namely, that additional information to assist with future forecasting is to be published together with the financial statements of a company. For example, attributes of specific assets and liabilities could be disclosed as a supplement. Supplying additional information like attributes may guide users in their decisions, but one should guard against an information overload (refer to Section 8.2.4).

8.2.2 Accounting hybrids

In this thesis the author pointed out that accounting has a number of hybrids, or "what-you-may-call-its" (Sprouse 1966:45), since results of new kinds of transactions may not fit into the definitions presently in use. An example of such a hybrid is deferred taxation. As a first step to alleviate this problem, the author of this thesis proposes that the identification and classification of accounting information should not be a static or a once-off exercise, but part of an ongoing process.

In the classification framework for accounting information, it was proposed that the problem of hybrids be solved by insisting that classes resulting from a classification exercise form a partition. This idea is reflected in Algorithm 3.2 in Section 3.8 of Chapter 3. In Section 7.4, Chapter 7 it is furthermore proposed that a third class be created for the classification of equity and liabilities.

8.2.3 Current/Non-current classification

The use of the terms *deferred assets* and *deferred liabilities* may be a way to help alleviate the problem of the *current/non-current* classification by using these as different categories in financial statements. The use of the *current/non-current* classification, according to Foulke (1961), dates back as far as 1898. Hence, the usefulness of this classification was questioned in this thesis.

The traditional method of asset and liability classification may still be used, but not the criteria linked to *current/non-current*. Classification according to liquidity, either increasing or decreasing, may still be used if it is possible to have a correct measure of liquidity.

One way the problem of the *current/non-current asset* and *liability* classification was solved in the proposed classification framework was to classify certain items, for instance R&D with a future benefit, as a *deferred asset*.

8.2.4 Information overload

It is important to guard against information overload when a classification framework for accounting information is developed. A framework should provide necessary and high quality information to users, enabling them to make informed decisions. At least one of the respondents to the questionnaire felt that any comprehensive picture of accounting information would be far too complex for stakeholders to make sense of (refer to Statement 14 in Chapter 6).

As a response to the above claim, the author proposed in the comprehensive classification framework that a distributed union of the requirements of users be taken, minus the conflicting requirements (refer Example 1.1). This will necessarily cut down on the classification complexity. The proposed framework is then augmented with additional information to aid stakeholders (refer to AICPA (1994) in Section 8.2.1).

8.2.5 Loss of information

When classification and summarising occurs, information and relationships may be omitted that may be valuable to certain users or groups of users (refer to 8.2.4 above). Compilers of classification guidelines, therefore, need to take note of the information needs of all the users of financial statements. A related problem is to uncover hidden information or attributes during an initial measurement (refer to Section 8.2.7).

In this thesis it was proposed in Chapter 7 that a sequence of JAD (Joint Application Development) (Wood and Silver 1995) workshops be used to uncover tacit (hidden) attributes, relationships and knowledge.

8.2.6 Measurement, attributes and relationships

A problem that often arises in classification is whether a measurement is to be performed before a classification exercise or after such an exercise. Statement 9 in Chapter 6 addressed this question. The outcome of this statement was overwhelmingly positive. However, the problem with performing classification before measurement is that the accountant or classifier may not know which attributes are important and which ones may be discarded. Attributes are needed to perform a correct classification of items into non-overlapping classes.

This problem was addressed in this thesis by way of the introduction of an initial measurement (refer to Corollary 3.2 in Section 3.9.1) to identify all attributes prior to classification. Once items have been defined using the correct set of attributes, relationships may be drawn among them. Classification is then performed and a second measurement is taken (i.e. the measurement the respondents of the questionnaire considered). Note, however, that the definition and taking of a second measurement is beyond the scope of this thesis.

Relationships among entities are identified from the normative subframework as follows: the setting of the attributes in any row of the normative subframework in Figure 7.4 defines a subclass (under the column heading Sub Entity) of a larger class (heading Entity of the last column), hence a relationship is established between each of these sub entities and the parent entity. This idea is in line with Step 5 of Algorithm 3.2 in Section 3.8. To this end Algorithm 7.1 in Chapter 7 was defined and used to draw up the normative subframeworks for the balance sheet and the income statement.

In this thesis classification starts with the analysis of a transaction. The attributes of the transaction are determined first and thereafter it is classified according to the normative subframework. In essence, therefore, a transaction is a *super class* that is divided into the classes assets, liabilities, equity, costs, expenses, income/revenue

and profit/loss. Each of these classes is subdivided into subclasses (refer to Table 7.4).

8.2.7 Knowledge creation

A property of a good classification system is that unstructured data is transformed into useful information that can subsequently be used by users of the financial statements. In this regard Copi and Cohen (1990:450) write: "The theoretical or scientific motive for classifying objects is the desire to increase our knowledge of them". Ultimately, therefore, a classification process may be viewed as a mechanism to create knowledge, i.e. it leads to more knowledge of the attributes, similarities, differences and relationships of a transaction.

In this thesis knowledge creation is recognised through the definition of Corollary 2.1 in Section 2.7.2 of Chapter 2. Whenever data is transformed into information, new knowledge is created in the system. Corollary 3.1 in Chapter 3 was an instantiation of Corollary 2.1 for accounting information.

8.2.8 Supplying additional information

Analysts make up an important group of users of accounting information who may need additional technical information from the financial statements to evaluate the performance of a company and to make useful decisions. Analysts typically reclassify accounting information to suit their needs.

The problem of the diversity of users and taking all the requirements of all the users into account has been discussed in this thesis and also covered elsewhere in this chapter (refer to Section 8.2.4: Information overload). A further problem in this regard is that requirements may be conflicting in nature. The solution proposed in this thesis is the same as for the problem of requirements being too comprehensive, namely, the author acknowledges that all the information needs of the underlying company and users of financial statements cannot be taken into account. Nevertheless, there are some needs that are generic to many users (IASB 2004), and then there are those users with unique requirements that do not contradict any requirement from any other user. Satisfying all these requirements could be achieved by taking a distributed union of all requirements, and then removing those that are in conflict with

any other requirement. This process then enables the development of a generic classification framework with supplementary information which can assist users with further classification and reclassification. This approach was taken in Chapter 7 of this work.

8.2.9 Classification in the balance sheet and income statement

The structure of the balance sheet is the subject of much criticism by many researchers. Classification in the income statement has been subjected to similar treatment in the literature. Many of these criticisms were researched in Chapter 3 and 4 of this work. Two important criticisms against present classification mechanisms of these two financial statements are:

1. current classification structures are all static in nature and
2. time is not taken into account, mainly because of the problem mentioned in 1.

Both criticisms 1) and 2) above were addressed in the proposed classification framework in Chapter 7. Three subframeworks have been defined for the *balance sheet*. These substructures are:

1. a normative subframework (Table 7.4) using attributes and embedding a temporal (past, present and future) component as a first classification step;
2. a number of decision subframeworks, each giving a sequence of steps on how to further classify an item; and
3. a static subframework, showing where an item is finally classified.

The relationships among the subframeworks for the balance sheet are shown in Figure 7.7, Chapter 7 and Algorithm 7.2 defines their use for the classification of information in the balance sheet.

For the *income statement* a functional model (refer to Section 4.4) was selected, and an equivalent normative subframework based on past, present and future attributes of a transaction was defined (Table 7.6), as well as a static subframework for items in the income statement. Algorithm 7.3 shows the steps to be followed in the classification of information in the income statement. In addition a change was

proposed to the static layout of the income statement. In Section 3.3.5 of Chapter 3 it was noted by Huizingh (1967) that an important principle is the classification of operations in the income statement as continuing and discontinued. It was further stated that any proposed classification framework for accounting information should preserve this property. In this regard it is noted that the reorganisation of the entries in the physical layout of the income statement in Section 7.6.2 does indeed preserve this property.

The details of the changed static layout of the income statement appear in Section 7.6.2 of Chapter 7.

8.2.10 Corollaries

A further contribution of this thesis is the definition of three corollaries:

Corollary 2.1: The process of classification tends to transform a collection containing unstructured *data* into a collection of classes such that each class contains useful *information* rather than data.

Corollary 3.1: The process of classification for accounting information transforms a pool of unstructured accounting *data* into a collection of classes and subclasses such that each class contains useful accounting *information* rather than unstructured data. In essence, therefore, classification results in the creation of new accounting knowledge.

Corollary 3.2: Classification in accounting necessitates performing an initial measurement to arrive at attributes for describing an item to be classified uniquely.

Corollary 3.2 defines an important step prior to a classification exercise.

8.3 Justifications for decisions taken

A possible criticism of the comprehensive framework for accounting information proposed in this thesis is that it is made up of three subframeworks instead of just one framework. However, in this regard Schroeder *et al.* (2005:117) claim the following: "Since individuals are incapable of integrating a great deal of information,

they process information in a sequential fashion". In a way this is precisely what the three subframeworks proposed in this thesis do – they take the classifier through a sequence of steps instead of a set of concurrent actions. Hence, a classification framework for accounting information that takes a classifier through such a sequence of steps may be the way to design a useful classification framework for accounting information. Note this is in line with point 3 in Section 2.7.1.2.1 in Chapter 2 as well as the point made just above Section 3.3.1 in Chapter 3.

8.4 Future work

In this section some directions in which future research in this area may be pursued are presented.

8.4.1 Distributed unions and conflicting requirements

The formula for establishing the combined requirements of users of financial statements, i.e. a distributed union minus conflicting requirements may be written as:

$$R = \text{Distributed union} - \text{Conflicting requirements} \quad (8.1)$$

where R is the final set of user requirements that ought to be catered for in the financial statements. Formula (8.1) may be considered by some to be rather restrictive. In some cases it may in fact be necessary to include conflicting requirements in financial statements. Hence, more research may be necessary to sensibly enlarge set R in order to satisfy more requirements of the users. One possible way is to rank (i.e. apply a measure to) the contradictory requirements and include some of the top-ranked requirements without offending users whose requirements scored among the lower ranks.

8.4.2 Identifying unique and conflicting requirements

Taking the union of any two sets of user requirements and later on determining all conflicting requirements are more involved processes than may appear at first glance. Given the information content of any two sets of user requirements, the accountant may find that two requirements may either already be present in both sets and agree in semantic content, or in one of the sets but not the other one, or may indeed be contradictory. Correctly identifying each of these cases may be a non-

trivial exercise, and it is anticipated that the work done by Hansson (1999) in belief revision may be a solution to this problem.

8.4.3 Refining the measurements

This thesis proposes the taking of an initial measurement to identify the attributes of items to be used in the subsequent classification. The exact way in which this measurement is to be taken is considered to be beyond the scope of this thesis, but it is certainly an area for further development. One could possibly define an algorithm (cf. Algorithm 3.1) to take the measurement. An advantage of refining the initial measurement could be more precise definitions of items and objects in accounting. In this regard the normative subframeworks (i.e. tables 7.4 and 7.6) may prove useful.

In addition, the problem of taking the second measurement after classification has to be researched.

8.4.4 Developing definitions

It is apparent from the research done that new definitions for classification categories, based on the relevant attributes of transactions, should be developed. A call for new definitions was also made by Wolk *et al.* (2004) when they stated that definitions of assets and liabilities have developed from narrow legal definitions to more involved economic concepts, which have resulted in definitions with a lack of boundaries or with indistinct boundaries. Currently, the FASB and IASB are focussing on the development of a new definition for assets as part of the Conceptual Framework Project (IASB 2007) and the development of other elements of the financial statements are to follow.

8.4.5 Frameworks for cash flow statements

This thesis proposed a comprehensive classification framework for accounting information for the balance sheet and the income statement. Future work should investigate to what extent a classification framework for the cash flow statement could be developed along similar lines.

8.4.6 Classification of items with characteristics of both equity and liabilities

The debate as to whether some items ought to be classified as equity or liabilities was briefly covered in Section 7.4, Chapter 7. In this thesis it was proposed that a new class to accommodate these items into a "no-mans land" be developed. Also, considering all the attributes of such items could facilitate the task of further research into this problem. These proposals may lead to a revision of the current accounting equation 3.1.

APPENDIX A – COVERING LETTER

ATTENTION: Financial Manager/Accountant/Auditor/Financial Analyst/Academic
Date: 22 August 2005

Dear Sir/Madam

I am currently conducting research for a DCom degree at the University of Pretoria. The research problem focuses on the classification of financial information from the recording process through to the financial statements. Classification is necessary to present quality information for decision-making purposes and is also a prerequisite for the correct measuring of performance. A questionnaire was designed to form part of the overall research done for my DCom studies. The aim of this questionnaire is to help solve the "classification puzzle". A classification system based on the relevant relationships should be developed to ascertain the truth.

The questionnaire, which accompanies this letter, should take approximately 10 minutes to complete. You will notice that a brief summary of the results of the opinion survey will be made available to all interested parties. However, if you want to keep your answers separate from the request for the results, please detach the last section of the questionnaire and kindly return the two separately by facsimile or via e-mail. Should you require any information on how to complete the questionnaire, please contact me at 012 429 4721 (08h00 – 13h00) or at 084 510 3933 (all hours).

All answers will be treated as strictly confidential and will be used for statistical and research purposes only.

Kindly return the completed questionnaire by faxing it to 012 429 6434 or by sending it via e-mail to: vdpolhm@unisa.ac.za.

Indien u die bygaande brief en die vraelys in Afrikaans verkies, skakel asseblief 012 429 4721 of 084 510 3933 of stuur 'n e-pos aan: *vdpolhm@unisa.ac.za*

Your kind cooperation is appreciated.

Yours sincerely

Breggie van der Poll

Approved by

Professor Daan Gouws (Supervisor)

APPENDIX B – QUESTIONNAIRE

QUESTIONNAIRE TO FINANCIAL MANAGERS AND OTHER STAKEHOLDERS

For office use only

All answers will be treated as strictly confidential and will be used for statistical purposes only.

□ □ □
1 2 3

QUESTIONNAIRE ON THE CLASSIFICATION OF FINANCIAL INFORMATION

Please return this questionnaire as soon as possible to e-mail address: vdpolhm@unisa.ac.za or fax it to 012 429 6434.

1. Please indicate the capacity in which you have completed the questionnaire:

Preparer of financial Information	___	□ 4
User of financial Information	___	□ 5
Academic	___	□ 6

2.

Male	___	□ 7
Female	___	□ 8

3. Opinions:

Please indicate to what extent you personally agree or disagree with the following statements:

SA - Strongly agree **A - Agree**
U - Uncertain **D - Disagree**
SD - Strongly disagree

		1	2	3	4	5	6
No	**Question**	**SD**	**D**	**U**	**A**	**SA**	**Ref**
Wholeness and content classification							
1	The accountant classifies for accountability/reporting purposes.						□ 9
2	Analysts/users classify for useful-decision purposes.						□ 10
3	The classification for accountability purposes should not be the same as for useful-decision purposes.						□ 11
4	New types of transactions emerge continually, rendering the current classification system inadequate.						□ 12
5	Classified facts may become distorted when unlike elements are classified in the same account (Littleton 1958:45).						□ 13
6	A different classification system should be in place for different users.						□ 14
7	The value of financial statements depends on the skill with which the ledger accounts are arranged into groups and classes (Fitzgerald 1938a).						□ 15
8	Classification is a way of making meaningful relationships visible.						□ 16
9	Classification is a prerequisite for measuring.						□ 17
10	Past, present and future-orientated recordings must be classified separately.						□ 18
11	Accounting information should be classified in such a manner that it facilitates the forecasting of future earnings and cash flows.						□ 19

		1	2	3	4	5	6
No	**Question**	**SD**	**D**	**U**	**A**	**SA**	**Ref**
12	It is necessary to reclassify financial statements in order to reflect economic reality (Lev & Thiagarajan 1991).						□ 20
13	The prudence principle may result in different classifications (Stickney *et al.* 2004).						□ 21
14	The accountant's classification may preclude or inhibit others from using much-needed information (Goldberg 2001:42).						□ 22
15	Definitions of classification should change when the needs of society change (Heath 1978:51-52).						□ 23
16	Presenting accounting information to assist in determining relevant relationships forms part of ascertaining the truth (Goldberg 1964:6).						□ 24
17	New classifications must be developed to facilitate any new statements.						□ 25
18	Classification principles should be disclosed.						□ 26
19	Intentions, which are in contrast with normal business practices, should be classified accordingly.						□ 27
Detail classification							
20	Working capital classifications are not indicators of success (Beaver 1968:117).						□ 28
21	The current working capital classification is not useful for decision-making.						□ 29
22	Working capital must be classified in terms of future cash flow realisation (Heath 1978:73).						□ 30
23	Because valuation and classification methods vary, owners' equity at the start of a financial year may lead to different income and equity figures at the end of the financial year (Mattessich 1995:111).						□ 31
24	The operating cycle should influence the classification of working capital.						□ 32
Examples of Proposed Reclassification							
25	A part of deferred taxation may also be classified as a part of equity.						□ 33
26	Uncertainties attached to contingencies should be classified according to probabilities.						□ 34
27	Advertising may also be classified as an investment rather than an expense.						□ 35

		1	2	3	4	5	6
No	**Question**	**SD**	**D**	**U**	**A**	**SA**	**Ref**
28	Cash should be earmarked in anticipation of the purchase/replacement of a fixed asset.						□ 36
29	The behaviour of bank overdrafts may lead to a different classification.						□ 37
Perceptions of classification							
30	Classification can be used for window dressing.						□ 38
31	Classifying items as non-recurring may be a key to developing adjusted earnings (Mulford & Comiskey 2002).						□ 39
32	Classification can be done according to authoritative principles laid down by governing bodies.						□ 40

4. Comments:

Please feel free to express your personal comments on any of the questions above, especially regarding SA and SD responses.

Statement No. .....

Statement No. .....

In general .....

Please fax this questionnaire at your earliest convenience to 012 345 3779 or return it via e-mail to: vdpolhm@unisa.ac.za.

E .....

Fill in your address, fax number or e-mail address if you are interested in receiving a brief summary of the results of the survey. (Return separately if you wish.)

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APPENDIX C – ORIGINAL 190 COMPANIES SELECTED

Alpha	Orig-Num	New-Num	Company	Sector
ALC	1	1	Amlac Limited	Automobiles & Parts
TIW	3	2	Tiger Wheels Limited	Automobiles & Parts
BDS	5	3	Bridgestone Firestone Maxiprest Limited	Automobiles & Parts
FSR	7	4	Firstrand Limited	Banks
NED	9	5	Nedcor Limited	Banks
SBK	11	6	Standard Bank Group Limited	Banks
SAB	13	7	SABMiller Plc	Beverages
KWV	15	8	KWV Beleggings Beperk	Beverages
AFE	17	9	AECI Limited	Chemicals
OMN	19	10	Omnia Holdings Limited	Chemicals
AGI	21	11	AG Industries Limited	Construction & Materials
CRM	23	12	Ceramic Industries Limited	Construction & Materials
DLV	25	13	Dorbyl Limited	Construction & Materials
MAS	27	14	Masonite (Africa) Limited	Construction & Materials
AEG	29	15	Aveng Limited	Construction & Materials
CMT	31	16	Cementation Company (Africa) Limited	Construction & Materials
ELR	33	17	ELB Group Limited	Construction & Materials
MUR	35	18	Murray & Roberts Holdings Limited	Construction & Materials
SLO	37	19	Southern Electricity Company Limited	Electricity
BIC	39	20	Bicc Cafca Limited	Electronic & Electrical Equipment
PSC	41	21	Pasdec Resources SA Limited	Electronic & Electrical Equipment
SLL	43	22	Stella Vista Technologies Ltd	Electronic & Electrical Equipment
DGC	45	23	Digicore Holdings Limited	Electronic & Electrical Equipment
STO	47	24	Setpoint Technology Holdings Limited	Electronic & Electrical Equipment
TMT	49	25	Trematon Capital Investments Limited	Equity Investment Instruments
AQL	51	26	Aquila Growth Limited	Equity Investment Instruments
BRT	53	27	Brimstone Investment Corporation Limited	Equity Investment Instruments
EUR	55	28	Eureka Industrial Limited	Equity Investment Instruments
RAH	57	29	Real Africa Holdings Limited	Equity Investment Instruments
SVN	59	30	Sabvest Limited	Equity Investment Instruments
REM	61	31	Remgro Limited	Equity Investment Instruments
PIK	63	32	Pick n Pay Stores Limited	Food & Drug Retailers
SHP	65	33	Shoprite Holdings Limited	Food & Drug Retailers
ARL	67	34	Astral Foods Limited	Food Producers
CNX	69	35	Conafex Holdings Societe Anonyme	Food Producers
NMS	71	36	Namibian Sea Products Limited	Food Producers
RBW	73	37	Rainbow Chicken Limited	Food Producers
WBH	75	38	W B Holdings Limited	Food Producers
ALJ	77	39	All Joy Foods Limited	Food Producers
ILV	79	40	Illovo Sugar Limited	Food Producers
TNT	81	41	Tongaat-Hulett Group Limited, The	Food Producers
SAP	83	42	Sappi Limited	Forestry & Paper
LNF	85	43	London Finance & Investment Group Plc	General Financial
MCU	87	44	M Cubed Holdings Limited	General Financial
ABL	89	45	African Bank Investments Limited	General Financial
CPI	91	46	Capitec Bank Holdings Limited	General Financial
BAT	93	47	Brait S.A.	General Financial
CDZ	95	48	Cadiz Holdings Limited	General Financial
DEC	97	49	Decillion Limited	General Financial
IDQ	99	50	Indequity Group Limited	General Financial
INL	101	51	Investec Limited	General Financial
PGR	103	52	Peregrine Holdings Limited	General Financial
SFN	105	53	Sasfin Holdings Limited	General Financial
ERM	107	54	Enterprise Risk Management Limited	General Financial
IND	109	55	Independent Financial Services Limited	General Financial
MMG	111	56	Micromega Holdings Limited	General Financial
TSC	113	57	Tisec Limited	General Financial
ALX	117	59	Alex White Holdings Limited	General Industrials
BCF	119	60	Bowler Metcalf Limited	General Industrials
NPK	121	61	Nampak Limited	General Industrials
ART	123	62	Argent Industrial Limited	General Industrials
BAW	125	63	Barloworld Limited	General Industrials
SKJ	127	64	Sekunjalo Investments Limited	General Industrials
AOO	129	65	African & Overseas Enterprises Limited	General Retailers
ECO	131	66	Edgars Consolidated Stores Limited	General Retailers
LAN	133	67	LA Group Limited	General Retailers
MPC	135	68	Mr Price Group Limited	General Retailers
RTN	137	69	Rex Trueform Clothing Company Limited	General Retailers
TRU	139	70	Truworths International Limited	General Retailers

Appendix C – Original 190 companies selected

Alpha	Orig-Num	New-Num	Company	Sector
MSM	141	71	Massmart Holdings Limited	General Retailers
NCL	143	72	New Clicks Holdings Limited	General Retailers
RLY	145	73	Relyant Retail Limited	General Retailers
WHL	147	74	Woolworths Holdings Limited	General Retailers
JDG	149	75	JD Group Limited	General Retailers
CDT	151	76	Creditvision Holdings Limited	General Retailers
UTR	153	77	Unitrans Limited	General Retailers
VLT	155	78	Vaalauto Limited	General Retailers
CMH	157	79	Combined Motor Holdings Limited	General Retailers
NTC	159	80	Network Healthcare Holdings Limited	Health Care Equipment & Services
MUM	161	81	Moulded Medical Supplies Limited	Health Care Equipment & Services
BEL	163	82	Bell Equipment Limited	Industrial Engineering
VTL	165	83	Venter Leisure & Commercial Trailers Limited	Industrial Engineering
HDC	167	84	Hudaco Industries Limited	Industrial Engineering
IVT	169	85	Invicta Holdings Limited	Industrial Engineering
NEI	171	86	Northern Engineering Industries Africa Limited	Industrial Engineering
PAM	173	87	Palabora Mining Company Limited	Industrial Metals
ISC	175	88	Iscor Limited	Industrial Metals
MBN	177	89	Mobile Industries Limited	Industrial Transportation
SUM	179	90	Spectrum Shipping Limited	Industrial Transportation
IPL	181	91	Imperial Holdings Limited	Industrial Transportation
VLE	183	92	Value Group Limited	Industrial Transportation
SPG	185	93	Super Group Limited	Industrial Transportation
NWL	187	94	Nu-World Holdings Limited	Leisure Goods
CLE	189	95	Clientele Life Assurance Company Limited	Life Insurance
LBH	191	96	Liberty Holdings Limited	Life Insurance
MET	193	97	Metropolitan Holdings Limited	Life Insurance
SGG	195	98	Sage Group Limited	Life Insurance
AME	197	99	African Media Entertainment Limited	Media
NPN	199	100	Naspers Limited	Media
PMA	201	101	Primedia Limited	Media
CAT	203	102	Caxton and CTP Publishers and Printers Limited	Media
JCM	205	103	Johnnic Communications Limited	Media
MNY	207	104	Moneyweb Holdings Limited	Media
NAN	209	105	New Africa Investment Limited	Media
DMR	211	106	Diamond Core Resources Limited	Mining
TBX	213	107	Thabex Exploration Limited	Mining
ZNT	215	108	Zenith Concessions Limited	Mining
AGL	216	109	Anglo American Plc	Mining
ASG	218	110	Assmang Limited	Mining
BIL	220	111	BHP Billiton Plc	Mining
KMB	222	112	Kumba Resources Limited	Mining
MTZ	224	113	Matodzi Resources Limited	Mining
SAL	226	114	Sallies Limited	Mining
SCE	228	115	South African Chrome & Alloys Limited	Mining
AFL	230	116	Afrikander Lease Limited, The	Mining
DUR	232	117	Durban Roodepoort Deep Limited	Mining
GFI	234	118	Gold Fields Limited	Mining
JCD	236	119	JCI Limited	Mining
SBN	238	120	Sub Nigel Gold Mining Company Limited	Mining
VIL	240	121	Village Main Reef Gold Mining (1934) Company Limited	Mining
AMS	242	122	Anglo American Platinum Corporation Limited	Mining
IMP	244	123	Impala Platinum Holdings Limited	Mining
MES	246	124	Messina Limited	Mining
MTN	248	125	MTN Group Limited	Mobile Telecommunications
AFB	250	126	Alexander Forbes Limited	Nonlife Insurance
MAF	252	127	Mutual & Federal Insurance Company Limited	Nonlife Insurance
SNT	254	128	Santam Limited	Nonlife Insurance
SOL	256	129	Sasol Limited	Oil & Gas Producers
BSB	258	130	House of Busby Limited, The	Personal Goods
GDA	260	131	Glodina Holdings Limited	Personal Goods
RCH	262	132	Richemont Securities AG	Personal Goods
SRN	264	133	Seardel Investment Corporation Limited	Personal Goods
APN	266	134	Aspen Pharmacare Holdings Limited	Pharmaceuticals & Biotechnology
ALN	268	135	Alliance Pharmaceuticals Limited	Pharmaceuticals & Biotechnology
ABT	270	136	Ambit Properties Limited	Real Estate
ALA	272	137	Alpina Investments Limited	Real Estate
APB	274	138	ApexHi Properties Limited	Real Estate
ATS	276	139	Atlas Properties Limited	Real Estate

Appendix C – Original 190 companies selected

Alpha	Orig-Num	New-Num	Company	Sector
FVT	278	140	Fairvest Property Holdings Limited	Real Estate
HYP	280	141	Hyprop Investments Limited	Real Estate
JGS	282	142	Jigsaw Holdings Limited	Real Estate
MCP	284	143	MICC Property Income Fund Limited	Real Estate
MRN	286	144	Marshalls Limited	Real Estate
OCT	288	145	Octodec Investments Limited	Real Estate
PMM	290	146	Premium Properties Limited	Real Estate
PRA	292	147	Paramount Property Fund Limited	Real Estate
RES	294	148	Resilient Property Income Fund Limited	Real Estate
SJL	296	149	S & J Land Holdings Limited	Real Estate
SRL	298	150	SA Retail Properties Limited	Real Estate
CPL	300	151	Capital Property Fund	Real Estate
PRM	302	152	Prima Property Trust	Real Estate
EMI	304	153	Emira Property Fund	Real Estate
AAA	306	154	AST Group Limited	Software & Computer Services
BTG	308	155	Bytes Technology Group Limited	Software & Computer Services
CSH	310	156	CS Computer Services Holdings Limited	Software & Computer Services
DCT	312	157	Datacentrix Holdings Limited	Software & Computer Services
ECH	314	158	EC-Hold Limited	Software & Computer Services
EOH	316	159	Enterprise Outsourcing Holdings Limited	Software & Computer Services
FRT	318	160	Faritec Holdings Limited	Software & Computer Services
IFW	320	161	Infowave Holdings Limited	Software & Computer Services
PCN	322	162	Paracon Holdings Limited	Software & Computer Services
SQE	324	163	Square One Solutions Group Limited	Software & Computer Services
YHK	326	164	Y3K Group Limited	Software & Computer Services
BEE	328	165	Beget Holdings Limited	Software & Computer Services
IDI	330	166	Idion Technology Holdings Limited	Software & Computer Services
MGX	332	167	MGX Holdings Limited	Software & Computer Services
SNG	334	168	Synergy Holdings Limited	Software & Computer Services
BDEO	336	169	Bidvest Group Limited The	Support Services
CMA	338	170	Command Holdings Limited	Support Services
ITG	340	171	Integrear Limited	Support Services
OLG	342	172	Onelogix Group Limited	Support Services
ADR	344	173	Adcorp Holdings Limited	Support Services
QUY	346	174	Quyn Holdings Limited	Support Services
ILA	348	175	Iliad Africa Limited	Support Services
ITE	350	176	Italtile Limited	Support Services
WNH	352	177	Winhold Limited	Support Services
BRY	354	178	Bryant Technology Limited	Technology Hardware & Equipment
PNC	356	179	Pinnacle Technology Holdings Limited	Technology Hardware & Equipment
DTC	358	180	Datatec Limited	Technology Hardware & Equipment
JSC	360	181	Jasco Electronics Holdings Limited	Technology Hardware & Equipment
ADL	362	182	Admiral Leisure World Limited	Travel & Leisure
MRB	364	183	Moribo Leisure Limited	Travel & Leisure
CLH	366	184	City Lodge Hotels Limited	Travel & Leisure
KER	368	185	Kersaf Investments Limited	Travel & Leisure
PAC	370	186	Pacific Holdings Limited	Travel & Leisure
GLL	372	187	Global Village Holdings Limited	Travel & Leisure
FBR	374	188	Famous Brands Limited	Travel & Leisure
SUR	376	189	Spur Corporation Limited	Travel & Leisure
PTC	378	190	Putco Limited	Travel & Leisure

APPENDIX D – FINAL 95 COMPANIES SELECTED

Alpha	Orig-Num	New-Num	2nd Num	Company	Year 1	Year 2	Year 3
TIW	3	2	1	Tiger Wheels Limited	2003	2004	2005
FSR	7	4	2	Firstrand Limited	Banks withdrawn		
SBK	11	6	3	Standard Bank Group Limited			
KWV	15	8	4	KWV Beleggings Beperk	2003	2004	2005
OMN	19	10	5	Omnia Holdings Limited	2003	2004	2005
CRM	23	12	6	Ceramic Industries Limited	2003	2004	2005
MAS	27	14	7	Masonite (Africa) Limited	2003	2004	2005
CMT	31	16	8	Cementation Company (Africa) Limited (Delisted)	2001	2002	2003
MUR	35	18	9	Murray & Roberts Holdings Limited	2003	2004	2005
BIC	39	20	10	Bicc Cafca Limited	2001	2002	Not available
SLL	43	22	11	Stella Vista Technologies Ltd	2002	2003	2004
STO	47	24	12	Setpoint Technology Holdings Limited	2003	2004	2005
AQL	51	26	13	Aquila Growth Limited	2002	2003	2004
EUR	55	28	14	Eureka Industrial Limited	2003	2004	2005
SVN	59	30	15	Sabvest Limited	2003	2004	2005
PIK	63	32	16	Pick n Pay Stores Limited	2003	2004	2005
ARL	67	34	17	Astral Foods Limited	2003	2004	2005
NMS	71	36	18	Namibian Sea Products Limited	2002	2003	2004
WBH	75	38	19	W B Holdings Limited	2003	2004	2005
ILV	79	40	20	Illovo Sugar Limited	2003	2004	2005
SAP	83	42	21	Sappi Limited	2003	2004	2005
MCU	87	44	22	M Cubed Holdings Limited	2003	2004	2005
CPI	91	46	23	Capitec Bank Holdings Limited	2003	2004	2005
CDZ	95	48	24	Cadiz Holdings Limited	2003	2004	2005
IDQ	99	50	25	Indequity Group Limited	2002	2003	2004
PGR	103	52	26	Peregrine Holdings Limited	2003	2004	2005
ERM	107	54	27	Enterprise Risk Management Limited	2003	2004	2005
MMG	111	56	28	Micromega Holdings Limited	2002	2003	2004
WLO	115	58	29	Wooltru Limited	2003	2004	2005
BCF	119	60	30	Bowler Metcalf Limited	Not available	2004	2005
ART	123	62	31	Argent Industrial Limited	2003	2004	2005
SKJ	127	64	32	Sekunjalo Investments Limited	2002	2003	2004
ECO	131	66	33	Edgars Consolidated Stores Limited	2003	2004	2005
MPC	135	68	34	Mr Price Group Limited	2003	2004	2005
TRU	139	70	35	Truworths International Limited	2003	2004	2005
NCL	143	72	36	New Clicks Holdings Limited	2003	2004	2005
WHL	147	74	37	Woolworths Holdings Limited	2003	2004	2005
CDT	151	76	38	Creditvision Holdings Limited	2003	2004	2005
VLT	155	78	39	Vaalauto Limited	2002	2003	2004
NTC	159	80	40	Network Healthcare Holdings Limited	2003	2004	2005
BEL	163	82	41	Bell Equipment Limited	2003	2004	2005
HDC	167	84	42	Hudaco Industries Limited	2003	2004	2005
NEI	171	86	43	Northern Engineering Industries Africa Limited	Liquidated 2002		
ISC	175	88	44	Iscor Limited	2002	2003	2004
SUM	179	90	45	Spectrum Shipping Limited	2002	2003	2004
VLE	183	92	46	Value Group Limited	2003	2004	2005
NWL	187	94	47	Nu-World Holdings Limited	2003	2004	2005
LBH	191	96	48	Liberty Holdings Limited	2002	2003	2004
SGG	195	98	49	Sage Group Limited	2002	2003	2004
NPN	199	100	50	Naspers Limited	2003	2004	2005
CAT	203	102	51	Caxton and CTP Publishers and Printers Limited	2003	2004	2005
MNY	207	104	52	Moneyweb Holdings Limited	2003	2004	2005
DMR	211	106	53	Diamond Core Resources Limited	2003	2004	2005
ZNT	215	108	54	Zenith Concessions Limited	2002	2003	2004
ASG	218	110	55	Assmang Limited	2003	2004	2005
KMB	222	112	56	Kumba Resources Limited	2003	2004	2005
SAL	226	114	57	Sallies Limited	2003	2004	2005
AFL	230	116	58	Afrikander Lease Limited, The	2002	2003	2004
GFI	234	118	59	Gold Fields Limited	2003	2004	2005
SBN	238	120	60	Sub Nigel Gold Mining Company Limited	2002	2003	2004
AMS	242	122	61	Anglo American Platinum Corporation Limited	2003	2004	2005
MES	246	124	62	Messina Limited	2002	2003	2004
AFB	250	126	63	Alexander Forbes Limited	2003	2004	2005
SNT	254	128	64	Santam Limited	2003	2004	2005
BSB	258	130	65	House of Busby Limited, The	2003	2004	2005
RCH	262	132	66	Richemont Securities AG	2003	2004	2005
APN	266	134	67	Aspen Pharmacare Holdings Limited	2003	2004	2005
ABT	270	136	68	Ambit Properties Limited	Prospectus	2004	2005
APB	274	138	69	ApexHi Properties Limited	2003	2004	2005

Appendix D – Final 95 companies selected

Alpha	Orig-Num	New-Num	2nd Num	Company	Year 1	Year 2	Year 3
FVT	278	140	70	Fairvest Property Holdings Limited	2002	2003	2004
JGS	282	142	71	Jigsaw Holdings Limited (Delisted)	2001	2002	2003
MRN	286	144	72	Marshalls Limited	2002	2003	2004
PMM	290	146	73	Premium Properties Limited	2003	2004	2005
RES	294	148	74	Resilient Property Income Fund Limited	2003	2004	2005
SRL	298	150	75	SA Retail Properties Limited	2003	2004	2005
PRM	302	152	76	Prima Property Trust	2003	2004	2005
AAA	306	154	77	AST Group Limited	2003	2004	2005
CSH	310	156	78	CS Computer Services Holdings Limited	2001	2002	2003
ECH	314	158	79	EC-Hold Limited	2002	2003	Not available
FRT	318	160	80	Faritec Holdings Limited	2003	2004	2005
PCN	322	162	81	Paracon Holdings Limited	2003	2004	2005
YHK	326	164	82	Y3K Group Limited	2003	2004	2005
IDI	330	166	83	Idion Technology Holdings Limited	2003	2004	2005
SNG	334	168	84	Synergy Holdings Limited	2003	2004	2005
CMA	338	170	85	Command Holdings Limited	2003	2004	2005
OLG	342	172	86	Onelogix Group Limited	2003	2004	2005
QUY	346	174	87	Quyn Holdings Limited	2003	2004	2005
ITE	350	176	88	Italtile Limited	2003	2004	2005
BRY	354	178	89	Bryant Technology Limited	2002	2003	2004
DTC	358	180	90	Datatec Limited	2003	2004	2005
ADL	362	182	91	Admiral Leisure World Limited (Delisted)	2002	2003	2004
CLH	366	184	92	City Lodge Hotels Limited	2003	2004	2005
PAC	370	186	93	Pacific Holdings Limited	2002	2003	2004
FBR	374	188	94	Famous Brands Limited	2003	2004	2005
PTC	378	190	95	Putco Limited (Delisted)	2002	2003	2004

APPENDIX E – ANALYSIS OF JSE LISTED COMPANIES

Analysis for a 3 year period – Classification practices in JSE Listed Companies										
BALANCE SHEET										
Company Name	Tiger Wheels Limited (Automobiles and parts)	KWV Limited (Beverages)	Omnia Hldgs Limited (Chemicals)	Tiger Wheels Limited (Automobiles and parts)	KWV Limited (Beverages)	Omnia Hldgs Limited (Chemicals)	Tiger Wheels Limited (Automobiles and parts)	KWV Limited (Beverages)	Omnia Hldgs Limited (Chemicals)
Year	2003			2004			2005		
ASSETS									
NON-CURRENT ASSETS	1	1	1	1	1	1	1	1	1
Property, Plant & Equipment	2	2	2	2	2	2	2	2	2
Trademarks				3					
Goodw ill	3			4			3		
Intangible assets			3			3		3	3
Investment in Associates	4	3	4		3	4		4	4
Other Investments				5			4		
Investments and loans			5						
Deferred Taxation	5	5		7	5			6	
Deferred Tax Assets							7		
Financial Assets	6			6			5		
Other financial assets		4			4			5	
Investment Tax Credit							6		
CURRENT ASSETS	7	6	6	8	6	5	8	7	5
Inventories	8	7	7	9	7	6	9	8	6
Trade and other Receivables	9		8	10		7	10		7
Receivables		8			8			9	
Non-current Assets held for Sale							11		
Taxation				11					
Taxation receivable		9			9			10	
Taxation Refundable							12		
Financial instruments								11	
Forw ard exchange contracts		10			10				
Short-term portion of long-term investments					11			12	
Cash and cash equivalents		11			12			13	
Bank and Cash Balances	10		9	12		8	13		8
EQUITY AND LIABILITIES									
CAPITAL AND RESERVES	11	12	10	13	13	9	14	14	9
Share Capital and Premium	12								
Stated capital			11			10			10
Share Capital		13		14	14		15	15	
Share Premium		14		15	15		16	16	
Share Option Reserve							17		
Non-distributable Reserves	13		12	16			18		
Reserves		15			16			17	
Fair value and other reserves						11			11
Retained earnings			13			12			12
Accumulated Profit	14			17			19		
Ordinary shareholders' interest		16			17			18	
Ordinary shareholders' equity			14			13			13
MINORITY INTEREST	15	17	15	18	18	14	20	19	14
INTEREST BEARING DEBT	16								
NON-CURRENT LIABILITIES		18	16	19	19	15	21	20	15
Long Term Debt	17			20					
Interest Bearing Liabilities							22		
Interest Bearing Borrow ings			18			17			17
Long-term borrow ings		19			20			21	
Current portion of Long Term Debt	18								
Short-term borrow ings	19								
Financial Liabilities				21			23		
Operating Lease Liabilities							24		
South African Wine Industry Trust		20			21			22	
Long-term provisions		21			22			23	
Deferred Income							25		
Deferred Taxation		22	17	22	23	16		24	16
Deferred Tax liabilties							26		
INTEREST FREE LIABILITIES	20								
CURRENT LIABILITIES		23	19	23	24	18	27	25	18
Trade and other payables	21	25	20	24	27	19	28	28	19
Provisions			21	25		20	29		20
Short-term portion of long-term borrow ings					25			26	
Current portion of interest-bearing borrow ings			22			21			21
Interest Bearing Liabilities				26			30		
Short-term borrow ings		24		27	26		31	27	
Dividends payable					28				
Short-term provisions		26			29				
Forw ard exchange contracts		27			30				
Financial instruments								29	
Current Taxation	22			28					
Taxation			23			22			22
Taxation Payable		28			31		32	30	
Bank borrow ings			24			23			23

Analysis for a 3 year period – Classification practices in JSE Listed Companies													
BALANCE SHEET													
CONSTRUCTION AND MATERIALS													
Company Name		Cementation Company (Africa) Limited	Cementation Company (Africa) Limited	Ceramic Industries Limited	Masonite (Africa) Limited	Cementation Company (Africa) Limited	Murray & Roberts Holdings Limited	Ceramic Industries Limited	Masonite (Africa) Limited	Murray & Roberts Holdings Limited	Ceramic Industries Limited	Masonite (Africa) Limited	Murray & Roberts Holdings Limited
Year		2001	2002	2003				2004			2005		
ASSETS	NON-CURRENT ASSETS	1	1	1	1	1	1	1	1	1	1	1	1
	Property, plant and equipment	2	2	2	2	2	2	2	2	2	2	2	2
	Discontinued headlease investment properties									3			
	Investment property												3
	Goodw ill						3			4			4
	Intangible asset			3				3			3	3	
	Share incentive trust loan			4									
	Unlisted investments	3	3			3							
	Deferred taxation asset			5				4			4	5	8
	Deferred tax	4								5			
	Payments in advance			6				5			5		
	Biological assets				3				3			4	
	Investments				4				4			6	
	Investment in associate company						4			6			5
	Other investments						5			7			6
	Deferred operating lease income accrual												7
	Loans receivable				5				5			7	
	CURRENT ASSETS	5	4	7	6	4	6	6	6	8	6	8	9
	Inventories	6	5	8	7	5	7	7	7	9	7	9	10
	Contracts in progress and contract receivables						8			10			11
	Trade and other receivables	7	6	9		6		8			8	10	12
	Trade receivables				8				8				
	Accounts receivable						9			11			
	Other receivables				9				9				
	Deferred operating lease income accrual												13
	Derivative financial instruments												14
	Amounts due from group companies				10				10				
	Amounts due from fellow subsidiaries											11	
	Tax prepaid					7							
	Cash and cash equivalents	8		10	11			9	11		9	12	
	Deposits and cash		7			8							
	Bank balances and cash						10			12			15

Appendix E – Analysis of JSE listed companies

Analysis for a 3 year period – Classification practices in JSE Listed Companies													
BALANCE SHEET													
CONSTRUCTION AND MATERIALS													
Company Name	Cementation Company (Africa) Limited	Cementation Company (Africa) Limited	Ceramic Industries Limited	Masonite (Africa) Limited	Cementation Company (Africa) Limited	Murray & Roberts Holdings Limited	Ceramic Industries Limited	Masonite (Africa) Limited	Murray & Roberts Holdings Limited	Ceramic Industries Limited	Masonite (Africa) Limited	Murray & Roberts Holdings Limited
Year	2001	2002	2003				2004			2005		
EQUITY AND LIABILITIES												
SHAREHOLDERS ' EQUITY			11				10			10		
CAPITAL AND RESERVES	9	8		12	9	11		12	13		13	16
Share capital			12	13			11	13		11	14	
Shares held by share trust							12			12		
Ordinary share capital and premium	10	9			10							
Share capital and premium						12			14			17
Cumulative preference share capital and premium	11	10			11							
Share premium				14				14			15	
Reserves			13				13			13		
Non-distributable reserves	12	11		15	12	13		15	15		16	18
Retained earnings			14				14			14	17	
Accumulated profits/(Losses)	13	12		16	13	14		16	16			19
Minority shareholders' interest			15			15	15		17	15		20
NON-CURRENT LIABILITIES	14	13	16	17	14	16	16	17	18	16	18	21
Shareholders' loans							17			17		
Long-term loans						17			19			22
Obligations under finance headleases												23
Discontinued finance headlease liabilities									20			
Long-term provision						18			21			24
Deferred operating lease cost accrual												25
Interest bearing borrow ings	15	14			15							
Deferred taxation liability			17				18			18	19	26
Deferred taxation	16	15		18	16	19		18	22			
Borrow ings			18				19			19		
Deferred investment allow ances				19				19				
Retirement benefit obligation				20				20			20	
Straight lining lease accrual											21	
CURRENT LIABILITIES	17	16	19	21	17	20	20	21	23	20	22	27
Trade and other payables	18	17	20	22	18		21	22		21	23	28
Accounts payable and provisions						21						
Accounts payable									24			
Deferred operating lease cost accrual												29
Derivative financial instruments												30
Sub-contractors						22			25			
Subcontractor liabilities												31
Provisions	19	18		23	19			23			24	
Short-term borrow ings	20	19			20							
Taxation payable	21	20	21		21		22			22		
Provisions for liabilities and charges			22				23			23		
Bank overdrafts				24				24			27	
Taxation				25		23		25	26			
Tax liabilities											28	
Current taxation liabilities												32
Bank overdrafts and short-term loans						24			27			33
Amounts due to group companies				26				26				
Amounts payable to holding company											25	
Amounts payable to fellow subsidiaries											26	
Straight lining lease accrual											29	
Shareholders for dividends	22	21	23		22		24			24		

Appendix E – Analysis of JSE listed companies

Analysis for a 3 year period – Classification practices in JSE Listed Companies										
BALANCE SHEET										
ELECTRONIC AND ELECTRICAL EQUIPMENT										
	Company Name	Bicc Cafca Limited	Bicc Cafca Limited	Stella Vista Technologies Ltd	Bicc Cafca Limited (Not available)	Stella Vista Technologies Ltd	Setpoint Technology Holdings Limited	Stella Vista Technologies Ltd	Setpoint Technology Holdings Limited	Setpoint Technology Holdings Limited
	Year	2001	2002		2003			2004		2005
ASSETS	NON-CURRENT ASSETS	1	1	1		1	1	1	1	1
	Property, plant and equipment	2	2	2		2	2	2	2	2
	Goodw ill						3		3	
	Goodw ill and intangibles									3
	Non-current receivables			3		3				
	Deferred taxation			4		4	4	3	4	4
	CURRENT ASSETS	3	3	5		5	5	4	5	5
	Stocks	4	4							
	Inventories			6		6	6	5	6	6
	Current portion of non-current receivables			7		7		6		
	Debtors	5	5							
	Receivables and prepayments			8		8		7		
	Trade and other receivables						7		7	
	Receivables									7
	Cash and deposits	6	6							
	Cash and cash equivalents			9		9	8	8	8	8
EQUITY AND LIABILITIES	EQUITY AND RESERVES						9		9	9
	CAPITAL AND RESERVES	7	7	10		10		9		
	Share capital	8	8	11		11	10	10	10	10
	Share premium	9	9	12		12	11	11	11	11
	Premium on minority equity transactions									12
	Deferred purchase consideration - shares						12			
	Revaluation and other reserves	10	10	13		13				
	Other reserves							12		
	Retained income						13		12	
	Retained earnings			14						13
	Revenue reserves	11	11							
	Accumulated losses					14		13		
	Minority interests						14		13	14
	NON-CURRENT LIABILITIES	12	12	15		15	15	14	14	15
	Deferred taxation liability	13	13							
	Contingent purchase consideration									16
	Interest bearing borrow ings			16		16		15		
	Interest bearing liabilities						16		15	17
	CURRENT LIABILITIES	14	14	17		17	17	16	16	18
	Interest bearing liabilities						18		17	19
	Creditors	15	15							
	Trade and other payables			18		18	19	17	18	
	Payables									20
	Current tax liabilities	16	16							
	Taxation payable						20		19	
	Current portion of interest-bearing borrow ings			19		19		18		
	Dividends	17	17							
	Short-term borrow ings	18	18							
	Other borrow ings			20		20		19		
	Provisions for liabilities and charges			21		21		20		
	Current taxation liabilities			22		22		21		
	Taxation liability									21

Appendix E – Analysis of JSE listed companies

Analysis for a 3 year period – Classification practices in JSE Listed Companies										
BALANCE SHEET										
EQUITY INVESTMENT INSTRUMENTS										
	Company Name	Aquila Growth Limited	Aquila Growth Limited	Eureka Industrial Limited	Sabvest Limited	Aquila Growth Limited	Eureka Industrial Limited	Sabvest Limited	Eureka Industrial Limited	Sabvest Limited
	Year	2002	2003			2004			2005	
ASSETS	NON-CURRENT ASSETS	13	1	1		1	1		1	1
	Equipment	14	2			2				
	Property, plant and equipment			2						2
	Tangible assets						2		2	
	Intangible assets	15	3			3				
	Deferred taxation	16	4			4				
	Deferred tax asset									3
	Share trust receivables									4
	Medium-term receivables									5
	Investment holdings - associates									6
	Investment holdings - long-term									7
	Investments			3			3		3	
	Investment in associates	17				5				
	Investment in associate company			4						
	Interest in associates		5							
	CURRENT ASSETS	18	6	5		6	4		4	8
	Cash at bank	19	7			7				
	Cash and cash equivalents			8			8		8	
	Cash balances									11
	Inventories	20	8	6			5		5	
	Receivables	21	9							
	Receivables and prepayments					8				
	Trade and other receivables			7			6		6	
	Finance advances and receivables									9
	Short-term investments									10
	Taxation prepaid						7		7	
	Fixed assets				6			6		
	Deferred taxation				7			7		
	Investments				8			8		
	Listed				9			9		
	Unlisted				10			10		
	Net goodw ill									
	Goodw ill				11			11		
	Finance and receivables									
	Finance advances and receivables				12			12		
	Share trust debtors							13		
	Cash balances				13			14		

Analysis for a 3 year period – Classification practices in JSE Listed Companies										
BALANCE SHEET										
EQUITY INVESTMENT INSTRUMENTS										
	Company Name	Aquila Growth Limited	Aquila Growth Limited	Eureka Industrial Limited	Sabvest Limited	Aquila Growth Limited	Eureka Industrial Limited	Sabvest Limited	Eureka Industrial Limited	Sabvest Limited
	Year	2002	2003			2004			2005	
EQUITY AND LIABILITIES	CAPITAL EMPLOYED	1								
	SHAREHOLDERS' EQUITY		10			9				
	CAPITAL AND RESERVES			9			9		9	
	ORDINARY SHAREHOLDERS' EQUITY				1			1		12
	Ordinary share capital			10			10		10	
	Share capital and premium	2	11			10				
	Ordinary share capital and premium				2			2		
	Distributable reserves	3								
	Revaluation and other reserves		12							
	Foreign currency translation reserve					11				
	Reserves				3			3		
	Non-distributable reserves			11			11		11	
	Retained earnings		13			12				
	Retained income	4		12			12		12	
	Preference share capital			13			13		13	
	Interest bearing debt				4			4		
	Accounts payable				5			5		
	Minority interests	5	14			13				
	NON-CURRENT LIABILITIES	6	15	14			14		14	13
	Preference shares	7	16							
	Interest-bearing borrowings			15			15		15	
	Deferred tax liability									14
	Deferred taxation			16			16		16	
	CURRENT LIABILITIES	8	17	17		14	17		17	15
	Trade and other payables	9	18	18		15	18		18	
	Accounts payable									17
	Interest-bearing borrowings			19			19		19	
	Interest-bearing debt									16
	Provisions	10	19	20		16	20			
	Shareholders for preference dividend	11	20							
	South African Revenue Service	12	21			17				
	Taxation			21			21		20	

Appendix E – Analysis of JSE listed companies

Analysis for a 3 year period – Classification practices in JSE Listed Companies										
BALANCE SHEET										
	Company Name	Pick n Pay Stores Limited (Food and drug retailers)	Sappi Limited (Forestry and paper)	Network Healthcare Holdings Limited (Health care equipment and services)	Pick n Pay Stores Limited (Food and drug retailers)	Sappi Limited (Forestry and paper)	Network Healthcare Holdings Limited (Health care equipment and services)	Pick n Pay Stores Limited (Food and drug retailers)	Sappi Limited (Forestry and paper)	Network Healthcare Holdings Limited (Health care equipment and services)
	Year	2003			2004			2005		
ASSETS	NON-CURRENT ASSETS	1	1	1	1	1	1	1	1	1
	Goodwill	2			2			2		
	Goodwill and intangible assets								5	
	Goodwill and development expenditure						3			3
	Intangible assets			3						
	Property	3			3					
	Equipment and vehicles	4	2	2	4	2	2		2	2
	Property, plant and equipment									
	Fixed assets							3		
	Plantations		3			3			3	
	Associated companies						4			
	Investment in subsidiary company									4
	Investments and loans			4			5			5
	Investments	5			5			4		
	Loans	6			6			5		
	Participation in export partnerships	7			7			6		
	Deferred tax(ation)	8	4	5	8		6	7		6
	Deferred taxation assets					4			4	
	Other non-current assets		5			5			6	
	Other financial assets		6	6		6			7	
	CURRENT ASSETS	9	7	7	9	7	7	8	8	7
	Stocks	10			10					
	Inventory		12	8		8	8	9	9	9
	Trade receivables	11								
	Trade and other receivables		9		11	9		10	10	
	Accounts receivable			9			9			10
	Cash resources	12			12					
	Cash and cash equivalents		8			12	10	11	13	11
	Investments and loans									8
	Other financial assets		10			10			11	
	Prepaid income taxes		11			11			12	
EQUITY AND LIABILITY	CAPITAL AND RESERVES	13		10	13		11	12		12
	SHAREHOLDERS' EQUITY		13			13			14	
	Ordinary share capital and share premium		14			14			15	
	Share capital and premium			11			12			13
	Share capital	14			14			13		
	Share premium	15			15			14		
	Unissued shares	16			16			15		
	Treasury shares	17			17		13	16		14
	Non-distributable reserves									
	Hedging reserves		15			15			16	
	Accumulated profits	18			18			17	17	
	Retained earnings								18	
	Distributable reserves		16			16				
	Revaluation reserve				19			18		
	Reserves			12			14			15
	Foreign currency translation reserve	19			20			19		
	Minority interest		17	13			15			16
	NET INTEREST-BEARING DEBT			14						
	Long-term			15						
	Short-term			16						
	Cash and cash equivalents			17						
	Other financial assets									
	NON-CURRENT LIABILITIES	20	18	18	21	17	16	20	19	17
	Interest-bearing debt	21			22		17	21		18
	Interest-bearing borrowings		19			18			20	
	Provisions	22								
	Retirement scheme obligations				23			22		
	Deferred lease liability									19
	Deferred tax	23	20	19	24	19	18	23		20
	Other non-current liabilities		21			20			21	
	Non-current provisions								22	
	CURRENT LIABILITIES	24	22	20	25	21	19	24	23	21
	Interest-bearing debt	15			26			25		
	Interest-bearing borrowings		23			22			24	
	Trade and other payables	26	25		27	24		26	26	
	Accounts payable			21			20			22
	Short-term interest-bearing debt						22			24
	Tax	27			28			27		
	Taxation payable		26	23		25	23		27	25
	Provisions		27	22		26	21		28	23
	Bank overdraft		24			23			25	
	Bank overdrafts									26

Analysis for a 3 year period – Classification practices in JSE Listed Companies													
BALANCE SHEET													
FOOD PRODUCERS													
Company Name		Namibian Sea Products Limited	Astral Foods Limited	Namibian Sea Products Limited	WB Holdings Limited	Illovo Sugar Limited	Astral Foods Limited	Namibian Sea Products Limited	WB Holdings Limited	Illovo Sugar Limited	Astral Foods Limited	WB Holdings Limited	Illovo Sugar Limited
Year		2002	2003				2004				2005		
ASSETS	NON-CURRENT ASSETS	1	1	1	1	1	1	1	1	1	1	1	1
	Property, plant and equipment		2		2	2	2		2	2	2	2	2
	Fixed assets	2		2				2					
	Cane roots									3			3
	Product registrations					3				4			4
	Goodwill					4				5	3		
	Intangible assets		3				3				4		
	Biological assets								3			3	
	Investments					5				6			
	Investments and loans												5
	Other investments	3	4	3				3					
	Available-for-sale investment				3				4			4	
	Loans						4				5		
	Other loans receivable											5	
	Deferred tax		5				5				6		
	Deferred tax asset	4		4				4		7			6
	CURRENT ASSETS	5	6	5	4	6	6	5	5	8	7	6	7
	Inventories	6	7	6	5	7	7	6		9	8		8
	Inventory and agricultural produce								6			7	
	Growing cane									10			9
	Biological assets						8				9		
	Receivables and prepayments		8				9				10		
	Receivables				6				7			8	
	Accounts receivable	7		7		8				11			10
	Trade and other receivables							7					
	Factory overhaul costs					9				12			11
	Financial instruments									13			12
	Cash and cash equivalents		9		7		10		8		11	9	
	Bank balances and cash	8		8				8					
	Cash resources					10				14			13

Appendix E – Analysis of JSE listed companies

Analysis for a 3 year period – Classification practices in JSE Listed Companies													
BALANCE SHEET													
FOOD PRODUCERS													
Company Name		Namibian Sea Products Limited	Astral Foods Limited	Namibian Sea Products Limited	W B Holdings Limited	Illovo Sugar Limited	Astral Foods Limited	Namibian Sea Products Limited	W B Holdings Limited	Illovo Sugar Limited	Astral Foods Limited	W B Holdings Limited	Illovo Sugar Limited
Year		2002	2003				2004				2005		
EQUITY AND LIABILITIES	CAPITAL AND RESERVES	9	10	9		11	11	9		15	12		14
	EQUITY AND RESERVES				8				9			10	
	Ordinary shares		11				12						
	Issued capital										13		
	Share capital	10		10	9			10	10			11	
	Ordinary share capital and premium					12				16			15
	Share premium		12				13						
	Reserves		13		10		14		11		14	12	
	Non-distributable reserves					13				17			16
	Accumulated (loss)/profit	11		11				11					
	Retained surplus					14				18			17
	Minority interest		14				15				15		
	Interest of outside shareholders of subsidiaries					15				19			18
	NON-CURRENT LIABILITIES	12	15	12	11	16	16	12	12	20	16	13	19
	Interest bearing borrowings		16		12		17		13			14	
	Long-term liabilities	14		14				14			17		
	Long-term borrowings					18				22			21
	Deferred tax liabilities	13	17	13			18	13					
	Deferred tax				13	17			14	21	18	15	20
	Retirement benefit obligations		18				19						
	Post-retirement medical aid obligations										19		
	CURRENT LIABILITIES	15	19	15	14	19	20	15	15	23	20	16	22
	Trade and other payables		20		15		21	16	16		21	17	
	Accounts payable	16		16		20				24			24
	Current tax liabilities		21				22						
	Provision for tax										22		
	Taxation					23				28			27
	Current portion of borrowings		22				23						
	Current portion of long term liabilities	17		17				17					
	Short-term borrowings					21				25	23		23
	Interest bearing borrowings				16				17			18	
	Provisions				17	24			18	29			28
	Bank overdraft	18		18		22		18		26			25
	Financial instruments									27			26
	Shareholders for dividend		23				24						

Appendix E – Analysis of JSE listed companies

Analysis for a 3 year period – Classification practices in JSE Listed Companies

BALANCE SHEET

GENERAL FINANCIALS

	Company Name	Indequity Group Limited	Micromega Holdings Limited	M Cubed Holdings Limited	Capitec Bank Holdings Limited	Cadiz Holdings Limited	Indequity Group Limited	Peregrine Holdings Limited	Enterprise Risk Management Ltd	Micromega Holdings Limited	Wooltru Limited	M Cubed Holdings Limited	Capitec Bank Holdings Limited	Cadiz Holdings Limited	Indequity Group Limited	Peregrine Holdings Limited	Enterprise Risk Management Ltd	Micromega Holdings Limited	Wooltru Limited	M Cubed Holdings Limited	Capitec Bank Holdings Limited	Cadiz Holdings Limited	Peregrine Holdings Limited	Enterprise Risk Management Ltd	Wooltru Limited
	Year	2002		2003								2004								2005					
ASSETS	NON-CURRENT ASSETS	1	1	1			1	1	1	1	1	1			1	1	1	1	1	1		1	1	1	1
	Property, plant and equipment		2	2				2	2	2	2	2				2		2		2			2		
	Plant and equipment																					2			
	Property and equipment	2					2								2										
	Investments			3								3					2			3				2	
	Intangible assets							3								3		3					3		
	Goodwill		2	4			3					4			3					4		3			
	Investment in associate		4					4		4						4		5		5			4		
	Financial investments							5								5							5		
	Long-term assurance fund investments							6								6							6		
	Loans and advances			5								5								6					
	Loans										3						3							4	
	Loans receivable							7		6						7		7							
	Loans and receivables		6																				7		
	Deferred taxation		3	6				8		3		6				8		4	2	7		4	8	3	2
	Shares in subsidiaries																					5			
	Financial assets																					6			
	Receivables and pre-payments																					7			
	Long-term investments		5							5								6							
	REINSURERES' SHARE OF TECHNICAL PROVISIONS	4																							
	Unearned premiums	5																							
	CURRENT ASSETS	6	7	7			4	9	3	7	4	7			4	9	4	8	3	8		8	9	5	3
	Financial assets																					9			
	Amounts due from subsidiaries																					10			
	Listed investments																								4
	Short-term investments									8															
	Receivables and pre-payments			8								8								9		11			
	Accounts receivable		10						4	9							5	10						6	
	Trade and other receivables							11			6					11			4				11		5
	Receivables	8					8								8										
	Trading securities							10								10							10		
	Trading investments		8																						
	Amounts receivable iro stock broking activities							12								12							12		
	Marketable securities	7																							
	Deferred taxation						5																		
	Deferred tax asset														5										
	Current tax asset						6								6										
	Taxation		11							11	7								5			12			6
	Inventory		9				7				5				7			9							
	Current portion of loans receivable									10								11							
	Bank and cash		12							12								12							
	Bank balances and cash equivalents										8								6						7
	Cash and cash equivalents	9		9			9	13	5			9			9	13	6			10		13	13	7	
	ASSETS				1	1							1	1							1				
	Cash and cash equivalents				2	8							2	8							2				
	Investments at fair value																				3				
	Loans and advances				3								3								4				
	Inventory												4								5				
	Other receivables				4								5								6				
	Group loans receivable				5																				
	Current tax asset												6												
	Fixed assets				6	2																			
	Equipment												7												
	Property and equipment																				7				
	Property, plant and equipment													2											
	Deferred tax				7	3							8	3							8				
	Goodwill					4								4											
	Investments in trading securities					5								5											
	Other assets																								
	Receivables and pre-payments					6								6											
	Taxation					7								7											

Appendix E – Analysis of JSE listed companies

Analysis for a 3 year period – Classification practices in JSE Listed Companies

BALANCE SHEET

GENERAL FINANCIALS

	Company Name	Indequity Group Limited	Micromega Holdings Limited	M Cubed Holdings Limited	Capitec Bank Holdings Limited	Cadiz Holdings Limited	Indequity Group Limited	Peregrine Holdings Limited	Enterprise Risk Management Ltd	Micromega Holdings Limited	Wooltru Limited	M Cubed Holdings Limited	Capitec Bank Holdings Limited	Cadiz Holdings Limited	Indequity Group Limited	Peregrine Holdings Limited	Enterprise Risk Management Ltd	Micromega Holdings Limited	Wooltru Limited	M Cubed Holdings Limited	Capitec Bank Holdings Limited	Cadiz Holdings Limited	Peregrine Holdings Limited	Enterprise Risk Management Ltd	Wooltru Limited
	Year	2002		2003								2004								2005					
EQUITY AND LIABILITIES	**LIABILITIES**				8	12							9	12							9				
	Deposits and current accounts				9																				
	Deposits												10												
	Deposits and unsecured loans																				10				
	Deposits held at fair value																				11				
	Compulsory convertible debentures																								
	Deferred taxation					13								13											
	Trade and other payables				10	14							11	14							12				
	Trading account liabilities																								
	Compulsory convertible debentures					15																			
	Taxation													15											
	Trading liabilities					16								16											
	Current tax liabilities				11																13				
	Provisions				12								12								14				
	CAPITAL AND RESERVES	10	13	10			10	14	6	13	9	10			10	14	7	13	7	11		14	14	8	8
	SHAREHOLDERS' FUNDS				13								13								15				
	EQUITY AND RESERVES					9								9											
	Ordinary shares			11																					
	Ordinary share capital										10								8						9
	Stated capital								7								8							9	
	Share capital	11	14				11	15		14		11			11	15		14		12			15		
	Share premium	12		12			12	16			11	12			12	16			9	13			16		10
	Share capital and premium				14								14												
	Ordinary share capital and premium					10								10								15			
	Share capital and group shares																				16				
	Revaluation and other reserves			13																					
	Non-distributable reserves	13	15				13	19			12	13			13	19			10				19		11
	Distributable reserves								8								9								
	Reserves					11							15	11							17				
	Foreign currency translation reserve																			14					
	Accumulated (loss)/profit	14	16	14			14	17		15	13	14			14	18		15	11	15			18		12
	Retained earnings/(Accumulated loss)				15								16								18	18		10	
	Treasury shares							18								17						16	17		
	Share-based payment reserve																					17			
	Obligation to issue shares																						20		
	Amounts due to vendors							20																	
	Preference shareholders' interest	15					15								15										
	Preference share capital			15							14	15								16					
	Minority interest							21								20		16					21		
	Minority shareholders' interest	16					16								16										
	NON-CURRENT LIABILITIES	17	17	16			17	22		16		16			17	21		17	12	17		19	22		13
	Provision for policyholder liabilities			17																					
	Policyholder liabilities											17								18					
	Insurance contracts											18								19					
	Investment contracts											19								20					
	Deferred capital gains tax investment contracts											20								21					
	Interest-bearing borrowings	18					18								18								23		
	Borrowings		18							17								18							
	Negative goodwill	19					19																		
	Long-term assurance fund							23								22							24		
	Preference share capital																		13						14
	Deferred tax(ation)	20						24								23						20	25		
	Trade and other payables																					21			
	Deferred capital gains tax on policyholder liabilities			18																					
	TECHNICAL INSURANCE PROVISIONS	21					20								19										
	Net outstanding claims	22					21								20										
	Net provision for unearned premiums						22								21										
	CURRENT LIABILITIES	23	19	19			23	25	9	18	15	21			22	24	10	19	14	22		22	26	11	15
	Loans payable		20																						
	Trade and other payables			20				26			16	22				25			15	23		23	27		16
	Trade payables	24					24								23										
	Accounts payables		22						10	19							11	21						12	
	Share incentive scheme trust										17														
	Shareholders for dividend								11								13								
	Shareholders' for unclaimed dividends																							13	
	Amounts payable iro stock broking activities							27								26							28		
	Amounts due to subsidiaries																					24			
	Interest-bearing borrowings							28																	
	Current portion of interest bearing borrowings		23							20								22					29		
	Income received in advance		24																						
	Provisions	25	25				25			21					24			23							17
	Bank overdraft						26																		
	Trading liabilities																					26			
	Taxation		21					29			18					27	12	20				25			
	Taxation payable																						30		
	Current tax liabilities	26		21								23								24					

Analysis for a 3 year period – Classification practices in JSE Listed Companies										
BALANCE SHEET										
GENERAL INDUSTRIALS										
	Company Name	Bowler Metcalf Limited (2003 not avail)	Sekunjalo Investments Limited	Argent Industrial Limited	Sekunjalo Investments Limited	Bowler Metcalf Limited (2003 not avail)	Argent Industrial Limited	Sekunjalo Investments Limited	Bowler Metcalf Limited (2003 not avail)	Argent Industrial Limited
	Year	2002		2003		2004			2005	
ASSETS	NON-CURRENT ASSETS	1	1	1	1	1	1	1	1	1
	Property, plant and equipment	2	3	2	3	2	2	2	2	2
	Investment property		2		2		3			
	Biological assets				4			3		
	Software development costs							4		
	Deferred expenditure		4		5					
	Goodwill		5		6			5		
	Intangible assets		6		7	3		6	3	
	Intangibles			3			4			3
	Pharmaceutical dossiers		7		8			7		
	Investments	3	8		9					
	Other investments							8		
	Investment in associate	4						9		
	Employee share incentive scheme			4						
	Deferred taxation		9							
	Loans receivable		10		10			10		
	CURRENT ASSETS	5	11	5	11	4	5	11	4	4
	Inventories	6	12	6	12	5	6	12	5	5
	Trade and other receivables	7	13	7	13	6	7	13	6	6
	Forward exchange contract asset							14		
	Receiver of Revenue							15		
	Cash and cash equivalents	8	14	8		7		16	7	
	Bank balance and cash						8			7
	Cash on hand and at bank				14					

Appendix E – Analysis of JSE listed companies

Analysis for a 3 year period – Classification practices in JSE Listed Companies										
BALANCE SHEET										
GENERAL INDUSTRIALS										
Company Name	Bowler Metcalf Limited (2003 not avail)	Sekunjalo Investments Limited	Argent Industrial Limited	Sekunjalo Investments Limited	Bowler Metcalf Limited (2003 not avail)	Argent Industrial Limited	Sekunjalo Investments Limited	Bowler Metcalf Limited (2003 not avail)	Argent Industrial Limited	
Year	2002		2003		2004			2005		
EQUITY AND LIABILITIES										
CAPITAL AND RESERVES	9	15	9	15	8	9	17	8	8	
Stated capital	10				9			9		
Share capital and premium			10			10			9	
Share capital		16		16			18			
Share premium		17		17			19			
Reserves			11			11			10	
Capital redemption reserve fund				18			20			
Non-distributable reserves		18		19			21			
Hedging reserve							22			
Accumulated profits/(Loss)	11	19	12	20	10		23	10		
Retained earnings						12			11	
Outside shareholders' interest		20		21			24			
Minority interest	12		13		11			11		
NON-CURRENT LIABILITIES	13	21	14	22	12	13	25	12	12	
Borrowings - interest bearing		22	15	23	13	14	26	13	13	
Non-interest-bearing borrowings		23		24			27			
Borrowings - other					14			14		
Provisions										
Deferred taxation	14		16	25	15	15	28	15	14	
Post-employment medical costs				26			29			
CURRENT LIABILITIES	15	24	17	27	16	16	30	16	15	
Trade and other payables	17	25	18	28	17	17	31	17	16	
Shareholders for dividends		26								
Provisions	18			29	18		32	18		
Current portion of long-term borrowings		27		30			33			
Bank overdrafts		28		31	19		34	19		
Short-term borrowings					20			20		
Taxation	19	29	19	32	21	18		21	17	
Receiver of Revenue							35			
Current portion of interest-bearing borrowings			20			19			18	

Analysis for a 3 year period – Classification practices in JSE Listed Companies

BALANCE SHEET

GENERAL RETAILERS

	Company Name	Vaalauto Limited	Creditvision Holdings Limited	Edgars Consolidated Stores Limited	Mr Price Group Limited	Truworths International Limited	New Clicks Holdings Limited	Woolworths Holdings Limited	Vaalauto Limited	Creditvision Holdings Limited	Edgars Consolidated Stores Limited	Mr Price Group Limited	Truworths International Limited	New Clicks Holdings Limited	Woolworths Holdings Limited	Vaalauto Limited	Creditvision Holdings Limited	Edgars Consolidated Stores Limited	Mr Price Group Limited	Truworths International Limited	New Clicks Holdings Limited	Woolworths Holdings Limited
	Year	2002	2003							2004							2005					
ASSETS	NON-CURRENT ASSETS	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	Property, fixtures, equipment and vehicles			2							2							2				
	Property, plant and equipment	2	2		2		2	2	2	2		2		2	2	2	2		2		2	2
	Property, fixtures, vehicles, plant, equipment and software					2							2							2		
	Goodwill and trademarks			3							3							3				
	Trademarks						3							3							3	
	Goodwill						4	6					3	4						3	4	
	Intangible assets		6							6												
	Intangibles				3							3							3			
	Investments			4	4	3		3			4	4	4		3			4		4		3
	Investments and loans	3							3													
	Investments in associate companies															6						
	Loans			5		4	6						5	6						5	6	
	Loans to customers							4							4							4
	Loan receivable		4							4							3					
	Loans to joint venture		8							7												
	Other loans							7							6							6
	Long-term receivables				5							5							4			
	Long-term trade receivables		3							3												
	Deferred taxation assets				6		5					6		5					5		5	
	Deferred tax(ation)		5					8		5					7	5				6		7
	Investment in subsidiary		7																			
	Participation in export partnerships							5							5							5
	Amounts owing by group companies	4							4													
	Amount owing by holding company															4						
	CURRENT ASSETS	5	9	6	7	5	6	9	5	8	5	7	6	7	8	6	4	5	6	7	7	8
	Inventories	6	11	7	8	6	7	10	6	10	6	8	7	8	9	7		6	7	8	8	9
	Accounts receivable and prepayments			8							7							7				
	Accounts receivable				9		8	13						9	12						9	12
	Trade and other receivables	7	10			7			7	9		9	8			8	5		8	9		
	Prepayments					8							9							10		
	Woolworths card debtors							11							10							10
	Credit card receivables							12							11							11
	Loans to customers							14							13							13
	Loans receivable																6					
	Taxation prepaid						9							10							10	
	Tax							15							14							14
	Amount owing by joint venture				10							10										
	Cash and cash equivalents	8	12	9		9			8	11	8	11	10			9	7	8	9	11		
	Bank balances and cash				11																	
	Cash on hand						10							11							11	
	Cash							16							15							15
	Derivatives																				12	

Appendix E – Analysis of JSE listed companies

Analysis for a 3 year period – Classification practices in JSE Listed Companies

BALANCE SHEET

GENERAL RETAILERS

	Company Name	Vaalauto Limited	Creditvision Holdings Limited	Edgars Consolidated Stores Limited	Mr Price Group Limited	Truworths International Limited	New Clicks Holdings Limited	Woolworths Holdings Limited	Vaalauto Limited	Creditvision Holdings Limited	Edgars Consolidated Stores Limited	Mr Price Group Limited	Truworths International Limited	New Clicks Holdings Limited	Woolworths Holdings Limited	Vaalauto Limited	Creditvision Holdings Limited	Edgars Consolidated Stores Limited	Mr Price Group Limited	Truworths International Limited	New Clicks Holdings Limited	Woolworths Holdings Limited
	Year	2002	2003							2004							2005					
EQUITY AND LIABILITIES	CAPITAL AND RESERVES	9	13	10	12	10	11	17	9	12	9	12		12	16	10	8	9	10		13	16
	TOTAL SHAREHOLDERS' EQUITY												11							12		
	Share capital and premium			11							10							10				
	Issued capital	10	14		13				10	13						11	9					
	Share capital					11							12							13		
	Net shareholders' equity											13							11			
	Ordinary share capital						12	18						13	17						14	17
	Share premium					12	13	19					13	14	18					14	15	18
	Preference share capital			14							13											
	Minority interests	13		15					13				16			14				17		
	Treasury shares												15	15						16	16	19
	Retained income/(Accumulated loss)		15		14					14		15					10		12			
	Retained surplus			13							12							12				
	Retained profit					13																
	Accumulated profits	11							11							12						
	Retained earnings												14							15		
	Capital redemption reserve fund				15							14							13			
	Non-distributable reserves			12			14	20			11			16	19			11			17	20
	Distributable reserves						15	21						17	20						18	21
	Reserves	12							12							13						
	Outside shareholders' interest							22							21							22
	Shares repurchased					14																
	INTEREST BEARING DEBT			16							14							13				
	Long and medium term			17							15											
	Short term			18							16							14				
	NON-CURRENT LIABILITIES	14	16		16	15	16	23	14	15		16	17	18	22	15	11		14	18	19	23
	Long-term liabilities				17		17					17										
	Interest bearing borrow ings	15	17						15	16						16	12					24
	Non-interest bearing liabilities																					25
	Non-interest bearing borrow ings		18							17							13					
	Loans payable													19							20	
	Associates' benefits																		15			
	Deferred taxation liabilities				18		18					18		20					16		21	
	Deferred taxation					16		25					18		24					19		27
	Other non-current liabilities																				22	
	Retirement benefit obligation					17							19									
	Post-retirement medical benefit obligation																			20		
	Post-retirement medical aid liability							24							23							26
	Operating lease obligation																		21			
	INTEREST FREE LIABILITIES			19							17							15				
	Deferred taxation			20							18							16				
	Current taxation			21							19							17				
	Accounts payable			22							20							18				
	CURRENT LIABILITIES	16	19		19	18	19	26	16	18		19	20	21	25	16	14		17	22	23	28
	Trade and other payables	17	20		20	19		27	17	19		20	21		26		15		18	23		29
	Trade creditors and accruals															18						
	Accounts payable						21														25	
	Accounts payable and accruals													23								
	Provisions		21		21	20		28		20		21			27	17			19			30
	Short-term provisions												22							24		
	Short-term borrow ings						20					22		22							24	
	Short-term loans																		20			
	Loans payable													24							26	
	Taxation	19			22	21			19			23				22			21			
	Current tax payable												23							25		
	Taxation payable						22							25							27	
	Receiver of revenue									21							16					
	Tax							29							28							31
	Overdrafts and short-term interest bearing borrow ings							30							29							32
	Bank overdraft	18	22						18							19	18					
	Floor plan borrow ings															20						
	Short -term portion of long-term liabilities																17					
	Current portion of borrow ings															21						

Appendix E – Analysis of JSE listed companies

Analysis for a 3 year period – Classification practices in JSE Listed Companies									
BALANCE SHEET									
INDUSTRIAL ENGINEERING									
	Company Name	Northern Engineering Industries Africa Limited Liquidated in 2002	Bell Equipment Limited	Hudaco Industries Limited	Bell Equipment Limited	Hudaco Industries Limited	Bell Equipment Limited	Hudaco Industries Limited
	Year		2003		2004		2005	
ASSETS	NON-CURRENT ASSETS		1	1	1	1	1	1
	Property, plant and equipment		2	2	2	2	2	2
	Goodw ill			3		3		3
	Investment		3		3		3	
	Long-term receivables		4		4		4	
	Deferred taxation		5	4	5	4	5	4
	CURRENT ASSETS		6	5	6	5	6	5
	Inventories		7	6	7	6	7	6
	Trade and other receivables		8		8		8	
	Accounts receivable			7		7		7
	Current portion of long-term receivables		9		9		9	
	Prepayments		10		10		10	
	Taxation		11		11		11	
	Cash resources		12		12		12	
	Bank deposits and balances			8		8		8
EQUITY AND LIABILITIES	CAPITAL AND RESERVES		13		13		12	
	EQUITY			9		9		9
	Stated capital		14		14		13	
	Shareholders' equity			10		10		10
	Non-distributable reserves		15		15		14	
	Retained earnings		16		16		15	
	Outside shareholders' interest			11		11		
	Minority interest							11
	NON-CURRENT LIABILITIES		17	12	17	12	16	12
	Long-term borrow ings		18					
	Long-term w arranty provision		19					
	Interest bearing debt			13	18	13	17	13
	Non-interest-bearing				19			
	Repurchase obligations and deferred leasing income						18	
	Lease escalation						19	
	Provisions				20			
	Amounts due to vendors							
	Amounts due to vendors of business acquired			14		14		14
	Deferred taxation			15				
	CURRENT LIABILITIES		20	16	21	15	20	15
	Trade and other payables		21		22		21	
	Accounts payable			17		16		16
	Current portion of long-term borrow ings		22					
	Current portion of interest-bearing liabilities				23		21	
	Current portion of non-interest-bearing liabilities				24			
	Current portion of repurchase obligations and deferred leasing income						22	
	Current portion of lease escalation						23	
	Current portion of w arranty provision		23		25		24	
	Warranty provision							
	Amounts due to vendors of business acquired							17
	Taxation		24	18		17	25	18
	Short-term interest bearing debt		25		26		26	

Appendix E – Analysis of JSE listed companies

Analysis for a 3 year period – Classification practices in JSE Listed Companies

BALANCE SHEET

	Company Name	Iscor Limited (Industrial metals)	Iscor Limited (Industrial metals)	Nu-World Holdings Limited (Leisure goods)	Aspen Pharmacare Holdings Limited (Pharmaceuticals and biotechnology)	Iscor Limited (Industrial metals)	Nu-World Holdings Limited (Leisure goods)	Aspen Pharmacare Holdings Limited (Pharmaceuticals and biotechnology)	Nu-World Holdings Limited (Leisure goods)	Aspen Pharmacare Holdings Limited (Pharmaceuticals and biotechnology)
	Year	2002	2003			2004			2005	
ASSETS	NON-CURRENT ASSETS	1	1	1	1	1	1	1	1	1
	Property, plant and equipment	2	2	2	2	2	2	2	2	2
	Investment property							3		3
	Intangible assets	3	3	3	4	3	3	5	3	5
	Goodw ill		4		3	4		4		4
	Investments in associates and joint ventures	4								
	Investment in associate company									
	Investment in joint ventures		5							
	Investment in joint ventures - unlisted					5				
	Preference share investment									6
	Available-for-sale investments									7
	Financial assets	5	6		5					
	Other financial assets					6				
	Non-current receivables							6		
	Deferred taxation assets				6			7		8
	Derivative instrument against interest-bearing borrow ings	6								
	CURRENT ASSETS	7	7	4	7	7	4	8	4	9
	Inventories	8	8	5	8	9	5	9	5	10
	Trade and other receivables	9	9	6	9	10	6		6	
	Receivables and prepayments									
	Cash and cash resources			7			7	10	7	11
	Cash and cash equivalents	10	10		10	8		11		13
	Current taxation asset									12
	Taxation prepaid								8	
EQUITY AND LIABILITIES	CAPITAL AND RESERVES	11	11	8	11	11	8		9	
	SHAREHOLDERS' EQUITY							12		14
	Shareholders' equity	12								
	Ordinary shareholders' equity					12				
	Issued capital			9			9		10	
	Stated capital		12							
	Share capital and share premium				12			13		15
	Non-distributable reserves		13		13			15		17
	Accumulated profit/(loss)			10			11			
	Retained income		14		14			16		18
	Treasury shares				15			14		16
	Foreign currency translation reserve			11			10		11	
	Outside shareholders' interest			12			12		12	
	Minority interest	13	15		16	13				
	NON-CURRENT LIABILITIES	14	16	13	17	14	13	18	13	19
	Preference shares - liability component									20
	Interest-bearing borrow ings	15	17		18	15		19		21
	Interest-bearing deferred payables				19			20		22
	Non-current provisions	16	18			16				
	Provision for post-retirement medical costs					17				
	Deferred taxation	17	19	14		18	14		14	
	Deferred taxation liabilities				20			21		23
	Retirement benefit obligation				21			22		24
	CURRENT LIABILITIES	18	20	15	22	19	15	23	15	25
	Trade and other payables	19	21	16	23	20	16	24	16	26
	Shareholders for dividend			17						
	Interest-bearings borrow ings	20	22		24	21		25		27
	Interest-bearing deferred payables				25			26		28
	Taxation	21	23	18	26	22	17		17	
	Current taxation liabilities							27		29
	Provisions				27					
	Current provisions	22	24			23				
	Shareholders for dividends					24				

Appendix E – Analysis of JSE listed companies

Analysis for a 3 year period – Classification practices in JSE Listed Companies								
BALANCE SHEET								
INDUSTRIAL TRANSPORTATION								
	Company Name	Spectrum Shipping Limited	Spectrum Shipping Limited	Value Group Limited	Spectrum Shipping Limited	Value Group Limited	Value Group Limited
	Year	2002	2003		2004		2005
ASSETS	NON-CURRENT ASSETS	1	1	1	1	1	1
	Property, plant and equipment	2	2				
	Plant and equipment				2		
	Property, vehicles, plant and equipment			2		2	2
	Intangible assets	3	3		3		
	Investments				4		
	Investments and loans			3		3	3
	Deferred taxation	4	4	4	5	4	4
	CURRENT ASSETS	5	5	5	6	5	5
	Inventories			6		6	6
	Trade and other receivables	6	6	7	7	7	7
	Non-interest-bearing loans	7					
	Taxation in advance			8			
	Cash and cash equivalents	8	7	9	8	8	8
EQUITY AND LIABILITIES	CAPITAL AND RESERVES	9	8	10	9	9	9
	Issued capital	10	3		10		
	Ordinary share capital			11		10	10
	Share premium			12		11	11
	Accumulated profit/(loss)	11	10	13	11	12	12
	Treasury shares					13	13
	NON-CURRENT LIABILITIES	12	11	14		14	14
	Interest-bearing borrowing	13	12	15		15	15
	Deferred tax			16		16	16
	CURRENT LIABILITIES	14	13	17	12	17	17
	Loan payable	15					
	Trade and other payables	16	14	18	13	18	18
	Current portion of borrowings	17	15		14		
	Current portion of interest- borrowings			19		19	19
	Taxation					20	20
	Bank overdraft	18	16	20	15		
	Provisions	19	17		16		
	Shareholders for dividend					21	21

Appendix E – Analysis of JSE listed companies

Analysis for a 3 year period – Classification practices in JSE Listed Companies							
BALANCE SHEET							
LIFE INSURANCE							
	Company Name	Liberty Holdings	Sage Group Lim	Liberty Holdings	Sage Group Lim	Liberty Holdings	Sage Group Lim
	Year	2002		2003		2004	
ASSETS	INVESTMENTS	1		1		1	
	Funds on deposit					2	
	Investment properties	2		2		3	
	Marketable securities	3		3		4	
	Interest in joint venture companies	4		4			
	Interest in joint ventures					5	
	Other investments	5		5		6	
	NON-CURRENT ASSETS		1		1		1
	Tangible assets		2		2		2
	Intangible assets		3		3		3
	Financial assets		4		4		4
	Investments of the South African life assurance subsidiary		5				
	Investments of the life assurance subsidiary				5		5
	Owner-occupied properties	6		6		7	
	Goodwill	7		7		8	
	Other intangible assets	8					
	Intangible assets			8		9	
	Tangible assets	9		9		10	
	Deferred taxation					11	
	CURRENT ASSETS	10	6	10	6	12	6
	Net outstanding premiums, accrued investment income and other debtors	11		11		13	
	Amounts due by Group companies	12					
	Inventories				7		7
	Trade and other receivables		7		8		8
	Cash and cash equivalents	13	8	12	9	14	9
EQUITY AND LIABILITIES	SHAREOWNERS FUNDS	14					
	SHAREHOLDERS' FUNDS			13		15	
	Ordinary shareholders' interest/(deficit)		9		10		10
	Share capital and share premium	15		14		16	
	Retained surplus and other reserves	16		15		17	
	Equity component of convertible bonds	17		16			
	Equity linked notes		10				
	Redeemable preference shares issued by subsidiaries		11				
	Long-term assurance fund		12				
	Minority interests	18		17		18	
	LIFE FUNDS	19					
	Actuarial liabilities	20					
	Deferred capital gains tax	21					
	NON-CURRENT LIABILITIES				11		11
	Equity linked notes				12		
	Redeemable preference shares issued by subsidiary				13		
	Deferred taxation				14		12
	POLICYHOLDER LIABILITIES			18	15	19	13
	Liabilities under insurance contracts			19	16	21	14
	Liabilities under investment contracts			20	17	20	15
	Deferred taxation				18		
	Convertible bonds	22		21		22	
	Retirement benefit obligation	23		22		23	
	Deferred tax	24		23		24	
	CURRENT LIABILITIES	25	13	24	19	25	16
	Outstanding claims, policy-owners' benefits and other creditors	26		25		26	
	Trade and other payables		14		20		20
	Interest-bearing borrowings		15				
	Short-term borrowings				21		17
	Bank borrowings						18
	Provisions	27		26	24	27	21
	Derivative liabilities				22		
	Tax	28	16	27	23	28	19

Analysis for a 3 year period – Classification practices in JSE Listed Companies										
BALANCE SHEET										
MEDIA										
Company Name		Naspers Limited	Caxton and CTP Publishers and Printers LTD	Moneyweb Holdings Limited	Naspers Limited	Caxton and CTP Publishers and Printers LTD	Moneyweb Holdings Limited	Naspers Limited	Caxton and CTP Publishers and Printers LTD	Moneyweb Holdings Limited
Year		2003			2004			2005		
ASSETS	NON-CURRENT ASSETS	1	1	1	1	1	1	1	1	1
	Property, plant and equipment	2	2		2	2		2	2	
	Furniture and equipment			2						
	Tangible assets						2			2
	Goodwill				3			3		
	Goodwill and other intangible assets	3								
	Other intangible assets				4			4		
	Intangible assets		3	3		3	3		3	3
	Investments and loans	4	4		5	4		5	4	
	Programme and film rights	5			6			6		
	Investment in associates			4			4			
	Other investments			5			5			4
	Deferred taxation	6			7		6	7		5
	CURRENT ASSETS	7	5	6	8	5	7	8	5	6
	Inventories	8	6		9	6		9	6	
	Programme and film rights	9			10			10		
	Accounts receivable	10	7		11	7		11	7	
	Trade and other receivables			7			8			7
	Other receivables	11			12			12		
	Amounts owing by related parties	12			13			13		
	Marketable debt and equity securities	13								
	Investments and loans				14			14		
	Embedded derivative assets				15					
	Derivative financial instruments							15		
	Taxation		8			8			8	
	Income tax prepaid			8			9			
	Preference shares - listed					9			9	
	Preference shares - unlisted					10			10	
	Bank and cash resources		9			11			11	
	Cash and cash equivalents			9			10			8
	Cash and cash deposits	14			16			16		

Appendix E – Analysis of JSE listed companies

Analysis for a 3 year period – Classification practices in JSE Listed Companies										
BALANCE SHEET										
MEDIA										
Company Name		Naspers Limited	Caxton and CTP Publishers and Printers LTD	Moneyweb Holdings Limited	Naspers Limited	Caxton and CTP Publishers and Printers LTD	Moneyweb Holdings Limited	Naspers Limited	Caxton and CTP Publishers and Printers LTD	Moneyweb Holdings Limited
Year		2003			2004			2005		
EQUITY AND LIABILITIES	**SHAREHOLDERS' EQUITY**	15	10		17	12		17	12	
	CAPITAL AND RESERVES			10			11			9
	Share capital and premium	16		11	18		12	18		10
	Share capital		11			13			13	
	Share premium		12			14			14	
	Non-distributable reserves	17	13			15			15	
	Distributable reserves	18	14			16			16	
	Other reserves				19			19		
	Retained earnings/(Loss)				20			20		
	Accumulated profit			12			13			
	Retained profit and reserves									11
	Goodw ill			13						
	Preference share capital		15			17			17	
	Outside shareholders' interest		16							
	Minority interest	19			21	18		21	18	
	Deferred taxation		17			19			19	
	NON-CURRENT LIABILITIES	20		14	22		14	22		12
	Post-retirement medical liability	21			23			23		
	Long-term liabilities	22			24			24		
	Capitalised finance leases	23			25			25		
	Concession liabilities				26			26		
	Interest-bearing loans	24			27			27		
	Programme and film rights	25			28			28		
	Non-interest-bearing loans	26			29			29		
	Deferred tax	27		15	30			30		
	Shareholders' loan						15			13
	CURRENT LIABILITIES	28	18	16	31	20	16	31	20	14
	Current portion of long-term liabilities	29			32			32		
	Provisions	30	20		33	22	18	33	22	16
	Accounts payable	31	19		34	21		34	21	
	Trade and other payable			17			17			15
	Accrued expenses and other current liabilities	32			35			35		
	Amounts ow ing to related parties	33			36			36		
	Deferred revenue			18			19			17
	Taxation	34	21		37	23		37	23	
	Income tax payable			19			20			
	Receiver of Revenue									18
	Foreign exchange contract liabilities				38					
	Derivative financial instruments							38		
	Bank overdrafts and short-term loans	35			39					
	Bank overdrafts							39		
	Shareholders for dividend			20			21			19

Appendix E – Analysis of JSE listed companies

Analysis for a 3 year period – Classification practices in JSE Listed Companies

BALANCE SHEET

MINING

	Company Name	Zenith Concessions Limited	Afrikander Lease Limited, The	Sub Nigel Gold Mining Company Limited	Messina Limited	Diamond Core Resources Limited	Zenith Concessions Limited	Assmang Limited	Kumba Resources Limited	Sallies Limited	Afrikander Lease Limited, The	Gold Fields Limited	Sub Nigel Gold Mining Company Limited	Anglo American Platinum Corporation Ltd	Messina Limited	Diamond Core Resources Limited	Zenith Concessions Limited	Assmang Limited	Kumba Resources Limited	Sallies Limited	Afrikander Lease Limited, The	Gold Fields Limited	Sub Nigel Gold Mining Company Limited	Anglo American Platinum Corporation Ltd	Messina Limited	Diamond Core Resources Limited	Assmang Limited	Kumba Resources Limited	Sallies Limited	Gold Fields Limited	Anglo American Platinum Corporation Ltd
	Year	2002				2003										2004										2005					
ASSETS	NON-CURRENT ASSETS	1	1		1	1	1	1	1	1	1	1		1	1	1	1	1	1	1	1	1		1	1	1	1	1	1	1	1
	Mining assets		2	1		2					2		1			2							1			2					
	Mining and mineral assets																					2									
	Property, plant and equipment	2		2	2				2	3		2	2	2	2			2	2	3	2		2	2	2		2	2	3	2	2
	Mining assets and development costs				3										3										3						
	Property, plant and machinery							2																							
	Plant and equipment						2																								
	Capital w ork-in-progress													3										3							3
	Platinum Producers' Environment Trust													4																	
	Exploration projects														4										4						
	Biological assets																		3									3			
	Intangible assets						3	3	3								2	3	4								3	4			
	Goodw ill								4	2									5	2								5	2		
	Accounts receivable									4										4									4		
	Non-current accounts receivable													6																	
	Investment in associate											3		5										4						3	4
	Investments in associates and joint ventures								5										6									6			
	Investments				4							4			5							4			5					4	
	Other investments		4								3										3										
	Inventory		3																												
	Non-current asset											5										3									
	Mineral interests					3																									
	Mineral rights															3										3					
	Loan receivable	3																													
	Cash deposits held by environmental trusts																														5
	Originated loans																							5							
	Prepaid operating lease rentals and royalties																							6							6
	Deferred tax assets							4										4													
	Deferred taxation								6										7									7			
	Environmental rehabilitation trust fund							5										5									4				
	Environmental trust fund																													5	
	Non-current portion of financial instruments																													6	
	Financial assets								7										8									8			
	CURRENT ASSETS	4	5	3	5	4	4	6	8	5	4	6	3	7	6	4	3	6	9	5	4	4	3	7	6	4	5	9	5	7	7
	Inventories		6		6	5		7	9	6	5	7		8	7			7	10	6	5			8	7		6	10	6	8	8
	Trade and other receivables	5				6		8	10							5		8	11				4			5	7	11			
	Accounts receivable			4						7		8	4	9						7				9					7	9	9
	Receivables and pre-payments		7		7						6				8						6				8						
	Amounts ow ing by related third parties		8								7										7										
	Deferred stripping costs											9																		10	
	Unrealised gain on financial instruments											10																			
	Current portion of financial instruments																													11	
	Recoverable deposit	6					5																								
	Other current assets																					5									
	Other receivables						6																								
	Sundry debtors						8										4														
	Cash held by insurance captives																														10
	Taxation prepaid									8										8									8		
	Net cash and deposits																					6									
	Deposits						7																								
	Cash and cash equivalents	7		5	8	7	9	9	11	9		12	5	10	9	6	5	9	12	9			5	10	9	6	8	12	9	12	11
	Bank and cash balances		9								8										8										

Appendix E – Analysis of JSE listed companies

Analysis for a 3 year period – Classification practices in JSE Listed Companies

BALANCE SHEET

MINING

Company Name	Zenith Concessions Limited	Afrikander Lease Limited, The	Sub Nigel Gold Mining Company Limited	Messina Limited	Diamond Core Resources Limited	Zenith Concessions Limited	Aasmang Limited	Kantoor Resources Limited	Sallies Limited	Afrikander Lease Limited, The	Gold Fields Limited	Sub Nigel Gold Mining Company Limited	Anglo American Platinum Corporation Ltd	Messina Limited	Diamond Core Resources Limited	Zenith Concessions Limited	Aasmang Limited	Kantoor Resources Limited	Sallies Limited	Afrikander Lease Limited, The	Gold Fields Limited	Sub Nigel Gold Mining Company Limited	Anglo American Platinum Corporation Ltd	Messina Limited	Diamond Core Resources Limited	Aasmang Limited	Kantoor Resources Limited	Sallies Limited	Gold Fields Limited	Anglo American Platinum Corporation Ltd
Year	2002				2003										2004										2005					
CAPITAL AND RESERVES	8	10	6	9	8	10	10	12	10	9		6	11	10	7	6	10	13	10	9		6	11	10	7	9	13	10		
SHARE CAPITAL AND RESERVES																														12
SHAREHOLDERS' EQUITY PER STATEMENT											13										7								13	
Ordinary share capital		11			9		11			10					8					10					8					
Share capital - Ordinary and preference																							12							13
Issued capital						11										7														
Share capital			7					13				7	12				11	14								10	14			
Stated capital																						7								
Ordinary shares				10										11										11						
Share capital and premium	9								11										11									11		
Share premium		12		11	10		12			11			13	12	9		12			11				12	9	11				
Share premium - Ordinary and preference																							13							14
Unrealised hedging deficit													14																	
Non-distributable reserves			8					14				8						15									15			
Distributable reserves			9																											
Reserves				12										13										13						
Equity loans					11																									
Accumulated (loss)/profit	10				12	12			12						10	8			12			8			10			12		
Accumulated (loss)/earnings		13								12										12										
Accumulated (loss)/reserve												9																		
Retained income/(loss)								15										16												
Retained earnings/(loss)							13										13									12	16			
Accumulated profits before proposed dividends and related secondary tax on companies (STC)													15										14							15
Accumulated profits after proposed dividends and related STC													16										15							16
Proposed ordinary dividends													17										16							17
Undeclared cumulative preference share dividend and related STC																							17							18
STC iro proposed dividends													18																	
Minority interest								16			14							17			8						17		14	
NON-CURRENT LIABILITIES		14		13	13	13	14	17	13	13	15		19	14	11	9	14	18	13	13			18	14	11	13	18	13	15	19
Interest bearing borrowings		15		15	14			18		14				16	12			19		14				17			19			
Ultimate shareholders' loan				14										15										15						
Loan from fellow subsidiary																								16						
Interest bearing debt									14										14									14		
Long-term borrowings							15										15									14				
Other long-term payables								19										20									20			
Non-interest bearing borrowings					15																				12					
Rehabilitation provision					16										13										13					
Provision for environmental rehabilitation									15																			15		
Environmental obligations				15									21	17									20	18						21
Rehabilitation and closure cost obligations		16								15										15										
Post-retirement health care provision																					12									
Amounts owing to related third parties		17								16										16										
Deferred tax liabilities							16										16									15				
Deferred taxation								21	16		16		20					22	16		9		19				22	16	16	20
Employees' service benefit obligations													22										21							22
Obligations due under finance leases													23										22							23
Long-term liabilities											17	10										9							17	
Long-term loans																					10									
Long-term provisions							17				18						17									16			18	
Non-current provisions								20										21									21			
Shareholders' loans						14										10														
Loans from directors						15																								
CURRENT LIABILITIES	11	18	10	16	17	16	18	22	17	17	19	11	24	18	14		18	23	17	17	13	10	23	19	14	17	23	17	19	24
Short-term provisions							19										19									18				
Provisions		20							19	21										22		11						20		
Current provisions								26										27									27			
Derivative financial instrument																				18										
Derivative financial liabilities																							26							27
Trade and other payables	12	19		16	18		20	23		18				19	15		20	24		21		12		20	15	19	24			
Accounts payable			11			17			19		20	12	26						19				25					19	20	26
Interest bearing borrowings					20			24					25					25					24				25			25
Short term loan																				19										
Other current liabilities																					14									
Current portion of borrowings				17										20										21						
Current portion of non-current borrowings					19																									
Current portion of long-term loan									20										20		15									
Current portion of interest bearing debt																												21		
Current portion of interest bearing borrowings		21								20										20										
Current portion of long-term liabilities											23																		22	
Other financial liabilities													27																	
Taxation							21	25			22		28				21	26					27			20	26		21	28
Bank overdraft				18	21				18			13		21					18			13		22				18		
Overdraft and short-term borrowings							22										22									21				
Bank overdraft balances		22								21										23										

EQUITY AND LIABILITIES

Appendix E – Analysis of JSE listed companies

Analysis for a 3 year period – Classification practices in JSE Listed Companies							
BALANCE SHEET							
NON-LIFE INSURANCE							
	Company Name	Alexander Forbes Limited	Santam Limited	Alexander Forbes Limited	Santam Limited	Alexander Forbes Limited	Santam Limited
	Year	2003		2004		2005	
ASSETS	Linked assets of policyholders and cell owners	1					
	Assets of investment and insurance operations			1		1	
	Investment operations			2		2	
	Insurance operations			3		3	
	NON-CURRENT ASSETS	2	1	4	1	4	1
	Fixed assets	3		5			
	Property and equipment		2		2	5	2
	Purchased and developed computer software					6	
	Goodwill	4	3	6	3	7	3
	Other intangible assets					8	
	Associates	5		7		9	
	Investment in associates					10	5
	Investments and loans receivable	6		8			
	Interest-bearing			9			
	Non-interest-bearing			10			
	Deferred tax asset				4	11	
	Deferred tax	7	4	11			
	Deferred income tax						4
	Investment in associate companies		5		5		
	Available-for-sale investments		6		6		
	Trading financial assets		7				
	Financial assets					12	6
	Equity securities: at fair value through income						7
	Debt securities: at fair value through income						8
	Technical assets		8		7		
	Reinsurers' share of technical provisions - oustanding claims		9		8		
	Reinsurers' share of technical provisions - unearned premiums		10		9		
	Deferred acquisition costs		11		10		
	CURRENT ASSETS	8	12	12	11	13	9
	Insurer debtors					14	
	Reinsurance contracts						10
	Deferred acquisition costs						11
	Trade and other receivables					15	
	Debtors and other receivables		13		12		
	Outstanding premiums debtors		14		13		
	Loans and receivables including insurance receivables						12
	Amounts owed by reinsurers		15		14		
	Other interest bearing receivables	9		14			
	Non-interest bearing receivables	10		15			
	Current financial assets					16	
	Cash and cash equivalents	11	16		15	17	13
	Cash balances			13			

Appendix E – Analysis of JSE listed companies

Analysis for a 3 year period – Classification practices in JSE Listed Companies							
BALANCE SHEET							
NON-LIFE INSURANCE							
	Company Name	Alexander Forbes Limited	Santam Limited	Alexander Forbes Limited	Santam Limited	Alexander Forbes Limited	Santam Limited
	Year	2003	2003	2004	2004	2005	2005
EQUITY AND LIABILITIES	**SHAREHOLDERS' FUNDS**	12		16		18	
	CAPITAL AND RESERVES		17		16	20	14
	Before goodwill effects	13		17			
	Goodwill written off and amortised	14		18			
	Ordinary shareholders' funds					19	
	Share capital		18		17		15
	Non-distributable reserves		19		18		
	Other reserves						16
	Distributable reserves		20		19		17
	Outside shareholders' funds	15		19			
	Minority shareholders' interest		21		20	20	18
	Cell owners' interest				21		
	Linked liabilities of policyholders and cell owners	16					
	Liabilities of investment and insurance operations			20		20	
	Investment operations			21		21	
	Insurance operations			22		22	
	Technical provisions		22		22		
	Gross outstanding claims		23		23		
	Gross provision for unearned premiums		24		24		
	Deferred reinsurance acquisition revenue		25		25		
	NON-CURRENT LIABILITIES	17	26	23	26	23	19
	Long-term borrowings	18					
	Long term liabilities			24			
	Interest-bearing			25			
	Non-interest-bearing			26			
	Borrowings					24	
	Cell owners' interest						20
	Deferred consideration for acquisitions					25	
	Provisions for post-retirement benefits	19		27			
	Retirement benefit obligations					26	
	Provisions					27	
	Deferred tax liability				27	28	
	Deferred taxation		27				
	Deferred income tax						21
	Trading financial liability				28		
	CURRENT LIABILITIES	20	28	28	29	29	22
	Insurer creditors					30	
	Insurance contracts						23
	Deferred reinsurance acquisition revenue						24
	Amounts due to reinsurers		29		30		
	Provisions for other liabilities and charges						25
	Trade and other payables		31		32	31	26
	Current borrowings					32	
	Current deferred consideration					33	
	Interest bearing payables	21		29			
	Non-interest bearing payables	22		30			
	Provisions	23	32	31	33		
	Current income tax liabilities						27
	Taxation	24	30	32	31	34	

Appendix E – Analysis of JSE listed companies

Analysis for a 3 year period – Classification practices in JSE Listed Companies							
BALANCE SHEET							
PERSONAL GOODS							
	Company Name	House of Busby Limited, The	Richemont Securities AG	House of Busby Limited, The	Richemont Securities AG	House of Busby Limited, The	Richemont Securities AG
	Year	2003		2004		2005	
ASSETS	NON-CURRENT ASSETS	1		1		1	
	LONG-TERM ASSETS		1		1		1
	Property, plant and equipment	2	2	2	2	2	2
	Intangible assets	3	3	3	3	3	3
	Non-current receivables	4					
	Deferred taxation	5		4		4	
	Deferred tax asset		4		4		4
	Investment in associated undertaking		5		5		5
	Other long-term assets		6		6		6
	Minority interest	6		5		5	
	CURRENT ASSETS	7	7	6	7	6	7
	Inventories	8	8	7	8	7	8
	Trade and other receivables	9		8		8	
	Debtors		9		9		9
	Taxation	10				9	
	Bank balances and cash	11		9		10	
	Cash		10		10		10
EQUITY AND LIABILITIES	CAPITAL AND RESERVES	12		10		11	
	EQUITY		14		18		18
	Share capital	13	15	11	19	12	19
	Share premium	14		12		13	
	Non distributable reserves	15		13		14	
	Participation reserve		16		20		20
	Treasury units				21		21
	Accumulated profits	16		14		15	
	Retained earnings and other reserves		17		22		22
	Minority interests		18		23		23
	LONG-TERM LIABILITIES		19		24		24
	Borrowings		20		25		25
	Secured call warrants		21		26		
	Provisions		22		27		26
	Post-retirement and other benefit obligations		23		28		27
	Deferred tax liabilities		24		29		28
	CURRENT LIABILITIES	17	11	15	11	16	11
	Trade and other payables	18		16		17	
	Bank loans and overdrafts				12		
	Bank overdrafts and short-term loans						12
	Short-term portion of long-term loans and finance leases				13		
	Borrowings						13
	Accruals and deferred income				14		14
	Other current liabilities				15		17
	Taxation			17		18	
	Current tax liabilities		12		16		15
	Provisions		13		17		16
	Bank overdrafts	19		18		19	

Appendix E – Analysis of JSE listed companies

Analysis for a 3 year period – Classification practices in JSE Listed Companies

BALANCE SHEET

REAL ESTATE

	Company Name	Jigsaw Holdings Limited (Delisted)	Fairvest Property Holdings Limited	Jigsaw Holdings Limited (Delisted)	Marshalls Limited	ApexHi Properties Limited	Fairvest Property Holdings Limited	Jigsaw Holdings Limited (Delisted)	Marshalls Limited	Premium Properties Limited	Resilient Property Income Fund Limited	SA Retail Properties Limited	Prima Property Trust	Ambit Properties Ltd (Prospectus end 2003)	ApexHi Properties Limited	Fairvest Property Holdings Limited	Marshalls Limited	Premium Properties Limited	Resilient Property Income Fund Limited	SA Retail Properties Limited	Prima Property Trust	Ambit Properties Ltd (Prospectus end 2003)	ApexHi Properties Limited	Premium Properties Limited	Resilient Property Income Fund Limited	SA Retail Properties Limited	Prima Property Trust
	Year	2001	2002			2003								2004								2005					
ASSETS	NON-CURRENT ASSETS	1	1	1	1		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	TANGIBLE ASSETS					1																					
	Investment property					2			2	2	2	2	2	2	2		2	2	2	2		2	2	2	2	2	2
	At valuation																					3				3	
	Rental straight line adjustment																					4				4	
	Investment properties under development																								3		
	Investment in other listed property securities																								4		
	Other asset investments																								5		
	Property and equipment		2				2									2											
	Property, plant and equipment	2		2	2			2	3	3							3	3						3			
	Tangible assets																				2						
	Fixed assets																		6								
	Plant and equipment					3																					
	Rental receivable - straight line adjustment																					6				5	
	Investment in associate									4				3				4	3			5		4			
	Listed investment																						3				
	Listed property securities										3								4								
	Financial assets		3				3									3											
	Deferred tax							3																			
	Other intangible assets	3		3				4																			
	Investments and loans	4		4				5																			
	Loan receivable							6																			
	Other investments and loans receivable				3				4																		
	Other investments																4										
	Goodwill	5		5				7																			
	Unit purchase trust loans																		5								
	CURRENT ASSETS	6	4	6	4	4	4	8	5	5	4	3	3	4	3	4	5	5	7	3	3	7	4	5	6	6	3
	Inventories	7		7		5		9																			
	Development projects	8		8				10																			
	Investments				5																						
	Trade and other receivables		5				5			6		4		5		5		6		4	4	8		6	7	7	4
	Accounts receivable	9		9				11			5		4						8								
	Receivables					6									4								5				
	Trade receivables and loans				6				6								6										
	Bills receivable				7				7								7										
	Rental receivable - straight line adjustment																									8	
	Taxation overpaid				8				8																		
	Funds held in trust	10																									
	Amount due from a vendor		6													6											
	Bank balance				9				9																		
	Bank and cash balances																8										
	Cash at bank					7									5								6				
	Cash and cash equivalents	11	7	10			6	12		7	6	5	5	6		7		7	9	5	5	9		8	8	9	5
	Taxation									8								8						7			

Appendix E – Analysis of JSE listed companies

Analysis for a 3 year period – Classification practices in JSE Listed Companies

BALANCE SHEET

REAL ESTATE

Company Name	Jigsaw Holdings Limited (Delisted)	Fairvest Property Holdings Limited	Jigsaw Holdings Limited (Delisted)	Marshalls Limited	Apexhil Properties Limited	Fairvest Property Holdings Limited	Jigsaw Holdings Limited (Delisted)	Marshalls Limited	Premium Properties Limited	Resilient Property Income Fund Limited	SA Retail Properties Limited	Prima Property Trust	Ambit Properties Ltd (Prospectus end 2003)	Apexhil Properties Limited	Fairvest Property Holdings Limited	Marshalls Limited	Premium Properties Limited	Resilient Property Income Fund Limited	SA Retail Properties Limited	Prima Property Trust	Ambit Properties Ltd (Prospectus end 2003)	Apexhil Properties Limited	Premium Properties Limited	Resilient Property Income Fund Limited	SA Retail Properties Limited	Prima Property Trust
Year	2001	2002			2003								2004								2005					
EQUITY AND LIABILITIES																										
CAPITAL AND RESERVES	12		11				13			6	6		7						6	6	10				10	6
SHARE CAPITAL AND RESERVES					8									6				11				7				
EQUITY AND RESERVES		8		10		7		10	9						8	9	9						9			
EQUITY																								9		
UNIT HOLDERS' CAPITAL										7								10								
Share capital and premium										8	7		8						7		11				11	
Linked unit debentures and premium		11																								
Linked unit holders' funds		9																								
Ordinary share capital		10				8																				
Share capital	13		12	11			14	11	10							10	10						10			
Stated capital												7								7						7
Issued capital																								10		
Share premium	14		13	12			15	12								11								11		
Revaluation reserve													9													
Non-distributable reserves		13		13		9		13		9						12			8	8	12		11	12	12	8
Distributable reserve (accumulated loss)	15	12	14	14			16	14		10	8		10			13			9		13				13	
Retained income																				9						9
Accumulated profits												9														
Retained earnings/(Accumulated loss)									12								12						12	13		
Capital reserves												8														
Reserves									11								11									
Linked debenture liabilities										11								12								
Minority interest	16		15				17																			
NON-CURRENT LIABILITIES	17	14	16	15	9	10	18	15	13	12	9		11	7	9	14	13	13	10	10	14	8	13	14	14	10
Debentures											10		12						11		15				15	
Debenture capital					10									8								9				
Debentures and premium									14								14						14			
Linked unit debentures and premium						11									10											
Limked debenture liabilities																								15		
Interest -bearing borrowings				16	12			16		13			13	10		15		14			16	11		16	17	
Long-term liabilities		15				12									11					11						11
Long term borrowings									15								15						15			
Interest -bearing liabilities	18		17				19																			
Interest-free liabilities	19		18				20																			
Derivative - fair value of Put option																			12							
Fair value of Put option																									16	
Deferred tax liability										14			14					15			17			17		
Deferred taxation		16		17	11	13		17	16		11			9	12	16	16		13	12		10	16		18	12
CURRENT LIABILITIES	20	17	19	18	13	14	21	18	17	15	12	10	15	11	13	17	17	16	14	13	18	12	17	18	19	13
Trade and other payables		18			14	15			18		13		16	12	16		18		15	14	19	13	19		20	14
Accounts payable and provisions	21		20				22																			
Trade payables				19				19								18										
Accounts payable										16		11						17								
Distributions												12														
Linked unit holders for distribution													17							15	21					
Debenture interest payable					15									13								14				
Amount owing on purchase consideration of subsidiaries	22																									
Vendor liabilities		19				16																				15
Trust liabilities	23																									
Interest bearing redeemable debentures		20				17									17											
Interest bearing liabilities	24		21				24																			
Short-term portion of long-term liabilities		21				18																				
Current portion - interest bearing borrowings				22				20								19										
Loans payable						19	23								14											
Short term borrowings									19								19						18			
Property acquisition obligation																			16							
Taxation						20			20						15		20			16			20			17
Taxation owing	25		22				25																			
Taxation payable				21				22								21					20					
Income tax payable										17								18						20		
South African Revenue Services											14								17						21	
Linked debenture interest payable										18								19						19		
Bank overdraft	26		23	20			26	21							18	20							22			
Shareholders for dividend	27		24				27																			
Unit holders for distribution		22							21		15						21		18				21		22	16

Appendix E – Analysis of JSE listed companies

Analysis for a 3 year period – Classification practices in JSE Listed Companies

BALANCE SHEET

SOFTWARE AND COMPUTER SERVICES

	Company Name	CS Computer Services Holdings Limited	CS Computer Services Holdings Limited	EC-Hold Limited	AST Group Limited	CS Computer Services Holdings Limited	EC-Hold Limited	Faritec Holdings Limited	Paracon Holdings Limited	Y3K Group Limited	Idion Technology Holdings Limited	Synergy Holdings Limited	AST Group Limited	Faritec Holdings Limited	Paracon Holdings Limited	Y3K Group Limited	Idion Technology Holdings Limited	Synergy Holdings Limited	AST Group Limited	Faritec Holdings Limited	Paracon Holdings Limited	Y3K Group Limited	Idion Technology Holdings Limited	Synergy Holdings Limited
	Year	2001	2002		2003								2004						2005					
ASSETS	NON-CURRENT ASSETS	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	Property, plant and equipment	2	2		2	2							2						2					
	Tangible assets			2			2		2	2					2	2					2	2		
	Equipment							2			2			2			2			2			2	
	Fixed assets											2						2						2
	Development costs capitalised							3						3						3				
	Financial assets			3					4						4									
	Intangible assets	3	3		5	3			3	3	4		5		3	3	4		3		3	3	4	
	Goodwill							4			3			4			3			4			3	
	Licence fees													5										
	Trademarks							5						6						5				
	Investment in associates		4																			4		
	Interest in associate companies				3								3											
	Investments and loans				4								4											
	Other investments		5			4																		
	Investments							6				3		7				3	4	6				3
	Long-term contracts					5																		
	Loans	4	6			6																		
	Loan to share incentive trust	5	7			7																		
	Loans receivable													8						7				
	Share incentive trust							7		4						4						5		
	Deferred tax(ation)	6	8			8		8	5		5			9	5					8	4		5	
	Deferred tax assets				6								6				5		5					
	CURRENT ASSETS	7	9	4	7	9	3	9	6	5	6	4	7	10	6	5	6	4	6	9	5	6	6	4
	Inventory			5	8	10	4	10				5	8	11		7		5	7	10		8		5
	Inventories and work in progress	8	10																					
	Work in progress					11																		
	Loan receivable																					9		
	Taxation			6			5							14										8
	Trade receivables	9	11			12														11				
	Trade and other receivables			7			6	11	7	7	7			12	7	8	7				6	10	7	6
	Trade debtors and other receivables																		8					
	Receivables and prepayments												9											
	Accounts receivable				9							6						6						
	Other receivables and prepayments	10	12			13																		
	Other receivables																			12				
	Prepayments and deposits										8						8						8	
	Loans receivable																							7
	Current tax asset					14													9					
	Tax asset				10																			
	Bank and cash									6														
	Bank balances and cash																9						9	
	Bank balances											7						7						9
	Cash and cash equivalents	11	13	8	11	15	7	12	8		9		10	13	8	6			10	13	7	7		

Appendix E – Analysis of JSE listed companies

Analysis for a 3 year period – Classification practices in JSE Listed Companies

BALANCE SHEET

SOFTWARE AND COMPUTER SERVICES

	Company Name	CS Computer Services Holdings Limi	CS Computer Services Holdings Limi	EC-Hold Limited	AST Group Limited	CS Computer Services Holdings Limi	EC-Hold Limited	Faritec Holdings Limited	Paracon Holdings Limited	Y3K Group Limited	Idion Technology Holdings Limite	Synergy Holdings Limited	AST Group Limited	Faritec Holdings Limited	Paracon Holdings Limited	Y3K Group Limited	Idion Technology Holdings Limite	Synergy Holdings Limited	AST Group Limited	Faritec Holdings Limited	Paracon Holdings Limited	Y3K Group Limited	Idion Technology Holdings Limite	Synergy Holdings Limited
	Year	2001	2002		2003								2004						2005					
EQUITY AND LIABILITIES	**CAPITAL AND RESERVES**	12	14		12	16		13		8	10	8	11	15		9	10	8	11	14		11	10	10
	EQUITY CAPITAL AND (DEFICIT)/RESERVES			9			8		9						9						8			
	Ordinary share capital	13	15			17																		
	Share capital							14		9				16		10	11			15		12	11	
	Issued capital											9						9						11
	Issued share capital and premium										11													
	Ordinary share capital and premium			10			9																	
	Share capital and premium								10						10						9			
	Share premium	14	16			18		15		10				17		11	12			16		13	12	
	Shares to be issued		17			19																		
	Currency translation reserve										12						13							
	Foreign currency translation reserve																						13	
	Non-distributable reserve			11			10		11	11					11	12					10	14		
	Retained earnings	15	18			20																		12
	Accumulated profit/(Loss)							16		12	13	10		18		13	14	10		17		15		
	Accumulated (loss)/distributable reserves			12			11		12						12						11		15	
	Outside shareholders' interest																15							
	Minority interest	16		13	13	21	12	17					12	19					12	18			16	
	NON-CURRENT LIABILITIES	17	19	14	14	22	13				14		13			14	16	11	13				17	13
	NON-CURRENT BORROWINGS							18						20						19				
	Borrowings	18	20			23																		14
	Long-term liabilities										15							12						
	Long-term borrowings																17						18	
	Interest-bearing borrowings			15	15		14						14	21		15			14	20				
	Non-interest bearing borrowings			16				19						22						21				
	Operating lease liability																		15					
	Amounts due to vendors	19	21		16	24																		
	Deferred taxation										16													
	Deferred tax liabilities				17								15				18		16				19	
	Deferred revenue - long-term										17													
	Deferred revenue																19						20	
	CURRENT LIABILITIES	20	23	17	18	25	15	20	13	13	18	11	16	23	13	16	20	13	17	22	12	16	21	15
	Current portion of interest bearing borrowings	21	24			26								25						25				
	Short-term portion of interest-bearing borrowings																		21					
	Current portion of long term liabilities											14						16						
	Current portion of borrowings																							17
	Current portion of amounts due to vendors		25			27																		
	Interest bearing borrowings			18			16									18								
	Amount due to vendor				22				14				20								13			
	Trade and other payables	22	26	19		28	17	21	15	14			17	24	14	17	21				14	17	22	16
	Trade payables and other provisions																							
	Trade payables										19									23				
	Trade creditors and accruals																		18					
	Accounts payable				19							12						14						
	Other payables																			24				
	Sundry payables (including payroll vendors and VAT)																		22					
	Provisions				20	29					20		18				22		19				23	
	Acquisition consideration due to vendors																						24	
	Income received in advance																		20					
	Deferred revenue						18										25						27	
	Deferred revenue - current										23													
	Tax liabilities	23	27		23	30											24						26	
	Current tax liability												21						24					
	Taxation							23	16		22	13		27	15			15		27	15			
	Short-term loans					31																		
	Short-term borrowings										21						23						25	
	Bank overdraft		28	20	21	32	19	22				15	19	26					23	26				

Analysis for a 3 year period – Classification practices in JSE Listed Companies													
BALANCE SHEET													
SUPPORT SERVICES													
	Company Name	Command Holdings Limited	Onelogix Group Limited	Quyn Holdings Limited	Italtile Limited	Command Holdings Limited	Onelogix Group Limited	Quyn Holdings Limited	Italtile Limited	Command Holdings Limited	Onelogix Group Limited	Quyn Holdings Limited	Italtile Limited
	Year	2003				2004				2005			
ASSETS	NON-CURRENT ASSETS	1	1	1	1	1	1	1	1	1	1	1	1
	Tangible assets	2				2				2			
	Property, plant and equipment		2	2	2		2	2	2		2	2	2
	Investment properties							3				3	
	Deferred taxation	3	4	7		3	4	8		3		8	5
	Goodw ill			3				4					
	Intangible assets	4	3				3				3		
	Intangibles			4									
	Investment, loans and rental advances	5											
	Investments and loans					4		5		4		4	
	Investment in associates					5		6				5	
	Investments			5									
	Other investments				3				3				3
	Loans to joint ventures			6									
	Investment and loans to joint ventures							7				6	
	Operating lease debtors											7	
	Long-term assets				4				4				4
	CURRENT ASSETS	6	5	8	5	6	5	9	5	5	1	9	6
	Inventories	7	6	9	6	7	6	10	6	6	5	10	7
	Accounts receivable	8		10		8		11		7		11	
	Receivables and prepayments		7				7				6		
	Trade and other receivables				7				7				8
	Prepaid taxation			11				12					
	Taxation											12	
	Bank balances and cash	9		12		9				8			
	Cash and cash equivalents		8		8		8	13	8		7	13	9

Analysis for a 3 year period – Classification practices in JSE Listed Companies												
BALANCE SHEET												
SUPPORT SERVICES												
Company Name	Command Holdings Limited	Onelogix Group Limited	Quyn Holdings Limited	Italtile Limited	Command Holdings Limited	Onelogix Group Limited	Quyn Holdings Limited	Italtile Limited	Command Holdings Limited	Onelogix Group Limited	Quyn Holdings Limited	Italtile Limited
Year	2003				2004				2005			
EQUITY AND LIABILITIES												
CAPITAL AND RESERVES	10	9	13	9	10	9	14	9	9	8	14	10
Share capital	11	10	14		11	10	15		10	9	15	
Stated capital				10				10				11
Share premium	12	11	15		12	11	16		11	10	16	
(Accumulated loss)/Retained earnings	13	12			13	12			12	11		
Retained profit				12				13				14
Treasury shares								12				13
Non-distributable reserves				11				11				12
Reserves			16				17				17	
Minority shareholders' interest									13			
Minority interest							18					
Outside shareholders' interest				13				14				15
NON-CURRENT LIABILITIES	14	13	17	14	14	13	19	15	14	12	18	16
Long-term borrowings	15				15				15			
Interest-bearing borrowings		14				14				13		
Borrowings			18				20				19	
Vendor liabilities		15										
Deferred income			19				21				20	
Deferred taxation				15			22	16		14	21	17
Provisions				16								
Long-term loans				17				17				18
Provision for onerous contracts			20									
CURRENT LIABILITIES	16	16	21	18	16	15	23	18	16	15	22	19
Current portion of borrowings			22				24				23	
Provision for onerous contracts			23									
Short-term borrowings	17				17				17			
Short-term loans							25				24	
Bank overdrafts	18		26		18		29		18		28	
Accounts payable	19		24		19		26		19		25	
Trade and other payables		17		20		16		19		16		20
Current portion of vendor liabilities		18				17						
Current portion of interest-bearing borrowings		19				18				17		
Short-term portion of long-term loans				19								
Accruals	20				20				20			
Provisions	21				21		27		21		26	
Taxation	22		25	21	22		28	20	22		27	21
Current tax liabilities		20				19				18		

Appendix E – Analysis of JSE listed companies

Analysis for a 3 year period – Classification practices in JSE Listed Companies								
BALANCE SHEET								
TECHNOLOGY HARDWARE AND EQUIPMENT								
	Company Name	Bryant Technology Limited	Bryant Technology Limited	Datatec Limited	Bryant Technology Limited	Datatec Limited	Datatec Limited
	Year	2002	2003		2004		2005
ASSETS	NON-CURRENT ASSETS	1	1	1	1	1	1
	Property, plant and equipment	2	2	2	2	2	2
	Capitalised development expenditure			3		3	3
	Goodwill					4	4
	Intangible assets			4			
	Other intangible assets						5
	Investments			5		5	
	Deferred tax asset			6		6	6
	CURRENT ASSETS	3	3	7	3	7	7
	Inventories	4	4	8	4	8	8
	Accounts receivable	5	5	9	5	9	9
	Other receivables			10		10	10
	Bank balances	6	6		6		
	Cash and cash equivalents			11		11	11
EQUITY AND LIABILITIES	CAPITAL AND RESERVES	7	7		7		
	ORDINARY SHAREHOLDERS' FUNDS			12		12	12
	Share capital	8	8		8		
	Share capital and premium			13		13	13
	Share premium	9	9		9		
	Non-distributable reserve			14		14	14
	Accumulated loss	10	10		10		
	Distributable reserve			15		15	15
	Outside shareholders' interest			16		16	16
	NON-CURRENT LIABILITIES	11	11	17	11	17	17
	Loans from related parties	12	12		12		
	Long-term liabilities			18		18	18
	Deferred tax liability			19		19	19
	CURRENT LIABILITIES	13	13	20	13	20	20
	Accounts payable	14	14	21	14	21	21
	Provisions			22		22	22
	Amounts owing to vendors			23		23	23
	Taxation			24		24	24
	Bank overdrafts and trade finance advances			25			
	Bank overdrafts					25	25

Appendix E – Analysis of JSE listed companies

Analysis for a 3 year period – Classification practices in JSE Listed Companies								
BALANCE SHEET								
TECHNOLOGY HARDWARE AND EQUIPMENT								
	Company Name	Bryant Technology Limited	Bryant Technology Limited	Datatec Limited	Bryant Technology Limited	Datatec Limited	Datatec Limited
	Year	2002	2003		2004		2005
ASSETS	NON-CURRENT ASSETS	1	1	1	1	1	1
	Property, plant and equipment	2	2	2	2	2	2
	Capitalised development expenditure			3		3	3
	Goodwill					4	4
	Intangible assets			4			
	Other intangible assets						5
	Investments			5		5	
	Deferred tax asset			6		6	6
	CURRENT ASSETS	3	3	7	3	7	7
	Inventories	4	4	8	4	8	8
	Accounts receivable	5	5	9	5	9	9
	Other receivables			10		10	10
	Bank balances	6	6		6		
	Cash and cash equivalents			11		11	11
EQUITY AND LIABILITIES	CAPITAL AND RESERVES	7	7		7		
	ORDINARY SHAREHOLDERS' FUNDS			12		12	12
	Share capital	8	8		8		
	Share capital and premium			13		13	13
	Share premium	9	9		9		
	Non-distributable reserve			14		14	14
	Accumulated loss	10	10		10		
	Distributable reserve			15		15	15
	Outside shareholders' interest			16		16	16
	NON-CURRENT LIABILITIES	11	11	17	11	17	17
	Loans from related parties	12	12		12		
	Long-term liabilities			18		18	18
	Deferred tax liability			19		19	19
	CURRENT LIABILITIES	13	13	20	13	20	20
	Accounts payable	14	14	21	14	21	21
	Provisions			22		22	22
	Amounts owing to vendors			23		23	23
	Taxation			24		24	24
	Bank overdrafts and trade finance advances			25			
	Bank overdrafts					25	25

Analysis for a 3 year period – Classification practices in JSE Listed Companies																	
BALANCE SHEET																	
TRAVEL AND LEISURE																	
Company Name		Admiral Leisure World Limited	Admiral Leisure World Limited	Pacific Holdings Limited	Putco Limited (Delisted)	Admiral Leisure World Limited	City Lodge Hotels Limited	Pacific Holdings Limited	Famous Brands Limited	Putco Limited (Delisted)	City Lodge Hotels Limited	Pacific Holdings Limited	Famous Brands Limited	Putco Limited (Delisted)	City Lodge Hotels Limited	Famous Brands Limited
Year		2001	2002			2003					2004				2005	
ASSETS	NON-CURRENT ASSETS	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	Fixed and intangible assets	2	2			2										
	Property, plant and equipment			2	2		2	2		2	2	2		2	2	
	Tangible fixed assets								2				2			2
	Intangible fixed assets								3				3			3
	Loan receivable	3	3			3			4				4			4
	Accounts receivable	4	4													
	Intangible assets						3									
	Investments and loans						4				3				3	
	Investments				3					3				3		
	Deferred taxation				4		5		5		4		5		4	5
	CURRENT ASSETS	5	5	3	5	4	6	3	6	4	5	3	6	4	5	6
	Inventories	6	6	4	6	5	7	4	7	5	6	4	7	5		7
	Accounts receivable	7	7			6										
	Trade receivables						8				7				6	
	Receivables and prepayments			5				5								
	Trade and other receivables				7				8	6		5	8	6		8
	Other receivables						9				8				8	
	Cash resources	8	8			7										
	Cash						10				9				7	
	Cash and bank balances			7				7								
	Cash and cash equivalents								9			7	9			9
	Cash on call, at bank and on hand				8					7				7		
	Taxation	9	9													
	Taxation prepaid			6				6				6				

Appendix E – Analysis of JSE listed companies

Analysis for a 3 year period – Classification practices in JSE Listed Companies																		
BALANCE SHEET																		
TRAVEL AND LEISURE																		
	Company Name	Admiral Leisure World Limited	Admiral Leisure World Limited	Pacific Holdings Limited	Putco Limited (Delisted)	Admiral Leisure World Limited	City Lodge Hotels Limited	Pacific Holdings Limited	Famous Brands Limited	Putco Limited (Delisted)	City Lodge Hotels Limited	Pacific Holdings Limited	Famous Brands Limited	Putco Limited (Delisted)	City Lodge Hotels Limited	Famous Brands Limited
	Year	2001	2002			2003					2004				2005	
EQUITY AND LIABILITIES	CAPITAL AND RESERVES	10	10	8		8		8			11	8				
	EQUITY CAPITAL AND RESERVES				9					8				8		
	SHAREHOLDERS' FUNDS						10								9	
	SHARE CAPITAL AND RESERVES								10				10			10
	Issued capital	11	11			9										
	Ordinary shares			9				9								
	Share capital				10				11				11			11
	Ordinary share capital											9				
	Share capital and premium									9	12			9	10	
	Ordinary share capital and premium						11									
	Share premium			10				10	12			10	12			12
	Revaluation reserve							11				11				
	Non-distributable reserves	12	12		11	10			13	10			13	10		13
	Accumulated profit/(loss)	13	13	11		11	12	12	14		13	12	14		11	14
	Distributable reserves				12					11				11		
	Minority shareholders' interest								15				15			
	NON-CURRENT LIABILITIES	14	14	12	13	12	13		16	12	14	13	16	12	12	15
	Holding company loan					13										
	Shareholders' loan			13								14				
	Long-term liabilities	15	15		14	14				13				13		
	Borrowings						15				16				14	
	Interest-bearing borrowings			14					17				17			16
	Deferred taxation	16	16			15	14			14	15			14	13	18
	Other														15	
	Provisions				15					15			18	15		17
	CURRENT LIABILITIES	17	17	15	16	16	16	13	18	16	17	15	19	16	16	19
	Short-term liabilities				17					17				17		
	Provisions				18					18	18		22	18		22
	Shareholders' loan							14								
	Accounts payable	18	18			17										
	Accounts payable and accruals						17				19				17	
	Trade and other payables			16	19			15	19	19		16	20	19		20
	Current portion of borrowings			17												
	Current portion of interest-bearing borrowings								20				21			21
	Shareholders for dividend								21				23			23
	Taxation	19	19		21	18	18		22	20	20		24	20	18	24
	Bank overdraft	20	20	18	20			16	23	21		17	25	21		25
	VAT payable			19				15								

Appendix E – Analysis of JSE listed companies

Analysis for a 3 year period – Classification practices in JSE Listed Companies										
INCOME STATEMENT										
Company name		Tiger Wheels Limited (Automobiles and parts)	KWV Limited (Beverages)	Omnia Holdings Limited (Chemicals)	Tiger Wheels Limited (Automobiles and parts)	KWV Limited (Beverages)	Omnia Holdings Limited (Chemicals)	Tiger Wheels Limited (Automobiles and parts)	KWV Limited (Beverages)	Omnia Holdings Limited (Chemicals)
Year		2003			2004			2005		
ABOVE THE LINE	Revenue	1		1	1	1	1	1	1	1
	Income		1							
	Cost of sales	2		2	2		2	2		2
	Gross profit	3		3	3		3	3		3
	Operating cost before depreciation and net of other income			4			4			
	Other operating income	4								4
	Other income				4			4		
	Selling and distribution costs	5			5			5		
	Administrative and other expenses	6			6			6		
	Sales, administrative and other expenses									5
	Distribution expenses									6
	Production expenses									7
	EBITDA			5			5			
	Depreciation			6						
	Depreciation and amortisation of intangible assets other than goodwill						6			
	Amortisation of goodwill						7			
	Operating income	7								
	Profit/(Loss) before financing costs				7			7		
	Operating profit		2	7		2	8		2	8
	Normal operations								3	
	Profit on sale of interest in associate								4	
	Dividend income		3			3			5	
	Net financing costs	8								
	Net finance costs									9
	Finance income				8			8		
	Finance costs			8	9		9	9		
	Net interest		4			4			6	
	Amortisation of goodwill: subsidiary		5							
	(Loss)/Income from associates	9	6			5			7	
	Share in retained earnings		7			6			8	
	Dilution of interest					7				
	Share in exceptional items		8							
	Dividends received		9			8			9	
	Fair value loss on derivative instruments						10			10
	Profit/(Loss) before taxation	10	10	9	10	9	11	10	10	11
ON THE LINE	Taxation	11	11	10	11	10	12	11	11	12
UNDER THE LINE	**Profit after taxation**	12	12	11	12	11	13		12	13
	Profit/(loss) for the year							12		
	Minority interest	13	13	12	13	12	14		13	14
	Earnings attributable to ordinary shareholders	14			14					
	Net profit attributable to ordinary class A shareholders		14	13		13	15		14	15
	Attributable to:							13		
	Equity holders of the parent							14		
	Minority interest							15		
	Profit/(loss) for the year							16		

Appendix E – Analysis of JSE listed companies

Analysis for a 3 year period – Classification practices in JSE Listed Companies														
INCOME STATEMENT														
CONSTRUCTION AND MATERIALS														
	Company Name	Cementation Company (Africa) Limited	Cementation Company (Africa) Limited	Ceramic Industries Limited	Masonite (Africa) Limited	Cementation Company (Africa) Limited	Murray & Roberts Holdings Limited	Ceramic Industries Limited	Masonite (Africa) Limited	Murray & Roberts Holdings Limited	Ceramic Industries Limited	Masonite (Africa) Limited	Murray & Roberts Holdings Limited
	Year	2001	2002	2003				2004			2005		
ABOVE THE LINE	Revenue		1	1	1	1	1	1	1	1	1	1	1
	Turnover	1											
	Cost of sales	2	2	2	2	2		2	2		2	2	
	Gross profit			3	3			3	3		3	3	
	Gross profit for the year	3	3			3							
	Operating expenses/(income)			4				4			4		
	Other operating income	5	5		4	5			4			4	
	Distribution expenses and allow ances				5				5				
	Distribution costs											5	
	Selling and general administrative expenses				6				6				
	Selling and marketing costs											6	
	Administrative expenses	4	4			4						7	
	Other operating expenses				7				7			8	
	Net plantation income				8				8				
	Forex (loss) profit					6							
	Other					7							
	Earnings before interest, exceptional items and depreciation						2			2			2
	Amortisation of goodw ill						3			3			
	Depreciation						4			4			3
	Earnings before exceptional items and interest						5			5			4
	Exceptional items						7			6			5
	Earnings before interest and taxation						8			7			6
	Interest paid						9						
	Interest expense									8			7
	Interest received						10						
	Interest income									9			8
	Currency (loss) gain on offshore treasury funds						11						
	Trading income				9				9			9	
	Movement in fair value of standing timber and sugar cane as a result of AC137				10				10				
	Fair value adjustment of biological assets											10	
	Operating income/(loss)			5				5			5		
	Operating profit before financing costs											11	
	Profit from operations				11				11				
	Net profit/(loss) from operations	6	6			8							
	Investment income			6				6			6		
	Finance costs			7				7			7		
	Net financing costs	7			12				12				
	Finance income											12	
	Finance expense											13	
	Net finance income (costs)		7			9							
	(Profit)/Loss attributable to minority shareholder			8				8					
	Income/(Loss) before taxation			9				9			8		
	Profit before tax(ation)				13				13			14	
	Net profit/(loss) before taxation	8	8			10							
	Earnings before taxation						12			11			9
ON THE LINE	Taxation	9	9	10		11	13	10		12	9		10
	Income tax expense				14				14			15	
UNDER THE LINE	**Income after taxation**										10		
	Net profit for the year				15				15				
	Net profit/(loss) after taxation	10	10			12							
	Profit for the year											16	
	Earnings after taxation						14			13			11
	Income from associate						15			14			12
	Income attributable to minority shareholder										11		
	Minority shareholders' interest						16			15			13
	Preference dividends	11	11										
	Net income/(loss) attributable to ordinary shareholders			11				11			12		
	Net profit/(loss) retained for the year	12	12										
	Earnings attributable to ordinary shareholders						17			16			14

Analysis for a 3 year period – Classification practices in JSE Listed Companies										
INCOME STATEMENT										
ELECTRONIC AND ELECTRICAL EQUIPMENT										
	Company Name	Bloc Cafca Limited	Bloc Cafca Limited	Stella Vista Technologies Ltd	Stella Vista Technologies Ltd	Setpoint Technology Holdings Limited	Stella Vista Technologies Ltd	Setpoint Technology Holdings Limited	Setpoint Technology Holdings Limited	
	Year	2001	2002		2003		2004		2005	
ABOVE THE LINE	Turnover	1	1							
	Revenue			1	1	1	1	1	1	
	Cost of sales	2	2	2	2	2	2	2	2	
	Gross profit	3	3	3	3		3	3	3	
	Gross margin					3				
	Other operating income	4	4							
	Distribution expenses	5	5							
	Operating costs			4	4		4			
	Operating expenses					4		4	5	
	Interest received								4	
	Administration expenses	6	6							
	Operating Profit/(Loss)	7	7	5	5	5	5			
	Income/(loss) before goodwill amortisation, capital items and foreign exchange gains							5		
	Operating profit before goodwill amortisation, impairment and capital items								6	
	Foreign exchange gains					6		8		
	Capital items					7		7	8	
	Goodwill amortisation/impairment							6	7	
	Profit/(loss) before finance charges					8				
	Income/(loss) before finance costs							9	9	
	Net financing (cost)/income	8	8	6	6		6			
	Net finance charge					9				
	Finance costs							10	10	
	Gain on net monetary position	9	9							
	Profit/(Loss) before taxation	10	10	7	7	10	7		11	
	Income before taxation							11		
ON THE LINE	Taxation	11	11	8	8	11	8	12	12	
UNDER THE LINE	**Profit/(loss) after taxation**	12	12			12			13	
	Income after taxation							13		
	Net (loss)/profit for the year			9	9		9			
	Minority interest					13				
	Profit/(loss) attributable to ordinary shareholders					14				
	Profit after taxation - Attributable to:									
	Ordinary shareholders							14		
	Equity holders of Set Point								14	
	Minority interest							15	15	

Appendix E – Analysis of JSE listed companies

Analysis for a 3 year period – Classification practices in JSE Listed Companies										
INCOME STATEMENT										
EQUITY INVESTMENT INSTRUMENTS										
	Company	Aquila Growth Limited	Aquila Growth Limited	Eureka Industrial Limited	Sabvest Limited	Aquila Growth Limited	Eureka Industrial Limited	Sabvest Limited	Eureka Industrial Limited	Sabvest Limited
	Year	2002	2003			2004			2005	
ABOVE THE LINE	Revenue	1	1			1	1		1	
	Gross revenue			1						
	Other operating income					2				
	Gross income from operations and investments				1			1		1
	Dividends received				2			2		2
	Interest received				3			3		3
	Income on financial instruments and shares									4
	Fees and other income				4			4		5
	Fair value adjustment to investments									6
	Share of equity accounted retained income				5			5		7
	Administrative expenditure					3				
	Operating expenditure	2	2			4				
	Operating (loss)/profit	3	3	2		5	2		2	
	Depreciation			3			3			12
	Net finance income	4	4			6				
	Interest paid				6			6		8
	Net funding costs			4			4		3	
	Net interest (paid)/received			5			5		4	
	Preference dividend paid			6			6		5	
	Net (loss)/surplus on long-term investments			7			7			
	Net (deficit)/surplus on long-term investments								6	
	Net (loss)/income	5	5			7				
	Net income from operations and investments				7					9
	Income from operations and investments							7		
	Operating costs				8			8		10
	Net income before exceptional items				9			9		
	Exceptional items profit/(losses)			9	10			10		11
	Group				11			11		
	Net losses arising from former finance operation				12			13		
	Associates				13			12		
	Amortisation of goodw ill				14			14		
	Share of results of associate companies	6	6							
	Share of results of associated companies before taxation					8				
	Share of profit/(loss) from associate company			8						
	Profit/(loss) before taxation	7	7	10		9	8		7	
	Net income/(loss) before taxation				15			15		13
ON THE LINE	Taxation	8	8			10				
	Taxation reversed/(provided)			11			9		8	
	Taxation - deferred				16			16		14
UNDER THE LINE	**Net profit/(loss) after tax**	9	9			11				
	Net profit/(loss) for the year			12			10		9	
	Net income/(loss) attributable to ordinary shareholders				17					
	Net income/(loss) attributable to equity shareholders									15
	Net income for the year							17		
	Minority interest	10	11			12				
	Group profit/(loss)	11								
	Net profit/(loss)		12							
	Profit/(loss)					13				

Appendix E – Analysis of JSE listed companies

Analysis for a 3 year period – Classification practices in JSE Listed Companies										
INCOME STATEMENT										
	Company	Pick n Pay Stores Limited (Food and drug retailers)	Network Healthcare Holdings Limited (Health care equipment)	Sappi Limited (US$) (Forestry and paper)	Pick n Pay Stores Limited (Food and drug retailers)	Network Healthcare Holdings Limited (Health care equipment)	Sappi Limited (US$) (Forestry and paper)	Pick n Pay Stores Limited (Food and drug retailers)	Network Healthcare Holdings Limited (Health care equipment)	Sappi Limited (US$) (Forestry and paper)
	Year	2003			2004			2005		
ABOVE THE LINE	**Revenue**	1	1		1	1		1	1	
	Turnover	2			2			2		
	Sales			1			1			1
	Cost of merchandise sold	3			3			3		
	Cost of sales			2			2			2
	Gross profit	4		3	4		3	4		3
	Selling, general and administrative expenses			4			4			4
	Other expenses						5			5
	Other income	5			5			5		
	Net operating costs before depreciation and amortisation		2			2			2	
	Operating profit/(loss) before depreciation (EBITDA)									
	Operating profit/(loss) before depreciation and amortisation(EBITDA)		3			3			3	
	Depreciation and amortisation		4			4			4	
	Operating profit before abnormal items					5			5	
	Abnormal items					6			6	
	Operating profit (EBIT)		5			7			7	
	Operating profit/(loss)			5			6			6
	Trading expenses	6			6			6		
	Employee costs	7			7			7		
	Occupancy	8			8			8		
	Operations	9			9			9		
	Merchandising and administration	10			10			10		
	Goodw ill amortisation	16			15			11		
	Non-trading loss			6						
	Trading profit	11			11			12		
	Interest received	12			12	8		13	8	
	Interest paid	13			13	9		15	9	
	Net finance charges		6	7						
	Dividends received	14			14			16		
	Operating profit	15						14		
	Net finance costs						7			7
	Gross interest and other finance costs						8			
	Interest received						9			8
	Interest capitalised						10			9
	Net foreign exchange gains						11			10
	Net loss/(gain) on marking to market of financial instruments						12			
	Net fair value loss/(gain) on financial instruments									11
	Exceptional items	17						17		
	Profit/(Loss) before taxation	18	7	8	16	10	13	18	10	12
ON THE LINE	Taxation benefit									13
	Tax	19	8	9	17	11	14	19	11	
UNDER THE LINE	**Profit/(Loss) after taxation**	20	9			12			12	
	Attributable earnings of associates		10			13			13	
	Profit/(Loss) after taxation including associates		11			14			14	
	Outside shareholders' interest									
	Minority interest	21	12			15			15	
	Net profit/(loss) for the year	22		10	18		15	20		14
	Earning/(Loss) attributable to ordinary shareholders		13			16			16	

Appendix E – Analysis of JSE listed companies

Analysis for a 3 year period – Classification practices in JSE Listed Companies														
INCOME STATEMENT														
FOOD PRODUCERS														
Company		Namibian Sea Products Limited	Astral Foods Limited	Namibian Sea Products Limited	W B Holdings Limited	Illovo Sugar Limited	Astral Foods Limited	Namibian Sea Products Limited	W B Holdings Limited	Illovo Sugar Limited	Astral Foods Limited	W B Holdings Limited	Illovo Sugar Limited
Year		2002	2003				2004				2005		
ABOVE THE LINE	Revenue	1	1	1	1	1	1	1	1	1	1	1	1
	Cost of sales		2		2		2						
	Gross profit		3		3		3						
	Operating expenses		4				4						
	Distribution costs		5				5						
	Marketing expenditure		6				6						
	Other operating income		7										
	Production costs								2			2	
	Other income				4		7		3			3	
	Other operating expenses				5				4			4	
	Administrative expenses				6				5			5	
	Fair value adjustment: agricultural produce								6			6	
	Fair value adjustment: biological assets								7			7	
	Exceptional items								8			8	
	Operating profit/(loss)	2	8	2			8	2			2		
	Profit/(Loss) from operations				7	2			9	2		9	2
	Net finance income/(costs)		9		8		9		10			10	
	Net interest received/(paid)										3		
	Net financing costs					3				3			3
	Finance costs	3		3				3					
	Investment income	4		4				4					
	Dividend income					4				4			4
	Exceptional items	5											
	Profit/(Loss) before taxation and abnormal items					5				5			5
	Abnormal items					6				6			6
	Profit/(Loss) before taxation	6	10	5	9	7	10	5	11	7	4	11	7
ON THE LINE	Taxation	7	11	6	10	8	11	6	12	8	5	12	8
UNDER THE LINE	**Profit/(Loss) after taxation**					9				9			9
	Attributable to outside shareholders of subsidiary companies					10				10			10
	Profit/(Loss) from ordinary activities		12										
	Minority interests		13										
	Net profit/(loss) for the year		14		11		12		13		6	13	
	Minority interests						13				7		
	Attributable profit to ordinary shareholders						14				8		
	Net profit/(loss) attributable to ordinary shareholders	8		7		11		7		11			11

Appendix E – Analysis of JSE listed companies

Analysis for a 3 year period – Classification practices in JSE Listed Companies

INCOME STATEMENT

GENERAL FINANCIAL

	Company	Indequity Group Limited	Micromega Holdings Limited	M Cubed Holdings Limited	Capitec Bank Holdings Limited	Cadiz Holdings Limited	Indequity Group Limited	Peregrine Holdings Limited	Enterprise Risk Management Limited	Micromega Holdings Limited	Wooltru Limited	M Cubed Holdings Limited	Capitec Bank Holdings Limited	Cadiz Holdings Limited	Indequity Group Limited	Peregrine Holdings Limited	Enterprise Risk Management Limited	Micromega Holdings Limited	Wooltru Limited	M Cubed Holdings Limited	Capitec Bank Holdings Limited	Cadiz Holdings Limited	Peregrine Holdings Limited	Enterprise Risk Management Limited	Wooltru Limited
	Year	2002		2003								2004								2005					
ABOVE THE LINE	Turnover								1								1								
	Net revenue			1								1								1					
	Gross operating revenue					1								1								1			
	Gross revenue		1																						
	Revenue							1		1	1					1		1	1				1		1
	Cost of revenue			2								2								2					
	Cost of sales		2								2							2	2						2
	Gross profit		3	3							3	3						3	3	3					3
	Operating expenditure			4								4								4					
	Operating costs		5							3								5							
	Operating expenses				8	2		2					9	2		2						4	2			
	Results of operating activities											5								5					
	Operating profit/(loss) before net finance income			5																					
	Interest on loans and advances				1																				
	Net finance income/(expense)			6								6													
	Net finance income/(costs)				2																				
	Interest income												1								1	2			
	Interest expense												2								2				
	Net interest income				3								3								3				
	Finance income																			6					
	Finance expense																			7					
	Finance costs		8							6	9							8	11			6			11
	Net interest received/(paid)							4								4							4		
	Finance charges	19					19								16										
	Net bad debts				4																				
	Net impairment from lending activities												4								4				
	Income from lending activities				5								5								5				
	Other operating income				6																				
	Fees and other income												6												
	Net fee income																				6				
	Dividend income																				7				
	Net movement in financial instruments held at fair value																				8				
	Non-banking gross profit												7								9				
	Other income		4							2								4			10				
	Income from operations				7								8								11				
	Banking operating expenses																				12				
	Non-banking expenses												10												
	Non-banking operating expenses																				13				
	Goodw ill amortised													3											
	Depreciation and amortisation										4								4						4
	Occupancy costs										5								5						5
	Employment costs										6								6						6
	Other operating costs										7								7						7
	Operating profit/(loss)		6		9	3			2	4			11	4			2	6				5		1	
	Profit/(Loss) from operations							3			8					3							3		
	Unrealised loss on long-term assurance fund investments							5																	
	Realised and unrealised net changes in fair value of long-term assurance fund investments															5							5		
	Gain/(Loss) on revaluation of long-term fund liability							6								6									
	Transfer of long term assurance fund liability																						6		
	Income from associate companies							7								7							7		
	Profit from disposal of business								3																
	Capital impairment and losses							8																	
	Net investment income					4								5								3			
	Investment income	1	7				1		4	5					1		3	7						2	
	Interest received	2					2								2										
	Dividends received	3					3																		
	Realised income/(loss) - marketable securities	4					7																		
	Unrealised income/(loss) - marketable securities	5																							
	Investment management and other income	6					8								3										
	Investment banking and private equity income	7					9								4										
	Fees received	8					10								5										
	Profit on sale of shares	9																							
	Unrealised income/(loss) - other investments	10																							
	Realised income/(loss) - other investments														6										
	Private equity opearting income	11					11								7										

Appendix E – Analysis of JSE listed companies

Analysis for a 3 year period – Classification practices in JSE Listed Companies

INCOME STATEMENT

GENERAL FINANCIAL

	Company	Indequity Group Limited	Micromega Holdings Limited	M Cubed Holdings Limited	Capitec Bank Holdings Limited	Cadiz Holdings Limited	Indequity Group Limited	Peregrine Holdings Limited	Enterprise Risk Management Limited	Micromega Holdings Limited	Wooltru Limited	M Cubed Holdings Limited	Capitec Bank Holdings Limited	Cadiz Holdings Limited	Indequity Group Limited	Peregrine Holdings Limited	Enterprise Risk Management Limited	Micromega Holdings Limited	Wooltru Limited	M Cubed Holdings Limited	Capitec Bank Holdings Limited	Cadiz Holdings Limited	Peregrine Holdings Limited	Enterprise Risk Management Limited	Wooltru Limited
	Year	2002		2003								2004								2005					
ABOVE THE LINE																									
	Insurance income	12					12								8										
	Net premiums earned	13					13																		
	Net premiums earned - proprietary underwriting														9										
	Net premiums earned - cell captive underwriting														10										
	Commission received	14					14								11										
	Fees received	15					15								12										
	Total revenue	16					16								13										
	Expenses attributable to cell holders	17					17								14										
	Net underwriting expenses and claims incurred - proprietary underwriting	18					18								15										
	Income from associates									7								9							
	Operating expenses	20					20								17										
	Total expenses	21					21								18										
	Profit from ordinary activities															9							8		
	Share of profit of associates			7																8					
	Minority interest											7													
	Amortisation/write-off of goodwill							9								8				9					
	Goodwill amortised				5																				
	Profit before non-trading items											8								10					
	Net profit before exceptional items										10														
	Profit before exceptional items																	8							8
	Amortisation of goodwill											9													
	Disposal of business																			11					
	Capital profit on sale of business of subsidiary															10									
	Capital surplus on sale of subsidiary/business of subsidiary																						9		
	Profit from disposal of business																4								
	Capital impairment and losses															11									
	Capital impairment																						10		
	Exceptional items				10						11		12						9						9
	Profit/(Loss) from operations																		10						10
	Profit/(Loss) before tax(ation)	22	9		11		22	10	5	8			13		19	12	5	10				7	11	3	
	Net profit/(loss) before taxation			8							12	10							12	12					12
	Operating profit before tax																				14				
	Net income before taxation					6								6											
ON THE LINE	Taxation	23	10	9	12	7	23	11		9	13	11	14	7	20	13		11	13	13	15	8	12	4	13
	SA normal taxation								6								6								
	Secondary tax on companies								6																
UNDER THE LINE	**Net profit after taxation**			10							14														
	Net profit for the year											12								14					
	Profit for the year																					9			
	Net income after taxation					8																			
	Profit/(Loss) from ordinary activities	24					24							8	21										
	Profit/(Loss) after taxation		11		13			12	7	10						14	7	12					13	5	
	Minority interest			11				13		11						15		13					14		
	Minority shareholders' interest in private equity investments' losses	25					25								22										
	Preference dividends										15														
	Headline earnings attributable to shareholders			12								14								17					
	Disposal of business																			15					
	Amortisation/write-off of goodwill			13								13								16					
	Equity accounted profits of associate companies		12																						
	Earnings/(Loss) attributable to ordinary shareholders		13	14																					
	Attributable earnings							14								16							15		
	Profit/(Loss) attributable to ordinary shareholders									12								14							
	Net profit attributable to shareholders				14																				
	Net profit/(loss) attributable to ordinary shareholders										16								14						14
	Net profit after tax attributable to ordinary shareholders												15								16				
	Exceptional items		14							13								15							
	Net profit/(loss)	26	15				26			14					23			16							

Analysis for a 3 year period – Classification practices in JSE Listed Companies											
INCOME STATEMENT											
GENERAL INDUSTRIALS											
	Company	Bowler Metcalf Limited (2003 not avail)	Sekunjalo Investments Limited	Argent Industrial Limited	Sekunjalo Investments Limited	Bowler Metcalf Limited (2003 not avail)	Argent Industrial Limited	Sekunjalo Investments Limited	Bowler Metcalf Limited (2003 not avail)	Argent Industrial Limited
	Year	2002		2003		2004			2005	
ABOVE HE LINE	Revenue	1	1	1	1	1	1	1	1	1
	Cost of sales		2		2			2		
	Gross Profit		3		3			3		
	Other operating income	2	4		4	2		4	2	
	Gross income		5		5			5		
	Raw materials and other operating costs	3				3			3	
	Staffing costs	4				4			4	
	Rental and property finance	5				5			5	
	Depreciation	6				6			6	
	Maintenance	7				7			7	
	Transport	8				8			8	
	Administration, distribution and selling expenses		6		6			6		
	Profit/(Loss) from operations	9	7		7	9		7	9	
	Operating profit before financing costs			2			2			2
	Financing costs			3			3			3
	Finance cost		8		8			8		
	Net finance income/(costs)	10				10			10	
	Received	11				11			11	
	Paid	12				12			12	
	Profit/(Loss) before tax(ation)	13	9	4	9	13	4	9	13	4
ON THE LINE	Income tax(ation) gain/(expense)	14	10		10	14		10	14	
	Taxation			5			5			5
UNDER THE LINE	**Profit/(Loss) after tax(ation)**	15	11	6	11	15	6	11	15	
	Income/(Loss) from associate	16	12		12	16		12		
	Minority interest			7		17			16	
	Outside shareholders' interest		13		13			13		
	Net profit	17				18			17	
	Net profit for year end			8			7			6
	Net profit/(loss) for the year		14		14			14		

Appendix E – Analysis of JSE listed companies

Analysis for a 3 year period - classification practices of JSE listed companies

INCOME STATEMENT

GENERAL RETAILERS

	Company	Vaalauto Limited	Creditvision Holdings Limited	Edgars Consolidated Stores Limited	Mr Price Group Limited	Truworths International Limited	New Clicks Holdings Limited	Woolworths Holdings Limited	Vaalauto Limited	Creditvision Holdings Limited	Edgars Consolidated Stores Limited	Mr Price Group Limited	Truworths International Limited	New Clicks Holdings Limited	Woolworths Holdings Limited	Vaalauto Limited	Creditvision Holdings Limited	Edgars Consolidated Stores Limited	Mr Price Group Limited	Truworths International Limited	New Clicks Holdings Limited	Woolworths Holdings Limited
	Year	2002	2003							2004							2005					
ABOVE THE LINE	**Total revenues**			1	7						1	7						1	7			
	Revenue - retail sales			2							2							2				
	Revenue	1			1	1		1	1			1	1		1	1			1	1		1
	Retail sales				2							2							2			
	Income from leased departments				3							3							3			
	Shoplifting revenue				4							4										
	Shoplifting revenue - discontinuing operation																		4			
	Interest on receivables				5							5							5			
	Other income				6							6							6			
	Sale of merchandise					2							2							2		
	Turnover						1	2		1				1	2		1				1	2
	Income		1							2							2					
	Cost of sales	2		3		3			2		3		3			2		3		3		
	Cost of merchandise						2	3						2	3						2	3
	Costs and expenses				8							8							8			
	Cost of sales				9							9							9			
	Selling expenses				10							10							10			
	Administrative and other operating expenses				11							11							11			
	Gross profit	3		4		4	3	4	3		4		4	3	4	3		4		4	3	4
	Other revenue						4	5						4	5						4	5
	Other operating income															4						
	Operating costs	4																				
	Store costs			5							5							5				
	Other expenditure						5							5							5	
	Expenses					5							5									6
	Depreciation							6							6					5		7
	Depreciation and amortisation						6							6							6	
	Employee costs						8	8						8	8					6	8	9
	Occupancy costs						7	7						7	7					7	7	8
	Administrative expenses								4							5						
	Other operating costs			6			9	9			6			9	9			6		8	9	10
	Other operating expenses								5							6						
	Impairment of property, plant and equipment													10								
	Loss on disposal of property, plant and equipment													11							10	
	Goodw ill amortisation													12								
	Goodw ill impairment													13							11	
	Retail trading profit			7																		
	Trading profit					6					7		6					7		9		
	Gross profit/(loss) from trading		2																			
	Profit/loss from trading									3							3					
	Profit before net foreign exchange gains/(losses)				12																	
	Administration fee		3							4							4					
	Net foreign exchange gains/(losses)				13																	
	Credit and financial services profit/(loss)			8							8							8				
	Operating profit/(loss)			9			10	10			9				10			9				11
	Profit from operating activities				14							12							12			
	Profit/(Loss) from operations	5							6							7						
	Profit before interest and taxation													14							12	
	Auditors remuneration		5							6							6					
	Depreciation									7							7					
	Rentals iro operating leases									8							8					
	Dividend income			10							10							10				
	Dividends received					7							7							10		
	Interest received			11		8					11		8					11		11		
	Interest paid							11														
	Interest expense														11							
	Interest		4							5							5					
	Net interest paid						11							15							13	
	Interest paid - normal operations						12							16								
	Net interest paid - normal operations																				14	
	Interest accrued - Purchase Milton & Association (PM&A)						13							17								
	Provision against interest accrued - PM&A						14							18								

Appendix E – Analysis of JSE listed companies

Analysis for a 3 year period - classification practices of JSE listed companies

INCOME STATEMENT

GENERAL RETAILERS

	Company	Vaalauto Limited	Creditvision Holdings Limited	Edgars Consolidated Stores Limited	Mr Price Group Limited	Truworths International Limited	New Clicks Holdings Limited	Woolworths Holdings Limited	Vaalauto Limited	Creditvision Holdings Limited	Edgars Consolidated Stores Limited	Mr Price Group Limited	Truworths International Limited	New Clicks Holdings Limited	Woolworths Holdings Limited	Vaalauto Limited	Creditvision Holdings Limited	Edgars Consolidated Stores Limited	Mr Price Group Limited	Truworths International Limited	New Clicks Holdings Limited	Woolworths Holdings Limited
	Year	2002	2003							2004							2005					
ABOVE THE LINE	Net profit after interest						15															
	Profit before financing costs			12							12							12				
	Profit before financing costs, exceptional items and taxation					9							9							12		
	Financing costs			13							13							13				
	Net finance costs/(income)				15							13							13			
	Finance costs	6				10			7				10			8				13		12
	Provision - impairment of loan to PM&A						16															
	Profit before exceptional items and taxation					11							11							14		
	Net profit before exceptional items						17	12							12							
	Exceptional items					12	18	13					12		13					15		
	Profit on sale of stores						19															
	Loss on disposal of property, plant and equipment						20															
	Goodwill amortised						21															
	Profit/(Loss) before tax(ation)	7		14	16	13	22		8		14	14	13			9		14	14	16		
	Net income/(loss) before taxation		5							9							9					
	Net profit/(loss) before tax(ation)							14						19	14						15	13
ON THE LINE	Tax(ation)	8	6	15	17	14	23	15	9	10	15	15		20	15	10	10	15	15		16	14
	Income tax expense												14							17		
UNDER THE LINE	Earnings attributable to ordinary shareowners			16							16							16				
	Net profit for the year				18																	
	Profit/(Loss) after tax(ation)	9							10				15			11				18		
	Net profit/(loss) after tax(ation)							16							16							15
	Net income/(Loss) after taxation		7							11							11					
	Loan written off		8																			
	Investment written off		9																			
	Outside shareholders' interest							17							17							16
	Minority interest	10							11				16			12				19		
	Net profit/(loss) from continuing operations							18				16							16			
	Net profit for this year	11	9						12	12						13	12					
DISCONTINUING OPERATIONS	DISCONTINUING OPERATIONS											17							17			
	Profit/(Loss) from operating activities											18							18			
	Loss arising from discontinuance											19							19			
	Net finance costs/(income)											20							20			
	Exceptional items							19														
	Outside shareholders' interest							20														
	Loss before taxation																		21			
	Taxation																		22			
	Net profit/(loss) from discontinuing operations							21				21							23			
GROUP	Total group							22				22							24			
	Net profit/(loss) attributable to ordinary shareholders							23				23			18							17
	Net profit attributable to shareholders					15							17									
	Profit/(Loss) attributable to shareholders						24							21					25		17	
	Net profit for the period																			20		

Appendix E – Analysis of JSE listed companies

Analysis for a 3 year period – Classification practices in JSE Listed Companies									
INCOME STATEMENT									
INDUSTRIAL ENGINEERING									
	Company	Northern Engineering Industries Africa Limited (Liquidated 2002)	Bell Equipment Limited	Hudaco Industries Limited	Bell Equipment Limited	Hudaco Industries Limited	Bell Equipment Limited	Hudaco Industries Limited
	Year		2003		2004		2005	
ABOVE THE LINE	Revenue - Continuing operations		1		1		1	
	Turnover			1		1		1
	Cost of sales		2	2	2	2	2	2
	Gross profit		3	3	3	3	3	3
	Other operating income		4		4		4	
	Distribution costs		5		5		5	
	Administrative expenses		6		6		6	
	Other operating expenses		7		7		7	
	Operating expenses			4		4		4
	Profit/(Loss) from operating activities		8		8		8	
	Operating profit			5		5		5
	Capital items written off			6				
	Cost of closure of discontinued operation					6		6
	Capital items written off					7		7
	Profit before interest			7		8		8
	Finance costs		9		9		9	
	Finance income		10		10		10	
	Net finance revenue/(costs)			8		9		9
	Profit before taxation		11	9	11	10	11	10
ON THE LINE	Taxation		12	10	12	11	12	11
UNDER THE LINE	**Net profit/(loss) for the year**		13		13		13	
	Profit after taxation			11		12		12
	Share in associate company profits			12				
	Attributable to outside shareholders			13		13		
	Attributable to minorities							13
	Profit attributable to shareholders			14		14		14

Appendix E – Analysis of JSE listed companies

Analysis for a 3 year period – Classification practices in JSE Listed Companies										
INCOME STATEMENT										
	Company	Iscor Limited (Industrial metals)	Iscor Limited (Industrial metals)	Nu-World Holdings Limited (Leisure goods)	Aspen Pharmacare Holdings Limited (Pharmaceuticals and bitotechnology)	Iscor Limited (Industrial metals)	Nu-World Holdings Limited (Leisure goods)	Aspen Pharmacare Holdings Limited (Pharmaceuticals and bitotechnology)	Nu-World Holdings Limited (Leisure goods)	Aspen Pharmacare Holdings Limited (Pharmaceuticals and bitotechnology)
	Year	2002	2003			2004			2005	
ABOVE THE LINE	Revenue	1	1	1	1	1	1	1	1	1
	Operating expenses	2	2			2				
	Operating profit before interest			2			2		2	
	Cost of sales				2			2		
	Gross profit				3			3		
	Earnings before interest, taxation, depreciation and amortisation (Ebitda)		3			3				
	Depreciation		4			4				
	Amortisation of intangible assets		5			5				
	Net operating income/(expenses)				4					
	Other operating income							4		
	Selling and distribution expenses							5		
	Administrative expenses							6		
	Other operating expenses							7		
	Operating profit before amortisation of intangible assets				5					2
	Profit from operations before impairment and goodwill movements		6			6				
	Impairment credit/(charge)	7	7							
	Impairment reversal					7				
	Reversal of other provisions				6					
	Amortisation of goodwill - accelerated				7					
	Amortisation of goodwill - recurring				8					
	Amortisation of intangible assets				9					3
	Goodwill amortisation/negative goodwill realised	8	8							
	Investment income									4
	Goodwill impairment					8				
	Profit from operations		9			9				
	Net operating profit	3								
	Operating profit				10			8		5
	Net financing costs	4	10		11	10		9		6
	Interest paid			3			3		3	
	Loss from equity accounted investments	5								
	Net profit/(loss) from equity accounted investments		11			11				
	Profit/(Loss) on sale of discontinued operations				12					
	Exceptional items	6	12							
	Net profit before taxation				13			10		7
	Profit/(Loss) before taxation	9	13	4		12	4		4	
ON THE LINE	Taxation	10	14	5	14	13	5	11	5	8
UNDER THE LINE	**Net profit after taxation**			6	15		6	12	6	9
	Share of income/(loss) attributable to associate company									
	Net income			7						
	Outside shareholders' interest			8			7		7	
	Net profit for the year			9			8		8	
	Profit/(Loss) from ordinary activities	11	15			14				
	Minority interest				16	15				
	Net profit attributable to shareholders				17			13		10
	Net profit attributable to ordinary shareholders	12	16			16				

Analysis for a 3 year period – Classification practices in JSE Listed Companies								
INCOME STATEMENT								
INDUSTRIAL TRANSPORTATION								
	Company	Spectrum Shipping Limited	Spectrum Shipping Limited	Value Group Limited	Spectrum Shipping Limited	Value Group Limited	Value Group Limited
	Year	2002	2003		2004		2005
ABOVE THE LINE	Gross billings	1	1		1		
	Cost of billings	2	2		2		
	Turnover	3	3		3		
	Revenue			1		1	1
	Cost of sales			2		2	2
	Gross profit			3		3	3
	Other income	4	4		4		
	Other operating income			4		4	4
	Operating costs	5	5		5		
	Other operating expenses			5		5	5
	Operating profit before interest and taxation	6	6		6		
	Operating profit on ordinary activities			6		6	6
	Abnormal items			7			
	Investment income			8		7	7
	Interest received	7			7		
	Finance costs	8		9	8	8	8
	Net finance costs		7				
	Profit before taxation	9	8		9	9	9
	Profit before taxation on ordinary activities			10			
ON THE LINE	Taxation	10	9	11	10	10	10
UNDER THE LINE	**Profit after taxation**	11	10		11		
	Profit after taxation on ordinary activities			12			
	Profit for the year					11	11

Appendix E – Analysis of JSE listed companies

Analysis for a 3 year period – Classification practices in JSE Listed Companies								
INCOME STATEMENT								
LIFE INSURANCE								
	Company	Liberty Holdings Limited	Sage Group Limited	Liberty Holdings Limited	Sage Group Limited	Liberty Holdings Limited	Sage Group Limited
	Year	2002		2003		2004	
ABOVE THE LINE	Turnover		1				
	Life fund operating surplus	1					
	South African life assurance operating activities		2				
	Sage Life operations surplus/(deficit)				1		1
	Net earnings/(loss) attributable to Sage Life shareholders' fund				2		2
	Other operating income				3		3
	International operating activities		3				
	South African life assurance investing activities		4				
	Net surplus on disposal of international free assets		5				
	Group operating activities		6				
	Surplus/(Deficit)		7				
	Net premium income	2					
	Dividend, interest and net rental income attributable to life funds	3					
	Investment (deficits)/surpluses attributable to life funds	4					
	Claims and policy-owners' benefits	5					
	Commissions	6					
	Investment returns attributable to policyholders' funds					2	
	Policyholders' benefits under insurance contracts					3	
	Management expenses	7				4	
	Commission expenses					5	
	Tax(ation)	8				6	
	Life fund transfers	9					
	Fair value adjustment to policyholders' liabilities under investment contracts					7	
	Transfer to policyholders' liabilities under insurance contracts					8	
	Operating profit from insurance operations net of tax			1			
	Operating profit from insurance operations					9	
	Attributable earnings from Sage Life operations after taxation				4		4
	Revenue					1	
	Revenue earnings attributable to shareowners' funds	10		2			
	Operating income from financial services operations	11		3		10	
	Equity accounted earning from joint ventures					11	
	Dividend, interest and net rental income attributable to shareowners' funds	12					
	Investment income attributable to shareholders' assets and financial services operations			4			
	Investment gains attributable to shareholders' assets held for trading			5			
	Investment returns attributable to shareholders' funds					12	
	Management expenses	13				13	
	Management expenses attributable to shareholders' and financial services operations			6			
	Tax(ation)	14				14	
	Tax attributable to shareholders' and financial services operations			7			
	Preference dividend in subsidiary	15		8		15	
	Minority interests					16	
	Other activities				5		5
	Finance costs		8				
	Financing activities				6		6
	Income from investments		9				
	Discontinued international operations				7		7
	Profit/(Loss) before taxation		10		8		8
ON THE LINE	Taxation		11		9		
	Taxation relating to other Group activities						9
UNDER THE LINE	**Profit after taxation**		12				
	Foreign preference dividends		13				
	Net earnings/(loss) attributable to ordinary shareholders				10		10
	Headline earnings	16	14			17	
	Goodwill amortisation	17					
	Goodwill amortisation and impairment			9		18	
	Goodwill amortisation in joint venture investment gains					19	
	Investment gains					20	
	Minority interests					21	
	Investment (deficits)/surpluses attributable to shareowners' funds	18					
	Realised investment gains attributable to shareholders' assets			10			
	Capital gains tax attributable to shareowners' investment surpluses	19					
	Capital gains tax attributable to realised shareholders' investment gains			11			
	Total earnings	20		12		22	

Appendix E – Analysis of JSE listed companies

Analysis for a 3 year period – Classification practices in JSE Listed Companies										
INCOME STATEMENT										
MEDIA										
Company		Naspers Limited	Caxton and CTP Publishers and Printers Limited	Moneyweb Holdings Limited	Naspers Limited	Caxton and CTP Publishers and Printers Limited	Moneyweb Holdings Limited	Naspers Limited	Caxton and CTP Publishers and Printers Limited	Moneyweb Holdings Limited
Year		2003			2004			2005		
ABOVE THE LINE	Revenue	1	1	1	1	1	1	1		1
	Cost of providing services and sale of goods	2			2					
	Cost of sales			2						
	Selling, general and administration expenses	3			3			2		
	Gross turnover		2			2			1	
	Gross profit			3						
	Less: inter-group		3			3			2	
	Net turnover		4			4			3	
	Other operating income		5			5			4	
	Total operating income		6			6			5	
	Other operating expenses			4						
	Earnings before interest, taxation, depreciation, amortisation and impairment	4			4					
	Operating profit from operations before depreciation and amortisation (EBITDA)			5			2			
	Amortisation (EBITDA)									2
	Depreciation of property, plant and equipment	5			5					
	Depreciation			6			3			3
	Amortisation of development costs			7						
	Amortisation of website development costs						4			4
	Operating profit/(loss) before amortisation and impairment	6			6					
	Amortisation of goodwill and other intangible assets	7								
	Amortisation of goodwill				7					
	Amortisation of other intangible assets				8					
	Depreciation, amortisation and impairment expense		10			10			9	
	Impairment of programme rights	8			9					
	Changes in inventories of finished goods and work in progress		7			7			6	
	Raw materials and consumables used		8			8			7	
	Staff costs		9			9			8	
	Other net operating expenses/(income)		11			11			10	
	Total operating expenses/(income)		12			12			11	
	Operating profit/(loss)	9			10			3		
	Profit/(Loss) from operations		13	8		13	5		12	5
	Net finance income/(costs)	10						4		
	Finance income		14			14			13	
	Finance costs		15		11	15			14	
	Income from investments	11			12			5		
	Net investment income			9			6			6
	Share of equity-accounted results	11			13					
	Exceptional items	12			14			6		
	Associated companies		16							
	Income from associate (net of taxation)			10			7			7
	Profit/(Loss) on disposal of investments									8
	Fair value adjustment of investments									9
	Income before exceptional items		17							
	Exceptional items		18	11						
	Profit before goodwill amortisation			12						
	Profit before goodwill amortisation and impairments						8			
	Profit before goodwill									10
	Goodwill amortisation			13			9			11
	Profit/(Loss) before taxation	13			15			7		
	Income before taxation		19			16			15	
	Net profit/(loss) before taxation			14			10			12
ON THE LINE	Taxation	14	20		16	17		8	16	13
	Income tax expense			15			11			
UNDER THE LINE	**Profit/(Loss) after taxation**	15			17					
	Income after taxation		21			18			17	
	Net loss for the year			16			12			14
	Income from associates					19			18	
	Minority interest	16			18					
	Attributable to minority interest					20			19	
	Attributable to outside shareholders		22							
	Preference dividends		23							
	Fixed component of preference dividends					21			20	
	Net income/(loss) from continuing operations	17								
	Profit/(loss) from discontinuing operations	18								
	Profit/(loss) arising on discontinuance of operations	19								
	Net income/(loss) attributable to shareholders	20			19					
	Profit/(Loss) attributable to shareholders							9		
	Earnings attributable to ordinary shareholders		24			22			21	

Analysis for a 3 year period – Classification practices in JSE Listed Companies

INCOME STATEMENT

MINING

	Company	Zenith Concessions Limited	Afrikander Lease Limited, The	Sub Nigel Gold Mining Company Limited	Anglo American Platinum Corporation Limited	Messina Limited	Diamond Core Resources Limited	Zenith Concessions Limited	Assmang Limited	Kumba Resources Limited	Sallies Limited	Afrikander Lease Limited, The	Gold Fields Limited	Sub Nigel Gold Mining Company Limited	Anglo American Platinum Corporation Limited	Messina Limited	Diamond Core Resources Limited	Zenith Concessions Limited	Assmang Limited	Kumba Resources Limited	Sallies Limited	Afrikander Lease Limited, The	Gold Fields Limited	Sub Nigel Gold Mining Company Limited	Anglo American Platinum Corporation Limited	Messina Limited	Diamond Core Resources Limited	Assmang Limited	Kumba Resources Limited	Sallies Limited	Gold Fields Limited
	Year	2002					2003										2004										2005				
ABOVE THE LINE	Revenue	1	1	1					1	1	1	1				1			1	1	1	1	1			1		1	1	1	1
	Turnover								2				1						2									2			
	Income					1																									
	Gross sales revenue				1										1										1						
	Commissions paid				2										2										2						
	Net sales revenue				3										3										3						
	Cost of sales				4				3		2		2		4	2			3		2				4	2		3		2	2
	Working cost		2								2										2										
	Gross profit/(loss)		3						4			3				3			4			3				3		4			
	Profit/(Loss) from mining										3										3										
	Profit/(Loss) from mining operations																														3
	Gross revenue							1																							
	Other operating income						1		5							4	1		5							4	1	5				
	Other income																	1													
	Operating expenses	2				2				2										2									2		
	Operating costs							2										2						2							
	Cash operating costs				5																										
	Distribution costs															5															
	Distribution expenses																									5					
	Administrative expenses										4					6					4				6					4	
	General and administrative											4										4									
	Amortisation of goodwill										5										5									
	Amortisation of mineral rights										6										6								5	
	Amortisation of operating assets				6																										
	Decrease/(Increase) in metal inventories				7																										
	Exploration costs						2										2										2				
	Exploration expenditure											5										5									
	Other operating expenses						3		6							7	3		6							7	3	6				
	Impairment of long life assets																					6									
	Write down of heap leach and other stock items																					7									
	Other net costs		4									6										8									
	Other costs				8																										
	Gold inventory change																							3							
	Rehabilitation provision																										4				
	Impairment losses						4																				5				
	Preference share capital cancelled																4														
	Loans written off						5										5														
	Expenditure			2										1										1							
	Gross profit on metal sales				9										5										5						
	Other net income/(expenditure)				10										6										6						
	Market development and promotional expenditure				11										7										7						
	Net income/(expenditure) before finance charges						6										6														
	Operating profit/(loss)	3	5	3	12			3				7		2	8			3				9	4	2	8		6				3
	Amortisation and depreciation																						5								
	Net operating profit/(loss)									3			3							3			6								
	Profit/(Loss) from operations								7							8										8						
	Net profit/(loss) from operations																		7									7			
	Investment income			4			7				8		4	3			7				8			3			7			7	4
	Net investment income				13																										
	Interest received							4	8									4	8									8			
	Interest and dividends received																								10						
	Interest income																				4								3		
	Interest expense																				5								4		
	Interest expensed																								9						
	Finance income/(costs)	4					8	5	9		7			4			8		9		7		7	4			8	9		6	
	Finance income/(expense)												5																		5
	Net financing costs		6							4		8				9						10				9					
	Net interest received/(paid)														9																

Appendix E – Analysis of JSE listed companies

Analysis for a 3 year period – Classification practices in JSE Listed Companies

INCOME STATEMENT

MINING

	Company	Zenith Concessions Limited	Afrikander Lease Limited, The	Sub Nigel Gold Mining Company Limited	Anglo American Platinum Corporation Limited	Messina Limited	Diamond Core Resources Limited	Zenith Concessions Limited	Assmang Limited	Kumba Resources Limited	Sallies Limited	Afrikander Lease Limited, The	Gold Fields Limited	Sub Nigel Gold Mining Company Limited	Anglo American Platinum Corporation Limited	Messina Limited	Diamond Core Resources Limited	Zenith Concessions Limited	Assmang Limited	Kumba Resources Limited	Sallies Limited	Afrikander Lease Limited, The	Gold Fields Limited	Sub Nigel Gold Mining Company Limited	Anglo American Platinum Corporation Limited	Messina Limited	Diamond Core Resources Limited	Assmang Limited	Kumba Resources Limited	Sallies Limited	Gold Fields Limited
	Year	2002					2003										2004										2005				
ABOVE THE LINE	Market-to-market derivative financial instrument																					11									
	Unrealised gain on financial instruments												6																		6
	Realised gain/(loss) on financial instruments												7																		7
	Gain/(Loss) on financial instruments																						8								
	Other income/(expenses)												8										9								
	Other operating income/(costs)																														8
	Exploration expense												9																		9
	Exploration																						10								
	Profit on disposal of St Helena												10																		
	Income/(Loss) from equity accounted investments									5										6									5		
	Income from associates				14										10										11						
	Profit/(Loss) on disposal of property, plant and equipment										9										9								8		
	Profit on sale of investments												11									12									
	Profit on disposal of investments																														12
	Profit on disposal of exploration rights																														13
	Market-to-market of investments																					13									
	Share of results of associate after tax																														10
	Harmony hostile bid costs																														14
	IAMGold transaction costs																														15
	Impairment charges									6																					
	Impairment of long life assets											9																			
	Impairment of assets																														11
	Impairment of critical spares - St Ives																														16
	Write down of heap leach and other stock items											10																			
	Goodwill amortisation									7																					
	Net foreign exchange gain/(loss)										10										10								9		
	Property, plant and equipment write-off										11																				
	Provision for onerous contract																														10
	Provision for dead freight																														11
	Retirement of health care obligations												12																		
	Premium on retirement of health care obligations																														17
	Other												13																		
	Other income/(costs)																														18
	Profit before taxation and exceptional items																						11								
	Exceptional gain/(losses)																						12								
	Net profit/(loss) for the year						9										9										9				
	Net profit/(loss) before taxation	5									12				10						11								12		
	Profit/(Loss) before taxation		7	5	15	3				8		11	14	5	11			5		7		14	13	5	12	10			6		19
	Profit/(Loss) for the year							6																							
	Profit/(Loss) before taxation and State's share of profit								10																						
	Net profit/(Loss) before taxation and State's share of profit																		10									10			
ON THE LINE	Taxation				16	4				9	13	12			12					8	12				13	11			7	13	
	Taxation and State's share of profit								11										11								11			
	Mining and income tax												15										14								20
UNDER THE LINE	**Net profit/(loss) for the year**	6	8						12		14	13							12		13	15					12		14		
	Net profit/(loss)				17	5		7							13	11		6							14	12					
	Profit/(Loss) from ordinary activities									10										9											
	Profit for the period																												8		
	Profit/(Loss) after taxation			6									16	6									15	6							21
	Accumulated profit/(loss) at beginning of year							8																							
	Profit for the period attributable to:																												9		
	Equity holders of the parent																												10		
	Minority interest																			10			16						11		
	Minority shareholders' interest												17																		22
	Accumulated profit/(loss) at end of year							9																							
	Net profit/(loss) attributable to ordinary shareholders									11										11											
	Net earnings												18										17								23

Analysis for a 3 year period – Classification practices in JSE Listed Companies								
INCOME STATEMENT								
NONLIFE INSURANCE								
Company		Alexander Forbes Limited	Santam Limited	Alexander Forbes Limited	Santam Limited	Alexander Forbes Limited	Santam Limited
Year		2003		2004		2005	
ABOVE THE LINE	Revenue from operations	1		1		1	
	Other revenue	2		2		2	
	Total revenue	3		3		3	
	Gross w ritten premium		1		1		1
	Less: reinsurance premium		2		2		2
	Net premium		3		3		3
	Less: change in unearned premium		4		4		4
	Earned premium		5		5		
	Net insurance premium revenue						5
	Operating expenses	4		4		4	
	Claims incurred		6		6		
	Change in provision for outstanding claims		7		7		
	Commission		8		8		
	Management expenses		9		9		
	Investment income						6
	Income from reinsurance contracts ceded						7
	Net realised gains on financial assets						8
	Net fair value gains on assets at fair value through income						9
	Other operating income						10
	Net income						11
	Insurance claims and loss adjustment expenses						12
	Insurance claims and loss adjustment expenses recovered from reinsurers						13
	Net insurance benefits and claims						14
	Expenses for acquisition of insurance contracts						15
	Expenses for marketing and administration						16
	Expenses for asset management services rendered						17
	Results of operating activities						18
	Operating profit/(loss)	5		5			
	Operating profit/(loss) before non-recurring restructuring costs					5	
	Underwriting surplus		10				
	Underwriting result				10		
	Non-recurring restructuring costs					6	
	Operational interest income	6		6			
	Investment return on insurance funds		11		11		
	Trading profit	7		7			
	Operating profit/(loss) after non-recurring restructuring costs					7	
	Operating income		12				

Appendix E – Analysis of JSE listed companies

Analysis for a 3 year period – Classification practices in JSE Listed Companies								
INCOME STATEMENT								
NONLIFE INSURANCE								
Company		Alexander Forbes Limited	Santam Limited	Alexander Forbes Limited	Santam Limited	Alexander Forbes Limited	Santam Limited
Year		2003		2004		2005	
ABOVE THE LINE	**Net insurance result**				12		
	Net financing income/(costs)	8					
	Net finance income/(costs)			8			
	Net interest income/(costs)					8	
	Finance costs						19
	Investment income		13		13		
	Income from associated companies		14		14		
	Share of profits/(loss) of associates						20
	Cell owners' interest						21
	Amortisation of goodwill				15		
	Profit before associates	9		9			
	Share of profits of associates	10				9	
	Associates' profits			10			
	Non-trading currency gain/(loss)			11		10	
	Profit before non-trading items	11					
	Headline adjusting items	12					
	Unrealised currency gain/(loss)	13					
	Headline profit before tax			12		11	
	Goodwill amortisation and other capital items			13			
	Impairment and other capital items					12	
	Profit before taxation	14		14		13	22
	Income before taxation		15		16		
ON THE LINE	Taxation	15	16	15	17	14	
	Income tax expense						23
UNDER THE LINE	**Profit after taxation**	16		16		15	
	Income after taxation				18		
	Profit for the year						24
	Outside shareholders' interest	17					
	Equity holders of the company						25
	Minority interests		17	17	19	16	26
	Income attributable to cell owners				20		
	Attributable profit	18		18			
	Net profit for the year					17	
	Headline earnings		18				
	Net income				21		
	Amortisation of goodwill		19				
	Attributable earnings to shareholders		20				
	Earnings attributable to equity shareholders						27

Analysis for a 3 year period – Classification practices in JSE Listed Companies							
INCOME STATEMENT							
PERSONAL GOODS							
Company		House of Busby Limited, The	Richemont Securities AG	House of Busby Limited, The	Richemont Securities AG	House of Busby Limited, The	Richemont Securities AG
Year		2003		2004		2005	
ABOVE THE LINE	Revenue	1		1		1	
	Sales		1		1		1
	Cost of sales	2	2	2	2	2	2
	Gross profit	3	3	3	3	3	3
	Other operating costs	4		4		4	
	Net other operating costs		4		4		4
	Operating profit		5		5		5
	Operating income before profit/(loss) on foreign exchange	5		5		5	
	Profit/(Loss) on foreign exchange	6		6		6	
	Operating income/(loss) before depreciation and amortisation of intangibles	7		7		7	
	Depreciation	8		8		8	
	Amortisation of intangibles	9		9		9	
	Impairment of goodwill					10	
	Operating income						
	Operating income/(loss) before net finance charges	10		12		11	
	Net investment income/(cost)	11		13		12	
	Net income/(loss) before exceptional items	12					
	Operating income/(loss) before exceptional items			10			
	Exceptional items	13	6	11	6		6
	Profit before net investment expense and taxation		7				
	Profit before net investment income				7		7
	Net investment expense/(income)		8		8		8
	Net income/(loss) before taxation	14		14		13	
	Profit before taxation		9		9		9
ON THE LINE	Taxation	15	10	15	10	14	10
UNDER THE LINE	**Net income/(loss) after taxation**	16		16		15	
	Profit after taxation		11		11		11
	Attributable to minorities	17		17		16	
	Minority interest		12		12		12
	Share of results of associated undertaking		13		13		13
	Net income attributable to ordinary shareholders	18		18		17	
	Net profit		14		14		14

Appendix E – Analysis of JSE listed companies

Analysis for a 3 year period – Classification practices in JSE Listed Companies

INCOME STATEMENT

REAL ESTATE

	Company	Jigsaw Holdings Limited (Delisted)	Fairvest Property Holdings Limited	Jigsaw Holdings Limited (Delisted)	Marshalls Limited	Ambit Properties Limited	ApexHi Properties Limited	Fairvest Property Holdings Limited	Jigsaw Holdings Limited (Delisted)	Marshalls Limited	Premium Properties Limited	Resilient Property Income Fund Limited	SA Retail Properties Limited	Prima Property Trust	Ambit Properties Limited	ApexHi Properties Limited	Fairvest Property Holdings Limited	Marshalls Limited	Premium Properties Limited	Resilient Property Income Fund Limited	SA Retail Properties Limited	Prima Property Trust	Ambit Properties Limited	ApexHi Properties Limited	Premium Properties Limited	Resilient Property Income Fund Limited	SA Retail Properties Limited	Prima Property Trust
	Year	2001	2002			2003									2004									2005					
ABOVE THE LINE	Revenue	1		1	1	1		1				1	1	1	1	1		1		1	1	1		1	1	1		1	1
	Rental													2															
	Rental income and recoveries																					2							2
	Operating costs recovered													3															
	Interest received													4								3							3
	Other income													5								4							
	Gross revenue																1												
	Turnover		1					1			1								1										
	Operating profit/(loss)										2	3							2	3					3				
	Operating expenses														2														
	Operating costs		2					2									2								2				
	Net operating expenses											2								2									
	Service fees and administrative costs													6								5							4
	Secretarial fees																					6							5
	Auditors remuneration													7								7							6
	Property expenses						2							9		2						10	2	2					8
	Administrative expenses						3									3							8	3					
	Letting cost amortisation/depreciation						4									4								4					
	Depreciation																					9							
	Other revenue net of costs							3									3												
	Fair value adjustment - debentures							4									4												
	Fair value adjustment - investments																5												
	Loss on sale of investment property							5									6												
	Fair value adjustment - investment properties																7												
	Change in value of investment properties							6																					
	Debt w ritten off							7																					
	Change in value of financial assets							8																					
	Loss on sale - shares in subsidiary							9																					
	Loss on settlement of amount due from vendor							10																					
	Financial asset accounted for							11									8												
	Fair value adjustment - put options							12																					
	Net rental income from properties												2		3								3				2		
	Net rental and related income																									1			
	Net operating income from properties																				2								
	Capital profit on disposal of investment properties										3								3						4				
	Fair value adjustment of investment properties																								5				
	Impairment loss										4								4						6				
	Write up of investment properties										5								5						7				
	Investment property portfolio											4								5									
	Investment in listed property securities											5								6									
	Total distribution income from equity investments																									2			
	Profit/(Loss) from operations	2		2			5		2		6					5			6					5	8				
	Operating profit/(loss)		3					13									9												
	Operating profit/(loss) before interest and taxation				2																								
	Net operating profit/(loss) before interest and taxation											6																	
	Operating profit/(loss) before interest																	2											
	Interest earned												3		4						3								
	Interest received		4		3			14									10	3										3	
	Interest income															7							5	7					
	Interest paid				4													4											
	Finance costs						6						8		5	6					4	8	7	6			4	7	
	Finance charges		5					15			10						12		10						12				
	Net finance costs	3		3					3																				
	Interest on loans											7								10									
	Interest on units issued cum-distribution											8								11									
	Interest to linked debenture holders											9								12									
	Investment income																							8					
	Income from investments										7								7						9				
	Income from associate										8								8	4					10				
	Other income																			7									
	Amortisation of debenture issue expenses												4																
	Profit on disposal of investments																									3			
	Capital profit on disposal of investment properties																										5		
	Operating profit after interest																	5											
	Profit before debenture interest						7									8								9					
	Net profit before debenture interest												5																
	Profit from ordinary activities before finance charges										9								9						11				
	Debenture interest income from associate company														6								6						
	Debenture interest						8	16					6			9	11							10					

Appendix E – Analysis of JSE listed companies

Analysis for a 3 year period – Classification practices in JSE Listed Companies

INCOME STATEMENT

REAL ESTATE

	Company	Jigsaw Holdings Limited (Delisted)	Fairvest Property Holdings Limited	Jigsaw Holdings Limited (Delisted)	Marshalls Limited	Ambit Properties Limited	ApexHi Properties Limited	Fairvest Property Holdings Limited	Jigsaw Holdings Limited (Delisted)	Marshalls Limited	Premium Properties Limited	Resilient Property Income Fund Limited	SA Retail Properties Limited	Prima Property Trust	Ambit Properties Limited	ApexHi Properties Limited	Fairvest Property Holdings Limited	Marshalls Limited	Premium Properties Limited	Resilient Property Income Fund Limited	SA Retail Properties Limited	Prima Property Trust	Ambit Properties Limited	ApexHi Properties Limited	Premium Properties Limited	Resilient Property Income Fund Limited	SA Retail Properties Limited	Prima Property Trust
	Year	2001	2002			2003									2004									2005					
ABOVE THE LINE	**Profit before fair value adjustments**														7									10					
	Net profit before fair value adjustments																					5						6	
	Profit/(Loss) before capital items						9									10								11					
	Income before revaluation and taxation																					11							9
	Change in fair value of investment properties		6				10								8	11								11	12				
	Goodwill amortisation/impairment						11															8							
	Net surplus on disposal of engineering business						12																		13				
	Net surplus/(deficit) on disposal of investment properties						13									12													
	Other expenses																							9					
	Profit/(Loss) on disposal of investment properties																							12					10
	Surplus on revaluation of investment properties (net of deferred capital gains tax)																					6							
	Net surplus on revaluation of investment properties																												11
	Valuation gains on investments																										4		
	Write up on revaluation of investment properties																											7	
	Surplus/(Deficit) on revaluation of Put option																					7						8	
	Net surplus on revaluation of investment properties																						12						
	Net profit before debenture interest and taxation																					8						9	
	Net operating income before net financing costs																										5		
	Debenture interest																					9						10	
	Financing income from incentive trust																										6		
	Interest on linked units issued																										7		
	Interest on borrow ings																										8		
	Interest on linked debentyre holders																										9		
	Profit after fair value adjustments														9									13					
	Share of associate company's after tax profits														10									14					
	Post-acquisition reserves from listed associated company																										10		
	Debenture interest														11									15					
	Profit before exceptional items				5																								
	Exceptional items				6																								
	Non-operating profit items																	6											
	Unclaimed Dividends written back									1																			
	Dividends received from subsidiary									2																			
	Operating profit for the year before taxation and dividends									3																			
	Net operating profit before interest and taxation																					9							
	Profit/(Loss) before taxation	4	7	4	7		14	17	4		11				12	13	13	7	11					16	14	13	11		12
	Net profit/(loss) before taxation											10	7	10						13	10	13						11	
ON THE LINE	Taxation expense														13														
	Income tax																										12		
	Taxation	5	8	5	8			18	5	4	12	11	8	11		14	14	8	12	14	11	14		17	15	14		12	13
	Deferred capital gains tax						15																						
UNDER THE LINE	**Net profit attributable to linked unitholders**												9		14						12							13	
	Profit attributable to linked unitholders		9																										
	Net profit attributable to unit holders						16																						
	Net profit															15								18					14
	Profit/(Loss) for the year				9													9											
	Net profit/(Loss) for the year										13								13	15					15				
	Net profit/(Loss) for the period											12																	
	Net profit after taxation													12								15			16				
	Profit/(Loss) after taxation	6		6					6																				
	Profit/(Loss) for the year before dividends									5																			
	Attributable to outside shareholders in subsidiaries	7		7					7																				
	Preference share dividends	8		8					8																				
	Profit attributable to shareholders							19									15												
	Profit/(Loss) for the year attributable to equity holders																										13		
	Profit/(Loss) for the year attributable to ordinary shareholders	9		9					9																				

Appendix E – Analysis of JSE listed companies

Analysis for a 3 year period – Classification practices in JSE Listed Companies

INCOME STATEMENT

SOFTWARE AND COMPUTER SERVICES

	Company	CS Computer Services Holdings Limited	CS Computer Services Holdings Limited	EC-Hold Limited	AST Group Limited	CS Computer Services Holdings Limited	EC-Hold Limited	Faritec Holdings Limited	Paracon	Y3K Group Limited	Idion Technology Holdings Limited	Synergy Holdings Limited	AST Group Limited	EC-Hold Limited	Faritec Holdings Limited	Paracon	Y3K Group Limited	Idion Technology Holdings Limited	Synergy Holdings Limited	AST Group Limited	Faritec Holdings Limited	Paracon	Y3K Group Limited	Idion Technology Holdings Limited	Synergy Holdings Limited
	Year	2001	2002		2003								2004							2005					
ABOVE THE LINE	Revenue	1	1	1	1	1	1	1		1	1		1		1		1	1		1	1		1	1	
	Gross revenue											1							1						1
	Turnover								1							1						1			
	Cost of sales	2	2	2	2	2	2		2	2	2	2	2			2	2	2	2	2		2	2	2	2
	Gross profit	3	3	3	3	3	3			3	3	3	3				3	3	3	3			3	3	3
	Gross margin								3							3						3			
	Administrative expenses	4	4			4							5							5					
	Administrative and general expenses										4							4							
	Research and development expenses										5							5							
	Marketing cost					5																			
	Distribution and marketing expenses										6							6							
	Other operating expenses	5	5			6																			
	Other operating costs								4				4			4									
	Operating costs			4			4					4							4			4			5
	Operating expenses				4			2		4					2		4				2		6	4	
	Other operating income												6							4					
	Other income																						4		4
	Income from associate																						5		
	Operating profit/(loss)	6	6		5	7		3				5			3				5	6				5	6
	Loss from operations												7												
	Operating income before depreciation			5																					
	Operating profit/(loss) before depreciation and amortisation																				3				
	Operating income before foreign exchange loss/(profit), depreciation, exceptional item and interest						5																		
	Foreign exchange (profit)/loss						6																	8	
	Operating income before depreciation, exceptional item and interest						7																		
	Earnings before interest, taxation, depreciation and amortisation (EBITDA)								5							5						5			
	Depreciation			6			8		6							6						6			
	Depreciation and amortisation										7										4				
	Depreciation and amortisation expenses																								
	Amortisation of goodwill and intangible assets																	7							
	Amortisation of goodwill	9	10			12																			
	Investment income and foreign exchange losses/gains								7							7									
	Impairment of goodwill																								
	Operating loss before exceptional items and interest						9																		
	Operating profit/(loss) before exceptional items and net finance charges									5															
	Operating profit/(loss) before net finance effects																	5					7		
	Profit/(Loss) before investment (income) cost										8														
	Results from operating activities			7																					
	Profit/(Loss) from operations																	8			5				
	Operating loss																								
	Net finance cost/(income)	7	7	8		8																			
	Net finance cost/interest received				6								8							7					
	Net finance charges/(income)									6							6						8		
	Interest (received)/paid						10																		
	Interest paid																	9						6	
	Interest received																	10						7	
	Share of results of associate		8		7	9							9							8					
	Income from associate							4																	
	Finance costs							5				7			4				7		6				8
	Investment income							6				6			5				6		7	7			7
	Net investment income/(cost)										9														
	Loss on sale of investment in associate					10																			
	Loss on discontinuing operation	8																							
	Loss on discontinued operation		9																						

Appendix E – Analysis of JSE listed companies

Analysis for a 3 year period – Classification practices in JSE Listed Companies

INCOME STATEMENT

SOFTWARE AND COMPUTER SERVICES

	Company	CS Computer Services Holdings Limited	CS Computer Services Holdings Limited	EC-Hold Limited	AST Group Limited	CS Computer Services Holdings Limited	EC-Hold Limited	Faritec Holdings Limited	Paracon	Y3K Group Limited	Idion Technology Holdings Limited	Synergy Holdings Limited	AST Group Limited	EC-Hold Limited	Faritec Holdings Limited	Paracon	Y3K Group Limited	Idion Technology Holdings Limited	Synergy Holdings Limited	AST Group Limited	Faritec Holdings Limited	Paracon	Y3K Group Limited	Idion Technology Holdings Limited	Synergy Holdings Limited
	Year	2001	2002		2003								2004							2005					
ABOVE THE LINE	Fair value adjustment of investment														6						6				
	Impairment of assets					11									7										
	Impairment of share trust																								
	Hostile bid defence costs																								
	Net capital impairments			9																					
	Revaluation of capital liability							7																	
	Revaluation of trademarks							8																	
	Licence fees amortised														8										
	Trademarks amortised														9										
	Exceptional (profit)/loss						11																		
	Foreign exchange gains																	11							
	Operating profit/(loss) before exceptional items									7															
	Exceptional items																				5				
	Profit before headline earnings adjustments and taxation								8							8						8			
	Amortisation of goodwill								9							9									
	Loss on disposal of offshore subsidiary																								
	Costs incurred on unsuccessful acquisition																								
	Impairment of goodwill on offshore subsidiary																								
	Foreign currency translation difference															10									
	Profit/(Loss) from ordinary activities	10	11			13																			
	Profit/(Loss) before taxation			10	8		12		10				10			11		12		9		9		9	9
	Net income before taxation							9																	
	Net profit/(loss) before taxation										10				10		7				7		9		
	Operating profit/(loss)									8															
ON THE LINE	Taxation	11	12	11	9	14	13	10	11						11	12			8		8	10	10		10
	Taxation benefit/(expense)										11														
	Income tax benefit/(expense)												11					13		10				11	
UNDER THE LINE	**Profit/(Loss) after tax**	12	13		10	15			12																11
	Net profit/(loss) after taxation			12			14								12						9				
	Net income after taxation							11																	
	(Loss)/Profit from ordinary activities												12							11					
	Profit																		9						
	Minority interest	13	14	13	11	16	15						13							12					
	Attributable (to)/from minorities							12							13						10				
	Outside shareholders' share of losses/(profits)								13																
	Dividends																		10						12
	Net profit/(loss) for the year	14	15		12	17				9	12		14				8	14		13			11		
	Profit/(Loss) for the period			14			16																		
	Profit/(Loss) for the year								14							13						11		12	
	Profit/(Loss) attributable to ordinary shareholders							13							14						11				
	Attributable to equity holders of the parent																							13	
	Attributable profit/(loss)																	15							
	Profit/(Loss)											8													
	Retained profits for the year																		11						13
	Accumulated loss at beginning of year											9													
	Retained profits/(accumulated loss) at beginning of year																		12						14
	Accumulated profit/(loss) at end of year											10							13						15

Appendix E – Analysis of JSE listed companies

Analysis for a 3 year period – Classification practices in JSE Listed Companies													
INCOME STATEMENT													
SUPPORT SERVICES													
Company		Command Holdings Limited	Orelogix Group Limited	Quyn Holdings Limited	Itatitle Limited	Command Holdings Limited	Orelogix Group Limited	Quyn Holdings Limited	Itatitle Limited	Command Holdings Limited	Orelogix Group Limited	Quyn Holdings Limited	Itatitle Limited
Year		2003				2004				2005			
ABOVE THE LINE	Revenue	1	1	1	1	1	1	1	1	1	1	1	1
	Turnover				2				2				2
	Cost of sales	2			3	2			3	2			3
	Gross profit	3			4	3			4	3			4
	Operating costs	4				4				4			
	Direct operating costs		2				2				2		
	Other operating costs		3				3				3		
	Other operating income		4		5		4		5		4		5
	Profit/(Loss) on sale of property, plant and equipment								6				8
	Sales and distribution				6				7				6
	General and administration				7				8				7
	Earnings before interest, taxation, depreciation, amortisation and impairment of assets		5				5				5		
	Depreciation		6				6				6		
	Amortisation of product and softw are development costs		7				7						
	Operating profit/(loss)		8				8				7		
	Trading profit/(loss)				8				9				9
	Attributable loss incurred from trade	5				5				5			
	Loss on sale of investment					6							
	Other income	6				7				6			
	Net profit/(loss) before interest	7				8				7			
	Operating income/(loss) before interest			2									
	Operating income/(loss) before interest and revaluations											2	
	Interest income				9				10				10
	Interest paid on borrow ings	7				9				8			
	Interest paid				13				12				12
	Net interest received/(paid)			3									
	Interest received on bank balances	8				10							
	Dividend income - other				10				11				11
	Loss on sale of property, plant and equipment				11								
	Share incentive trust reversal				12								
	Attributable profit/(loss) before other items	9				11				9			
	Amortisation of goodw ill	10	9				9		13				13
	Amortisation of trademarks	11				12							
	Capital gains/(losses)	12											
	Restructuring and staff rationalisation costs	13											
	Profit/(Loss) before exceptional items		10				10						
	Operating income/(loss)			4				2					
	Exceptional items		11	5									
	Profit/(Loss) before net finance income/(costs)		12				11						
	Revaluation of investment property							3				3	
	Investment income							4				4	
	Net finance income/(costs)		13				12				8		
	Finance costs							5				5	
	Share of loss of associate										9		
	Net profit/(loss) before taxation	14				13				10			
	Profit/(Loss) before taxation		14		14		13		14		10		14
	Net income/(loss) before taxation			6				6				6	
ON THE LINE	Taxation	15	15	7	15	14	14	7	15	11	11	7	15
UNDER THE LINE	**Profit/(Loss) attributable to ordinary shareholders**	16				15				12			
	Profit/(Loss) from continuing operations		16				15				12		
	Income/(Loss) after taxation			8				8				8	
	Profit/(Loss) after taxation				16				16				16
	Loss from discontinued operations		17				16						
	Loss arising on discontinuance of operations		18										
	Share of associated company profit/(loss)	17		9		16		9					
	Minority interest							10				9	
	Minority shareholders' share of loss	18											
	Outside shareholders' interest				17				17				17
	Net profit/(loss) for the period	19				17				13			
	Net profit/(loss) for the year		19		18		17		18		13		18
	Income/(Loss) attributable to ordinary shareholders			10				11				10	
	Attributable to equity holders of company										14		
	Attributable to minority interests										15		

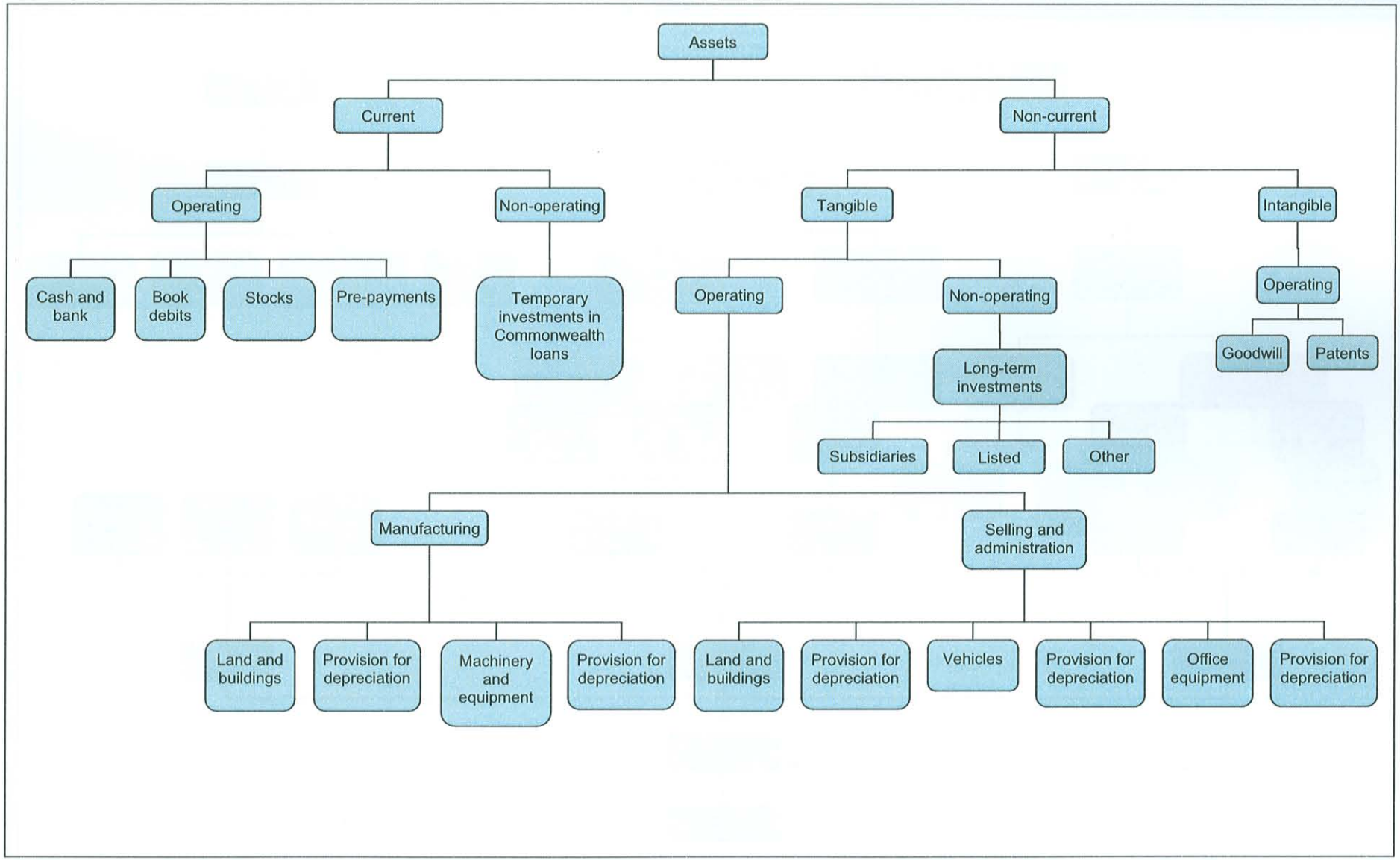
Appendix E – Analysis of JSE listed companies

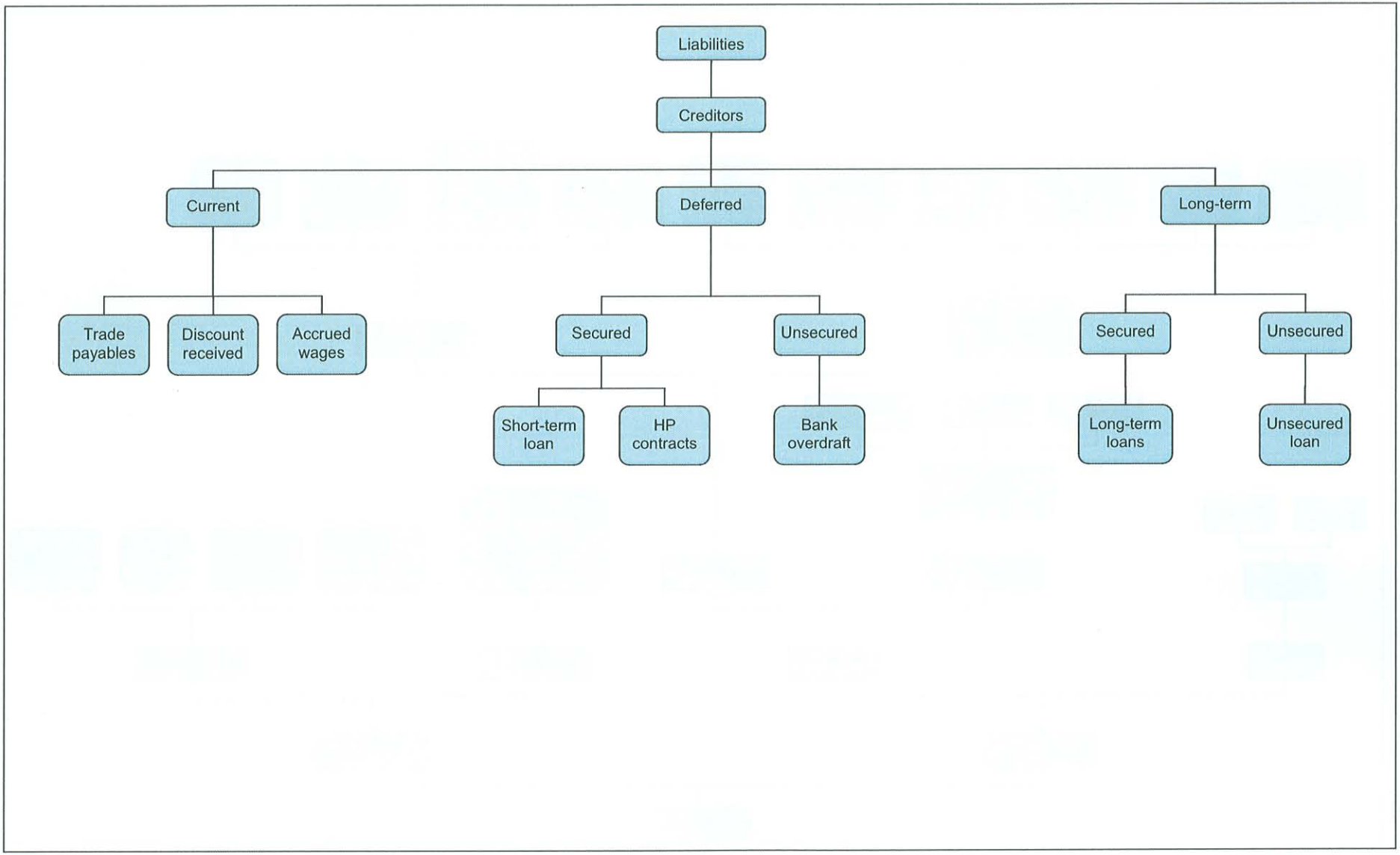
Analysis for a 3 year period – Classification practices in JSE Listed Companies								
INCOME STATEMENT								
TECHNOLOGY HARDWARE AND EQUIPMENT								
	Company	Bryant Technology Limited	Bryant Technology Limited	Datatec Limited	Bryant Technology Limited	Datatec Limited	Datatec Limited
	Year	2002	2003		2004		2005
ABOVE THE LINE	Revenue	1	1	1	1	1	1
	Cost of sales	2	2	2	2	2	2
	Gross profit/(loss)	3	3		3		
	Gross margin			3		3	3
	Operating income/(costs)			4		4	4
	Selling and administration expenses	4	4		4		
	Loss from operations	5	5		5		
	Operating profit/(loss) before finance costs, depreciation and amortisation (EBITDA)			5		5	6
	Depreciation and amortisation			6		6	7
	Operating (loss)/profit			7			
	Income from investments			8			
	Financing costs			9		14	14
	Net finance income/(costs)	6	6		6		
	Interest received					13	13
	Profit/(Loss) before exceptional items and goodwill amortisation			10			
	Operating profit/(loss) before goodwill amortisation, impairment and other income					7	
	Operating profit/(loss) before goodwill impairment and other income						8
	Goodwill amortisation			11		8	
	Exceptional items			12			
	Exceptional items					12	
	Goodwill impairment			13		9	9
	Other exceptional items			14			
	Other income					10	10
	Operating profit/(loss)					11	11
	Profit/(Loss) on disposal and closure of discontinued operations						12
	Profit/(Loss) before tax	7	7	15	7	15	15
ON THE LINE	Taxation	8	8	16	8	16	16
UNDER THE LINE	**Net loss for the year**	9	9		9		
	Profit/(Loss) after taxation			17		17	17
	Profit/(Loss) attributable to outside shareholders			18		18	18
	Attributable profit/(loss)			19		19	19

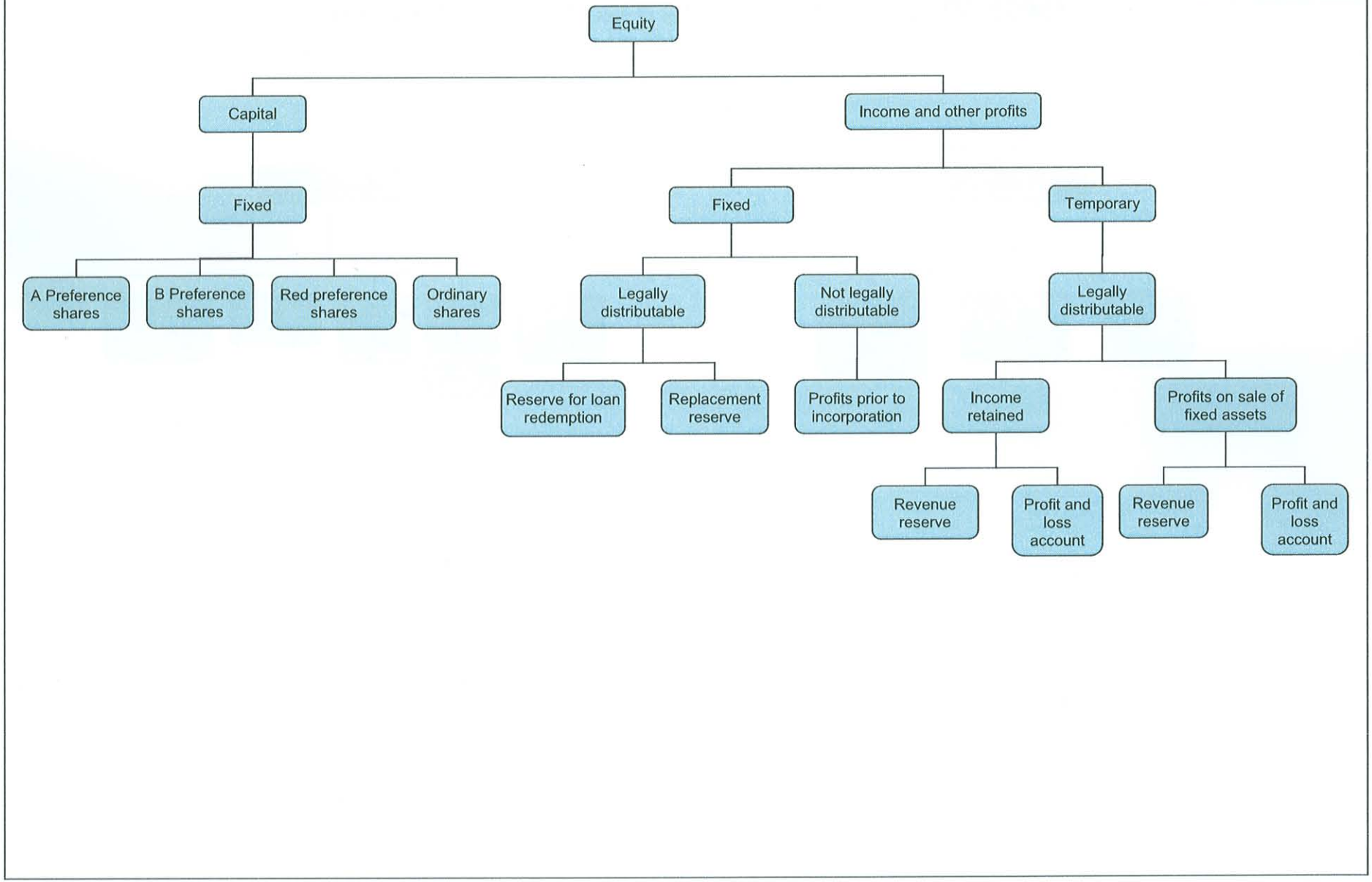
Appendix E – Analysis of JSE listed companies

Analysis for a 3 year period – Classification practices in JSE Listed Companies																	
INCOME STATEMENT																	
TRAVEL AND LEISURE																	
Company		Admiral Leisure World Limited	Admiral Leisure World Limited	Pacific Holdings Limited	Putco Limited (Delisted)	Admiral Leisure World Limited	City Lodge Hotels Limited	Pacific Holdings Limited	Famous Brands Limited	Putco Limited (Delisted)	City Lodge Hotels Limited	Pacific Holdings Limited	Famous Brands Limited	Putco Limited (Delisted)	City Lodge Hotels Limited	Famous Brands Limited
Year		2001	2002			2003					2004				2005	2005
ABOVE THE LINE	Gross revenue	1	1			1			1				1		1	1
	Revenue			1	1		1	1		1	1	1		1		
	Turnover				2					2						
	Other income	2	2			2										
	Amortisation and marketing costs						2				2					
	Operating costs						3				3					
	Operating and other expenses	3	3			3										
	Cost of sales			2				2	2			2	2			2
	Cost of operating and trading				3					3				2		
	Gross profit			3				3	3			3	3			3
	Other operating income			4				4				4				
	Selling and administrative expenses								4				4			4
	Employee compensation costs			5				5				5				
	Other operating expenses			6				6				6				
	EBITDA						4				4				2	
	Depreciation and amortisation						5				5				3	
	Operating profit/(loss)			7			6	7	5		6	7	5	8	4	5
	Operating profit/(loss) before onerous contracts				4					4						
	Gross profit/(loss) before onerous contracts													3		
	Provision for onerous contracts reversed													4		
	Onerous contracts				5					5						
	Operating profit/(loss) after onerous contracts				6					6						
	Gross profit/(loss) after onerous contracts													5		
	Other dividends				7					7				6		
	Operating profit/(loss) before interest and taxation								6				6			6
	Net interest received/(paid)						7		7		7		7			7
	Interest income														5	
	Interest expense														6	
	Interest received				8					8				7		
	Finance cost			8	10			8		10		8		9		
	Profit before interest paid and taxation				9											
	Profit before finance cost and taxation									9						
	Income from joint venture						8				8				7	
	Net loss before taxation	4	4			4										
	Profit/(Loss) before taxation			9	11		9	9		11	9	9		10	8	
	Operating profit/(loss) before taxation								8				8			8
ON THE LINE	Taxation	5	5	10	12	5	10	10	9	12	10	10	9	11	9	9
UNDER THE LINE	**Net loss after taxation**	6	6			6										
	Net profit/(loss)			11			11	11			11	11			10	
	Operating profit/(loss) after taxation								10				10			
	Attributable profit/(loss)								11				11			10
	Profit/(Loss) from ordinary activities				13											
	Profit/(Loss) attributable to shareholders				14					13						
	Net profit for the year													12		

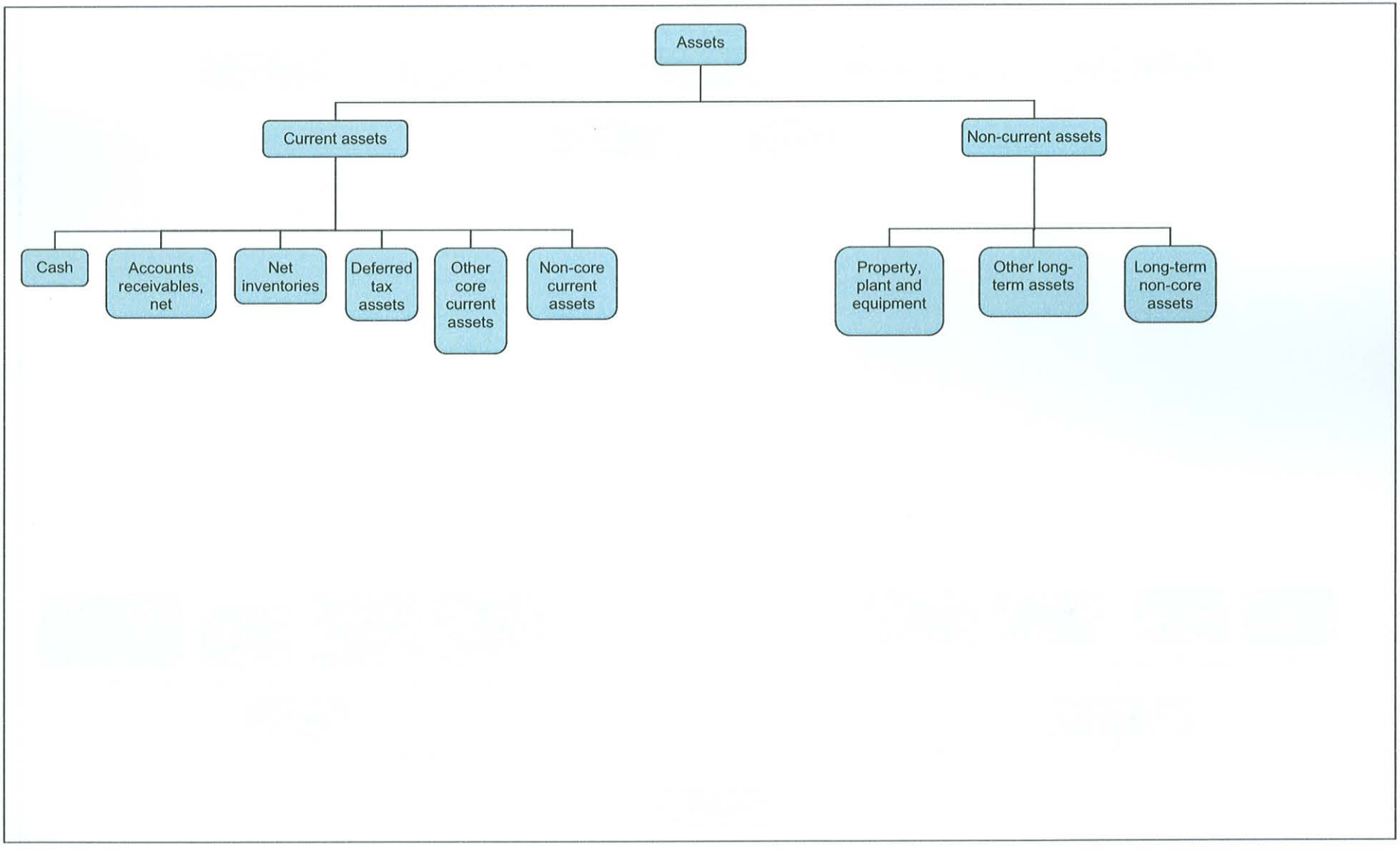
APPENDIX F – FRAMEWORK AUGMENTED FROM FITZGERALD AND SCHUMER (1962)



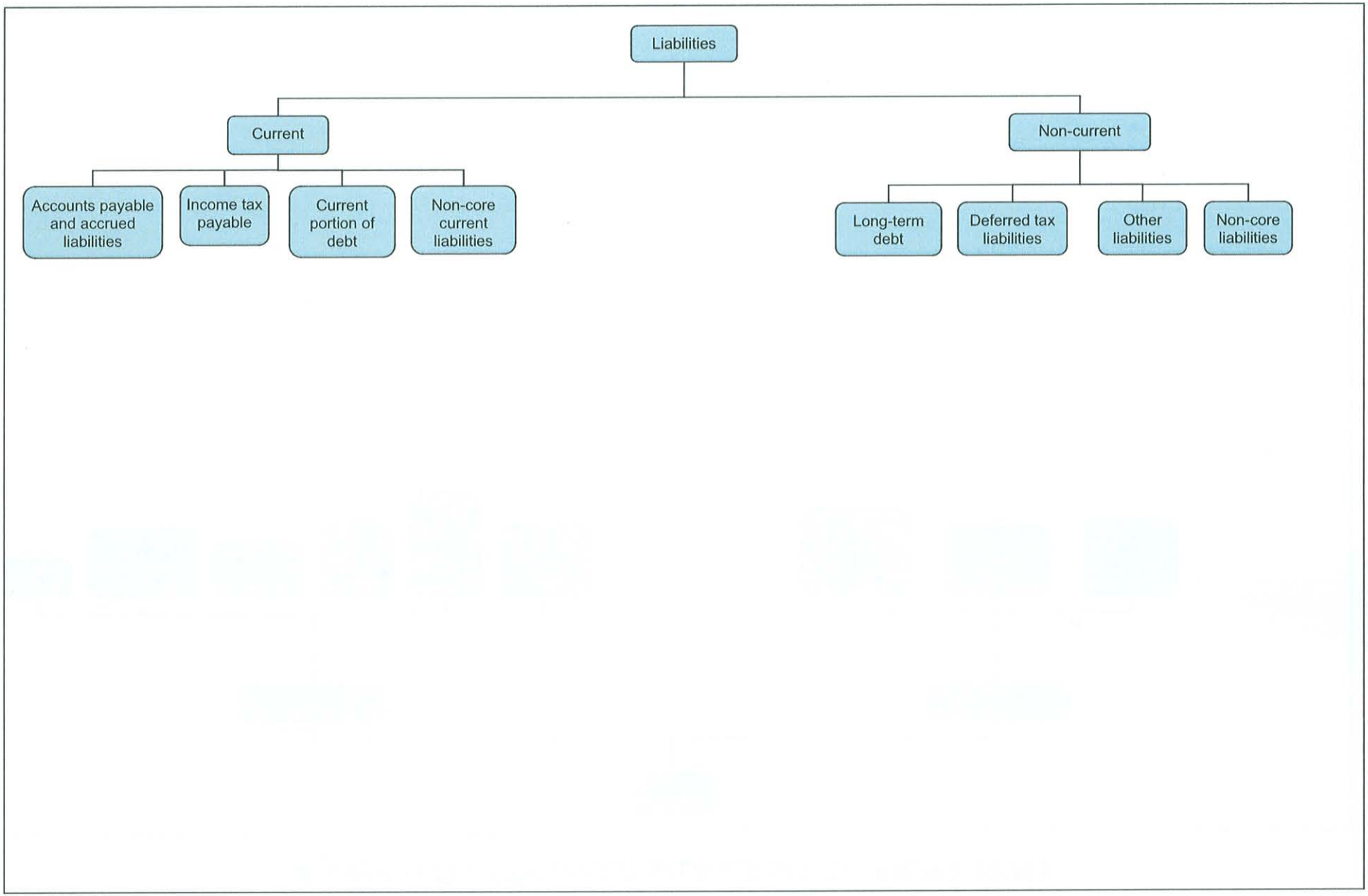

Liabilities
Creditors
Current
Deferred
Long-term
Trade payables
Discount received
Accrued wages
Secured
Unsecured
Secured
Unsecured
Short-term loan
HP contracts
Bank overdraft
Long-term loans
Unsecured loan

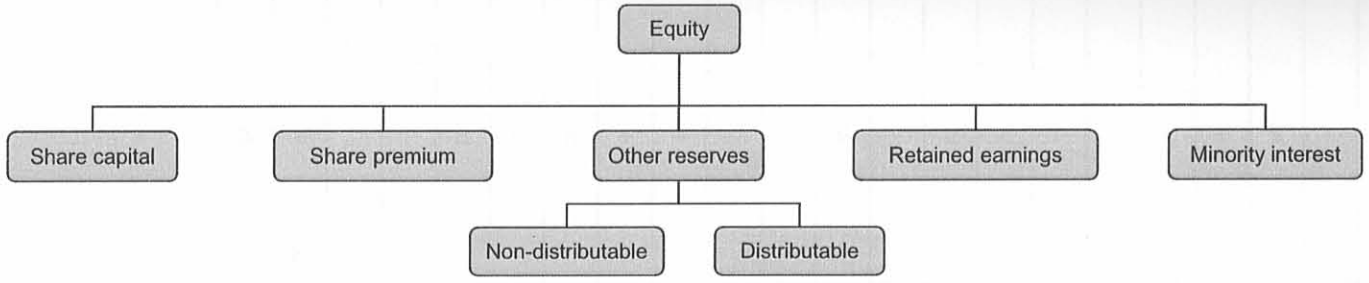

Equity
Capital
Income and other profits
Fixed
Fixed
Temporary
A Preference shares
B Preference shares
Red preference shares
Ordinary shares
Legally distributable
Not legally distributable
Legally distributable
Reserve for loan redemption
Replacement reserve
Profits prior to incorporation
Income retained
Profits on sale of fixed assets
Revenue reserve
Profit and loss account
Revenue reserve
Profit and loss account

APPENDIX G – PROPOSED BALANCE SHEET (AICPA 1994)



Appendix G – Proposed Balance Sheet (AICPA 1994)

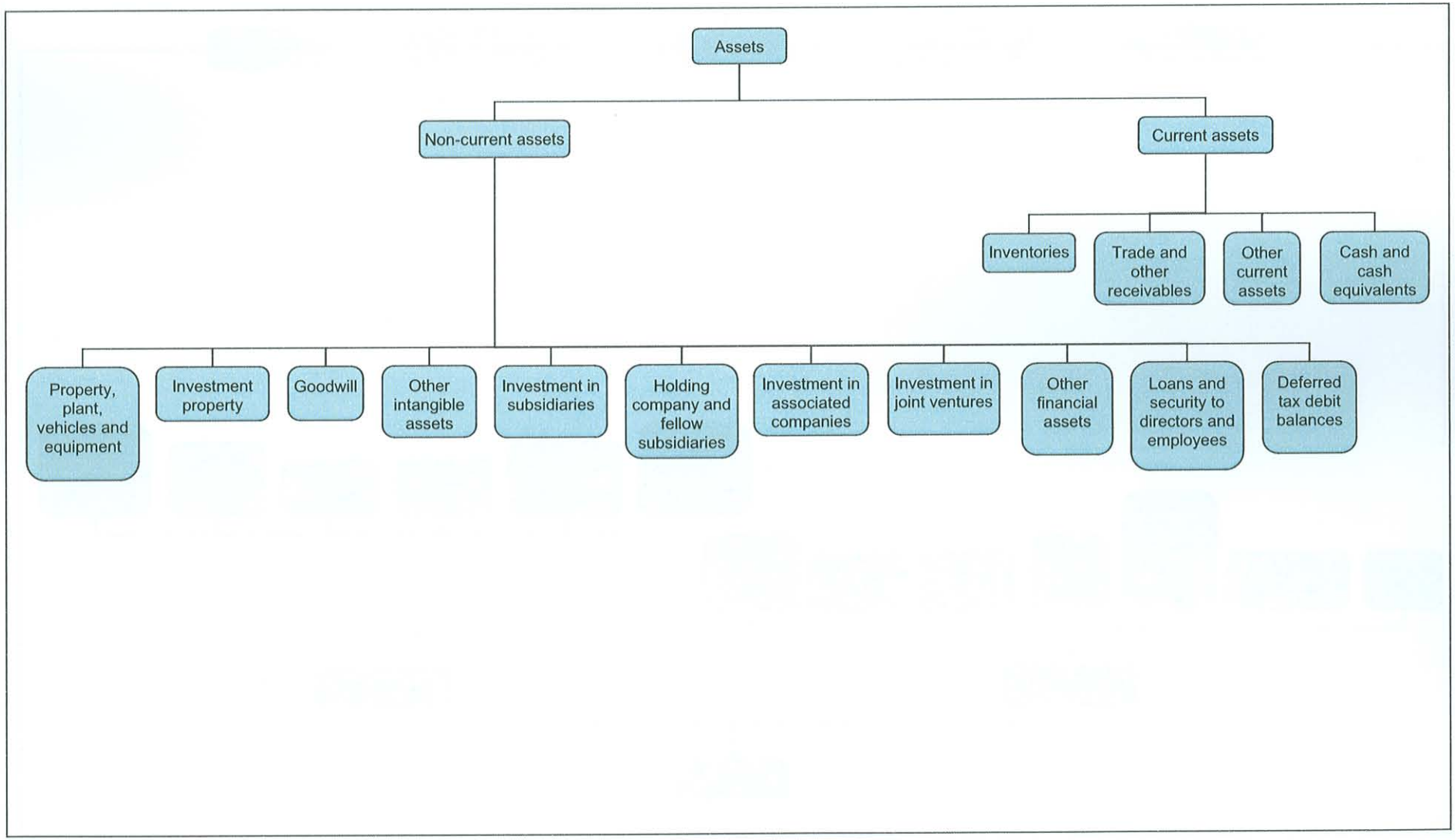


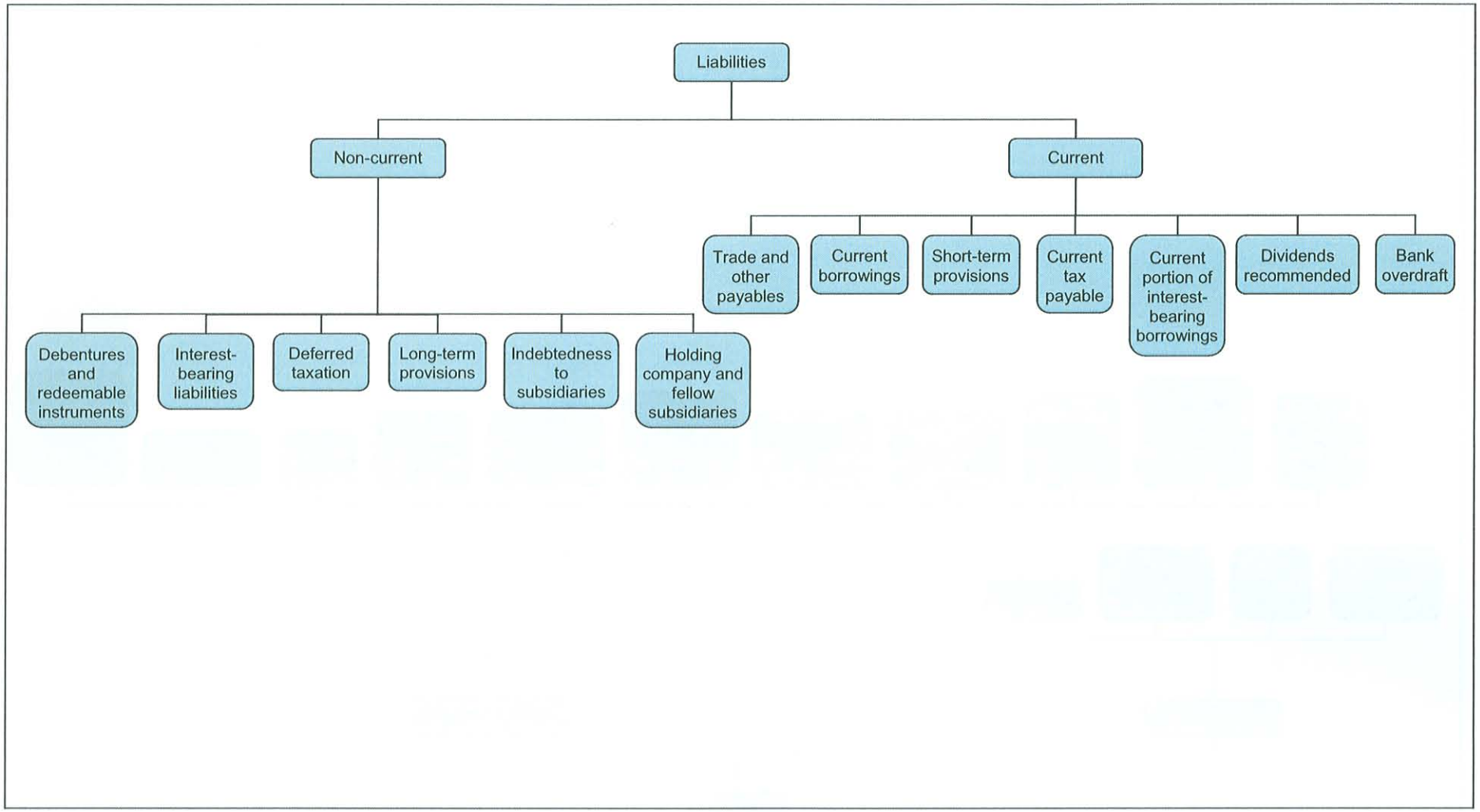

Equity
Share capital
Share premium
Other reserves
Retained earnings
Minority interest
Non-distributable
Distributable

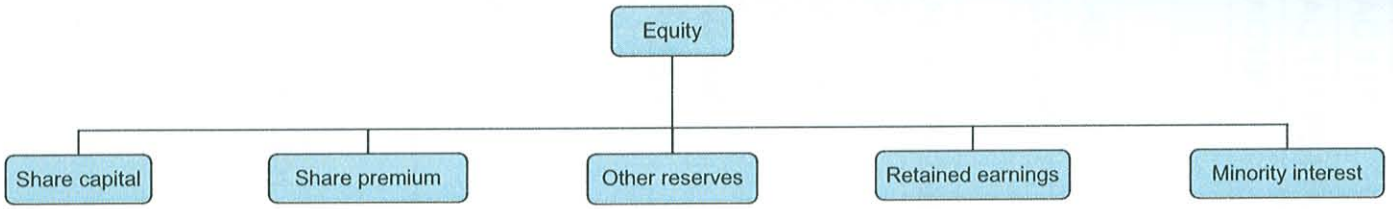
APPENDIX H – PROPOSED INCOME STATEMENT (AICPA 1994)

	Core activities
	Revenue
-	Cost of revenue
=	**Gross margin**
-	Selling and marketing
-	Research and development
-	General and administrative expenses
-	Other operating costs and expenses
-	Recurring non-operating gains and losses
=	**Pre-tax core earnings**
-	Income taxes related to core earnings
=	**Core earnings**
	Non-core items and financing costs:
	Financing costs
+	Income/(loss) from unusual or non-recurring transactions
+	Income/(loss) from discontinued operations
=	**Pre-tax non-core income and financing costs**
-	Income taxes related to non-core items and financing costs
=	**Net Income**
	Share data:
	Core earnings
+	Non-core income and financing costs
=	**Net income**

APPENDIX I – BALANCE SHEET FROM PRESENT ACCOUNTING PRACTICE AUGMENTED FROM CILLIERS *ET AL*. (2004)



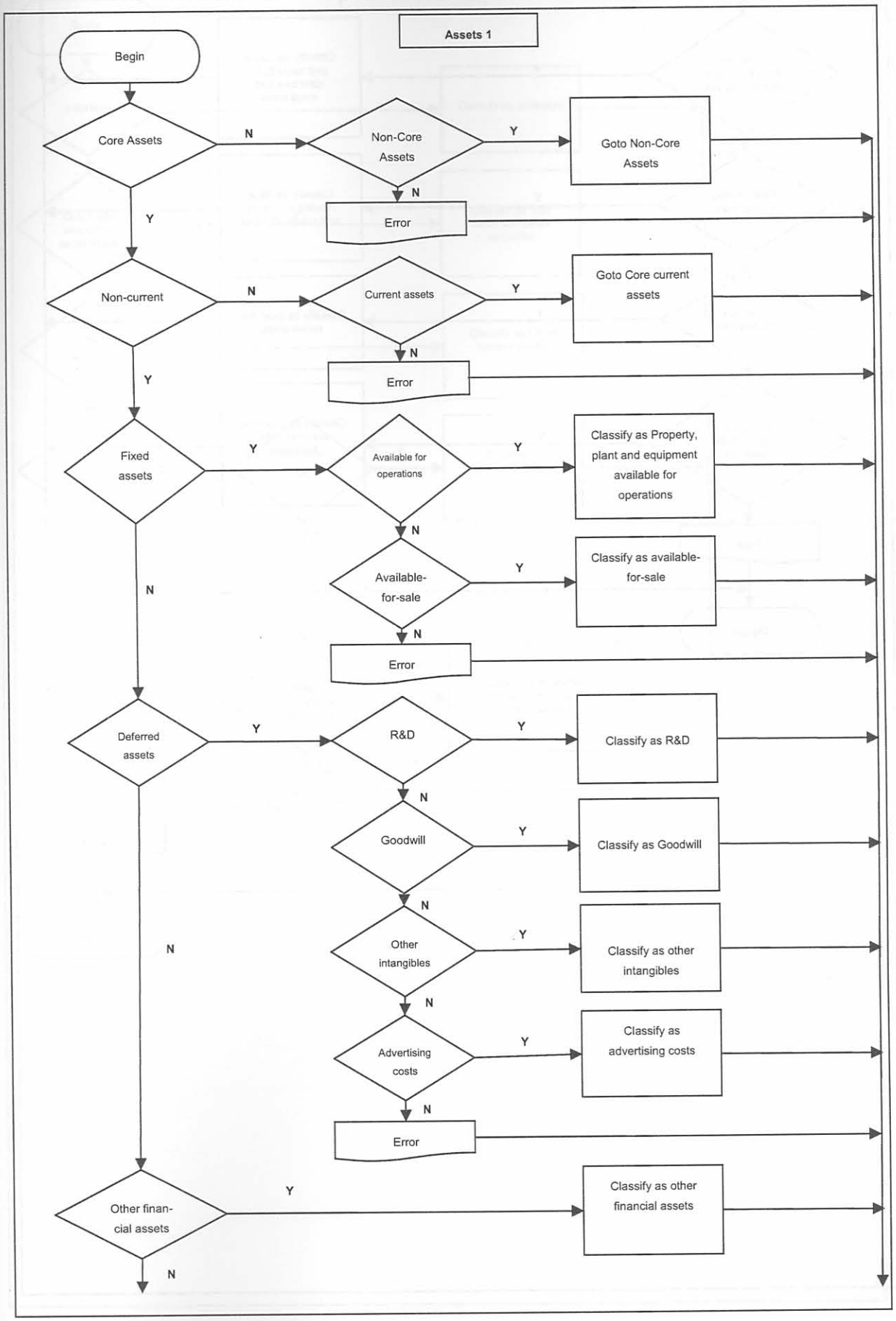

Liabilities
Non-current
Current
Debentures and redeemable instruments
Interest-bearing liabilities
Deferred taxation
Long-term provisions
Indebtedness to subsidiaries
Holding company and fellow subsidiaries
Trade and other payables
Current borrowings
Short-term provisions
Current tax payable
Current portion of interest-bearing borrowings
Dividends recommended
Bank overdraft

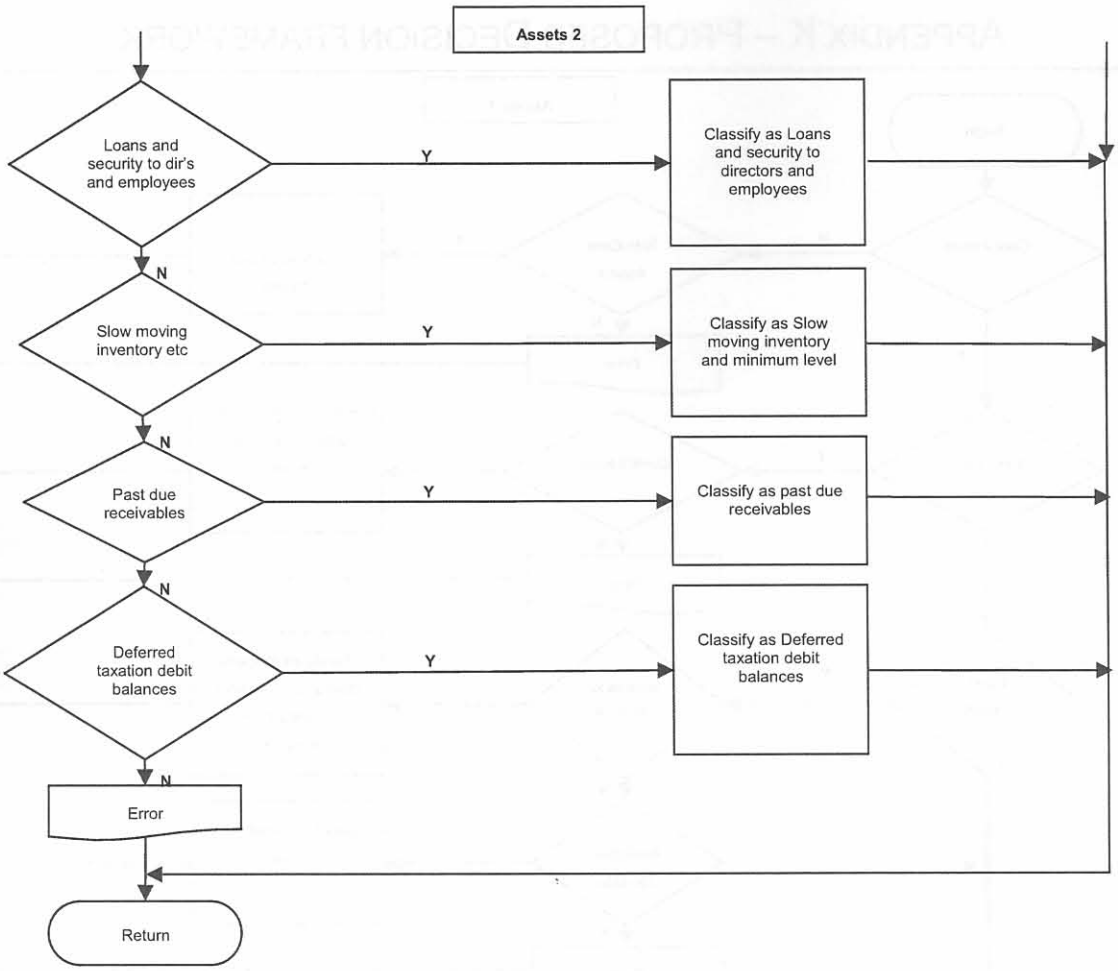

Equity
Share capital
Share premium
Other reserves
Retained earnings
Minority interest

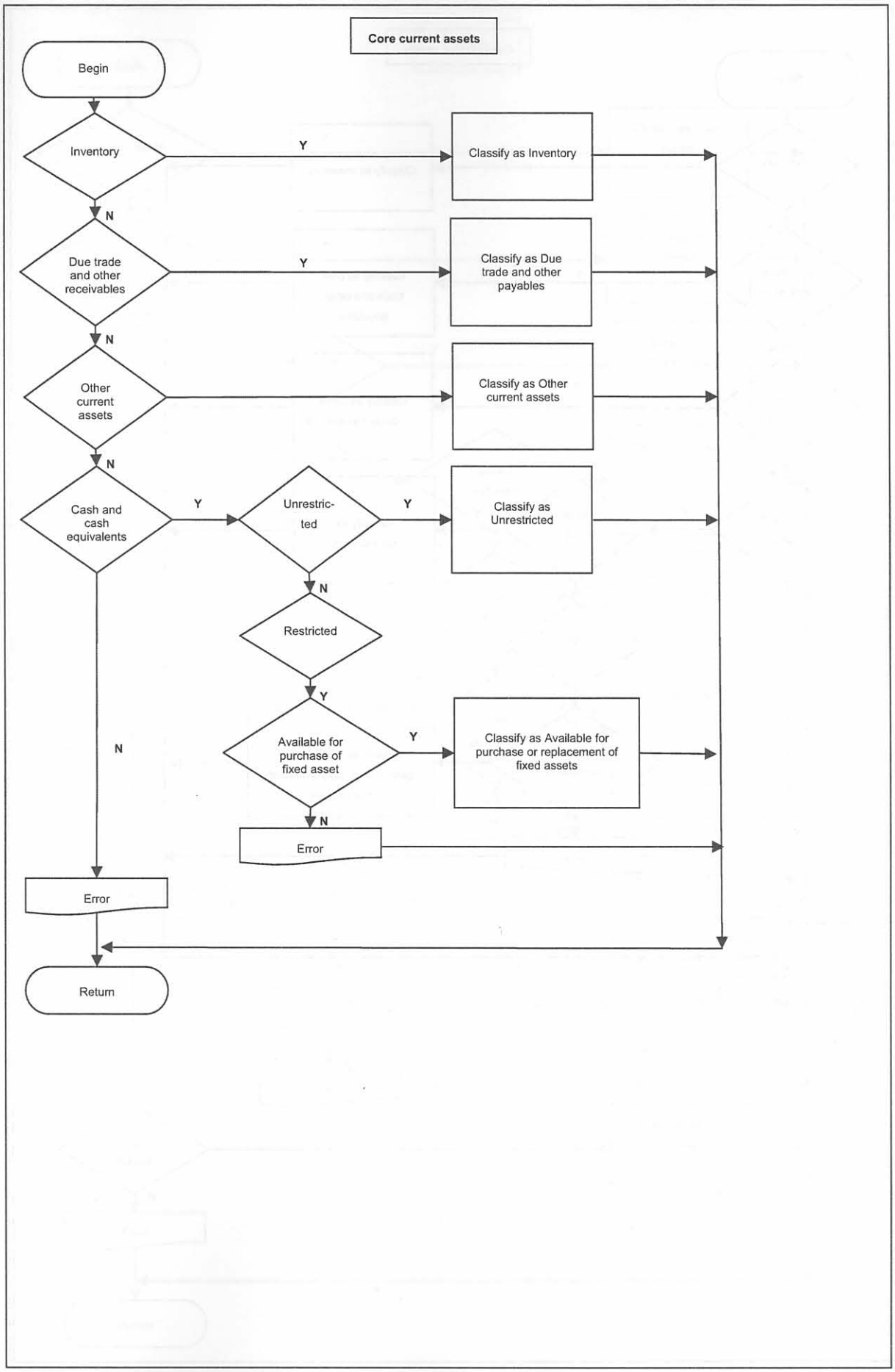
APPENDIX J – INCOME STATEMENT FROM PRESENT ACCOUNTING PRACTICE AUGMENTED FROM CILLIERS *ET AL.* (2004)

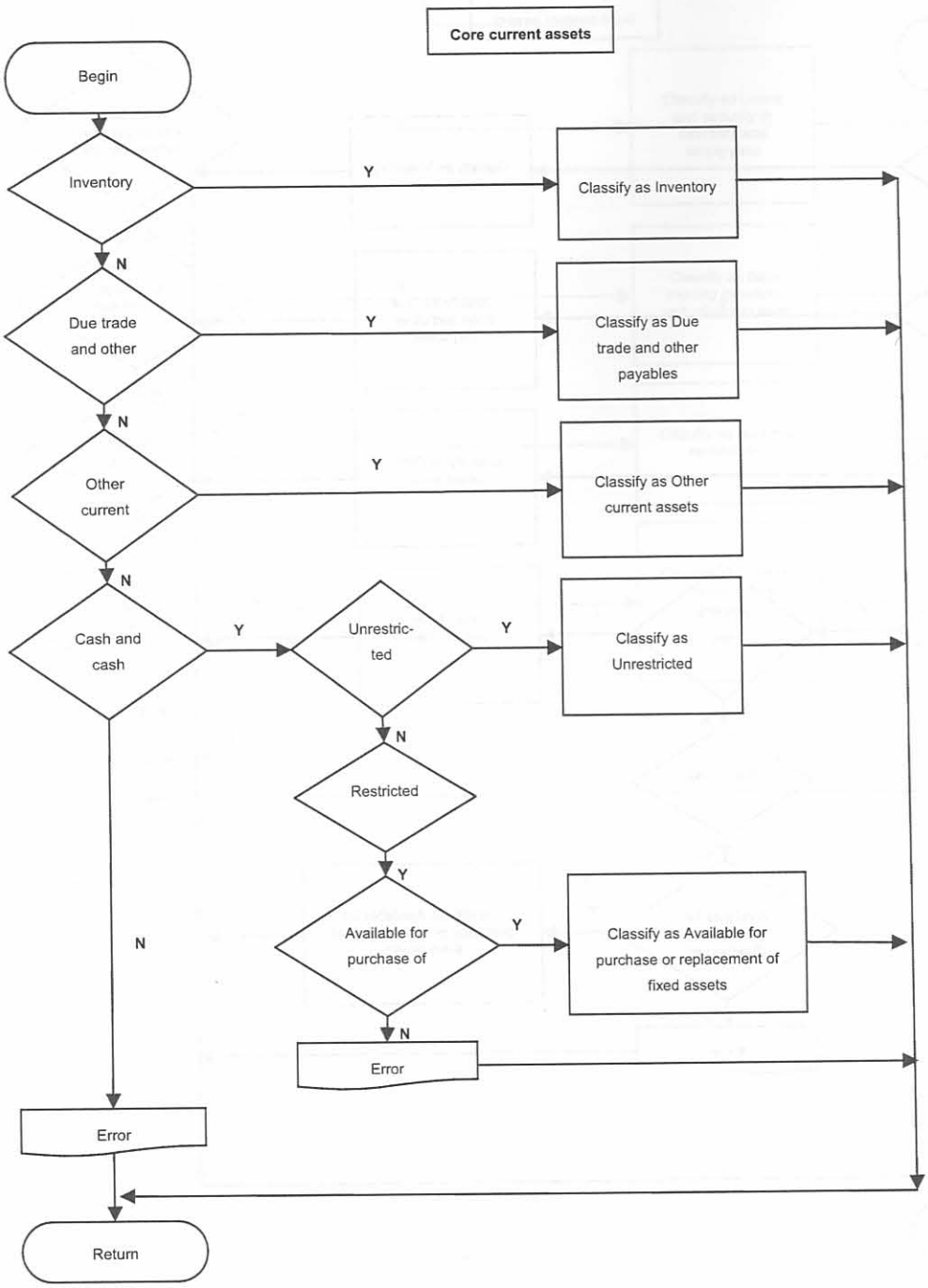
Act Schedule 4/GAAP	
AC 117	**Continuing operations**
AC 111/P34/IAS2	Revenue
AC108	Cost of sales
	Gross profit
	Other income
IAS 1/AC 101	Distribution costs
IAS 1/AC 101	Administrative expenses
	Other expenses
AC 114/P42(a)	Finance costs
P42 (b)	Income from subsidiaries
IAS 28/AC 110/AC 133	Share of profit of associates
P42	Income from other financial assets
AC 102	**Profit before tax**
P42 (d)	Income tax expense
	Profit for the period from continuing operations
IFRS 5	**Discontinuing operations**
	Loss for the period from discontinuing operations
	Profit for the period
IAS 1/AC 101	**Attributable to:**
	Equity holders of the parent
	Minority interest

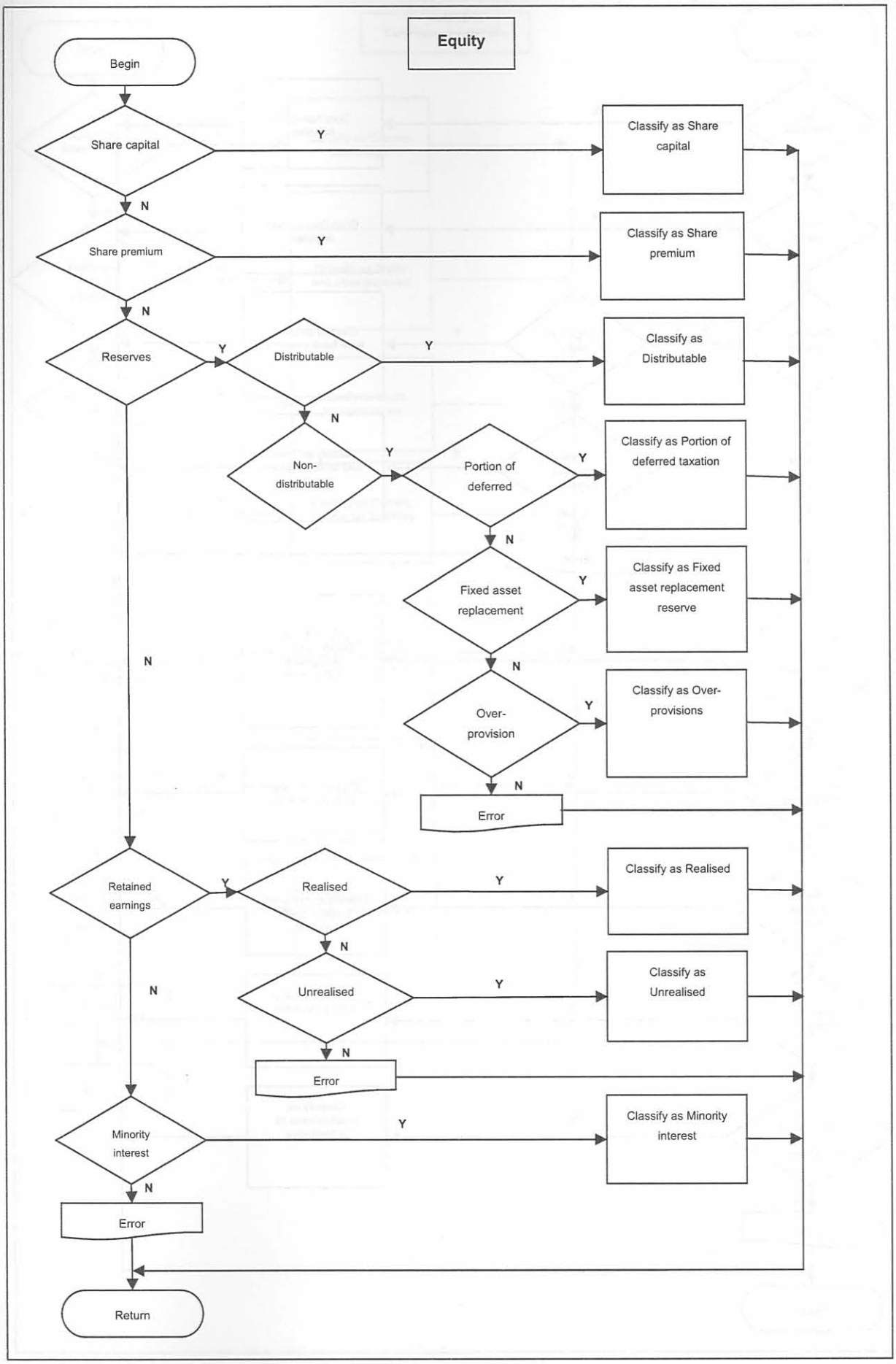
APPENDIX K – PROPOSED DECISION FRAMEWORK

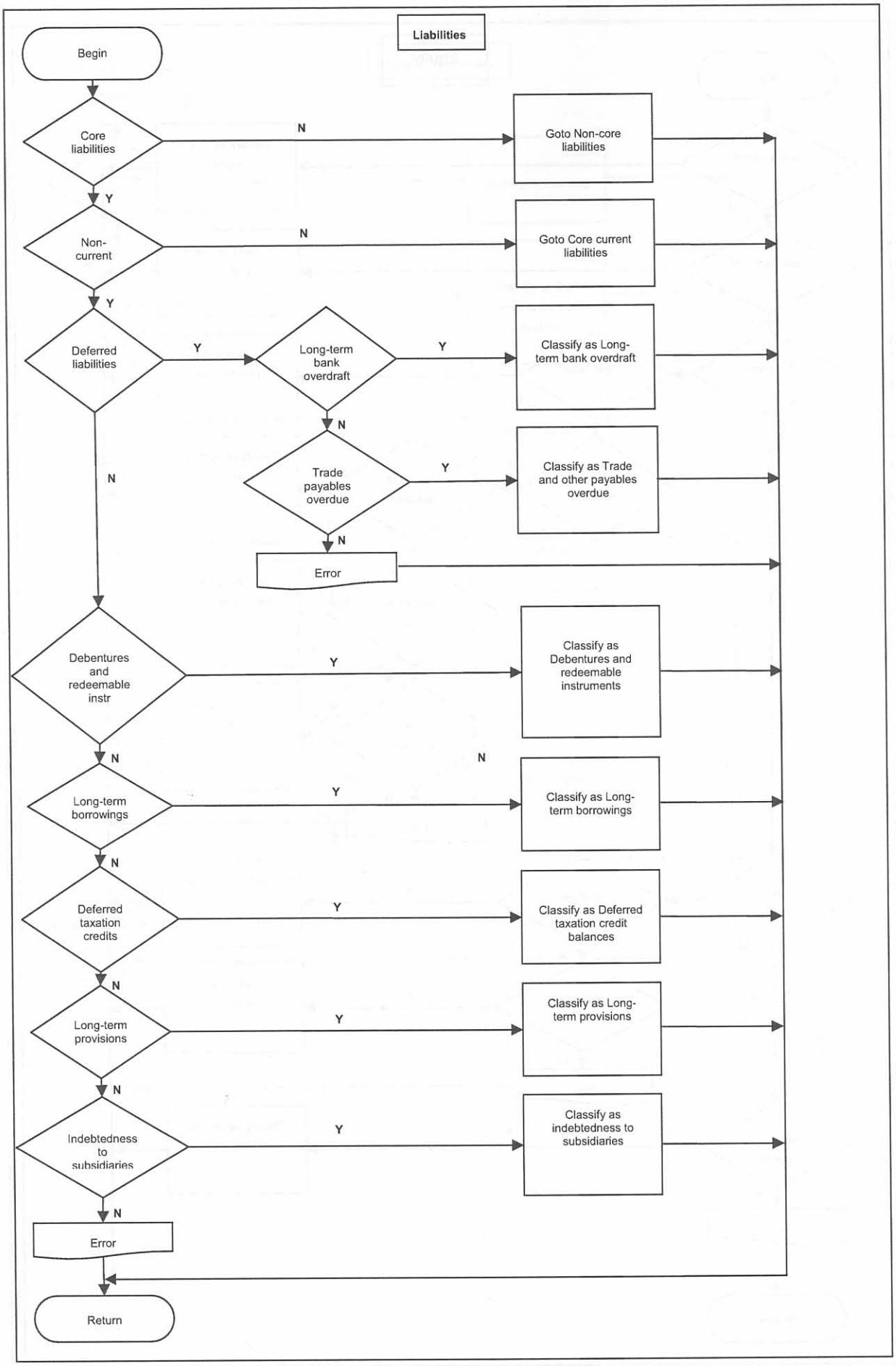


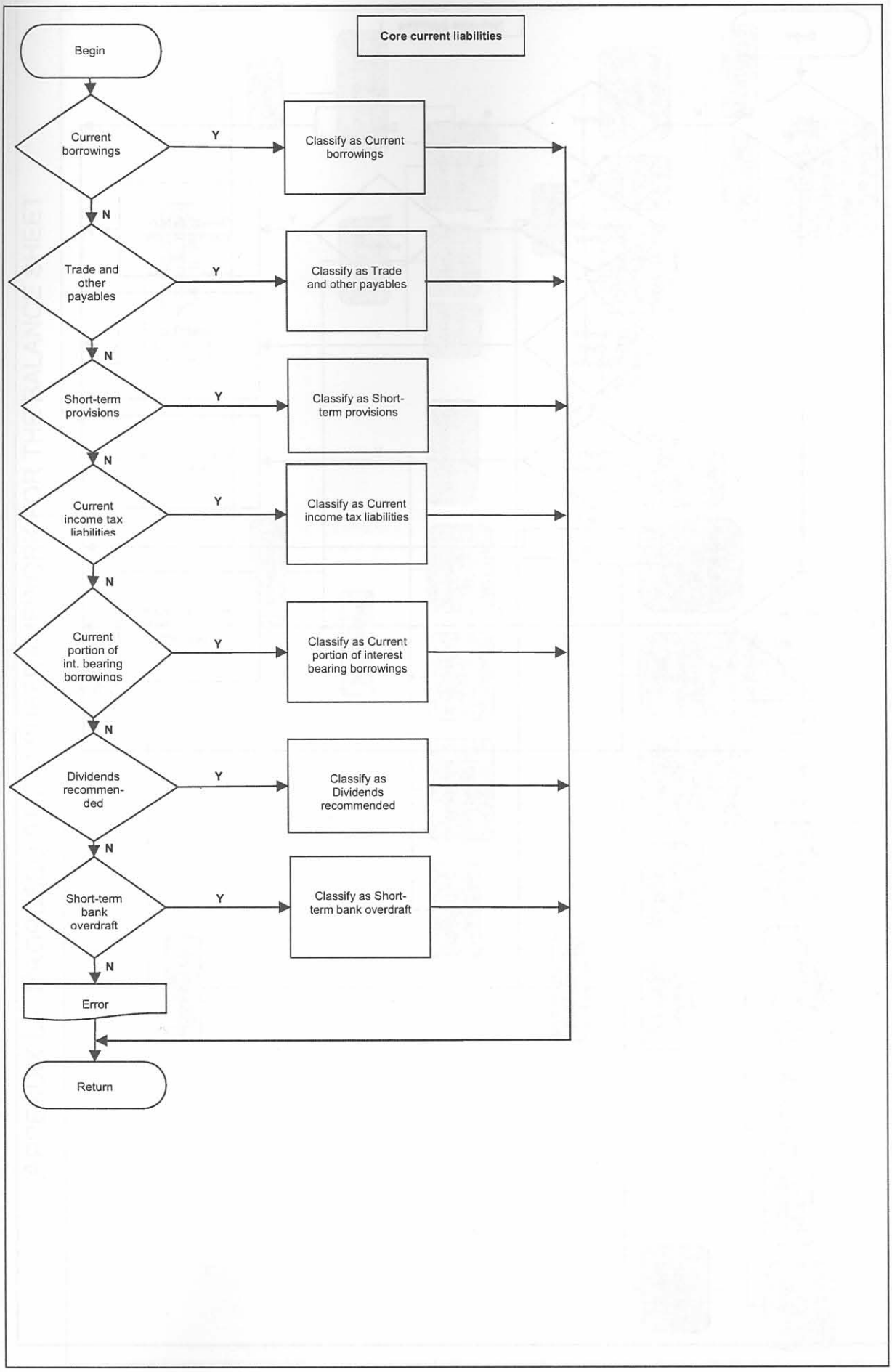

Assets 2
Loans and security to dir's and employees
Y
Classify as Loans and security to directors and employees
N
Slow moving inventory etc
Y
Classify as Slow moving inventory and minimum level
N
Past due receivables
Y
Classify as past due receivables
N
Deferred taxation debit balances
Y
Classify as Deferred taxation debit balances
N
Error
Return

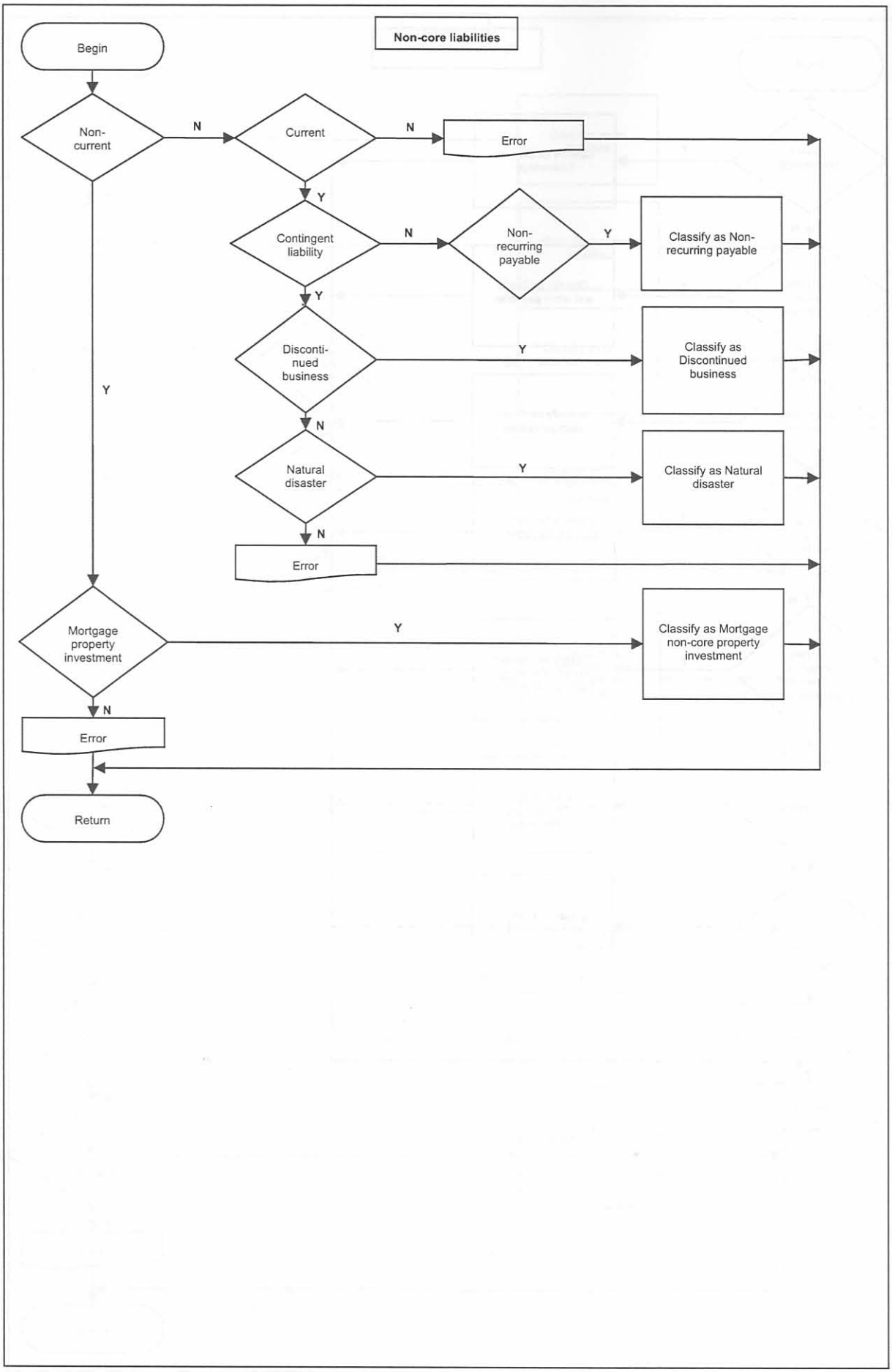

Core current assets
Begin
Inventory
Y
Classify as Inventory
N
Due trade and other receivables
Y
Classify as Due trade and other payables
N
Other current assets
Classify as Other current assets
N
Cash and cash equivalents
Y
Unrestric-ted
Y
Classify as Unrestricted
N
Restricted
Y
Available for purchase of fixed asset
Y
Classify as Available for purchase or replacement of fixed assets
N
Error
N
Error
Return


Core current assets
Begin
Inventory
Y
Classify as Inventory
N
Due trade and other
Y
Classify as Due trade and other payables
N
Other current
Y
Classify as Other current assets
N
Cash and cash
Y
Unrestric-ted
Y
Classify as Unrestricted
N
Restricted
Y
Available for purchase of
Y
Classify as Available for purchase or replacement of fixed assets
N
Error
N
Error
Return

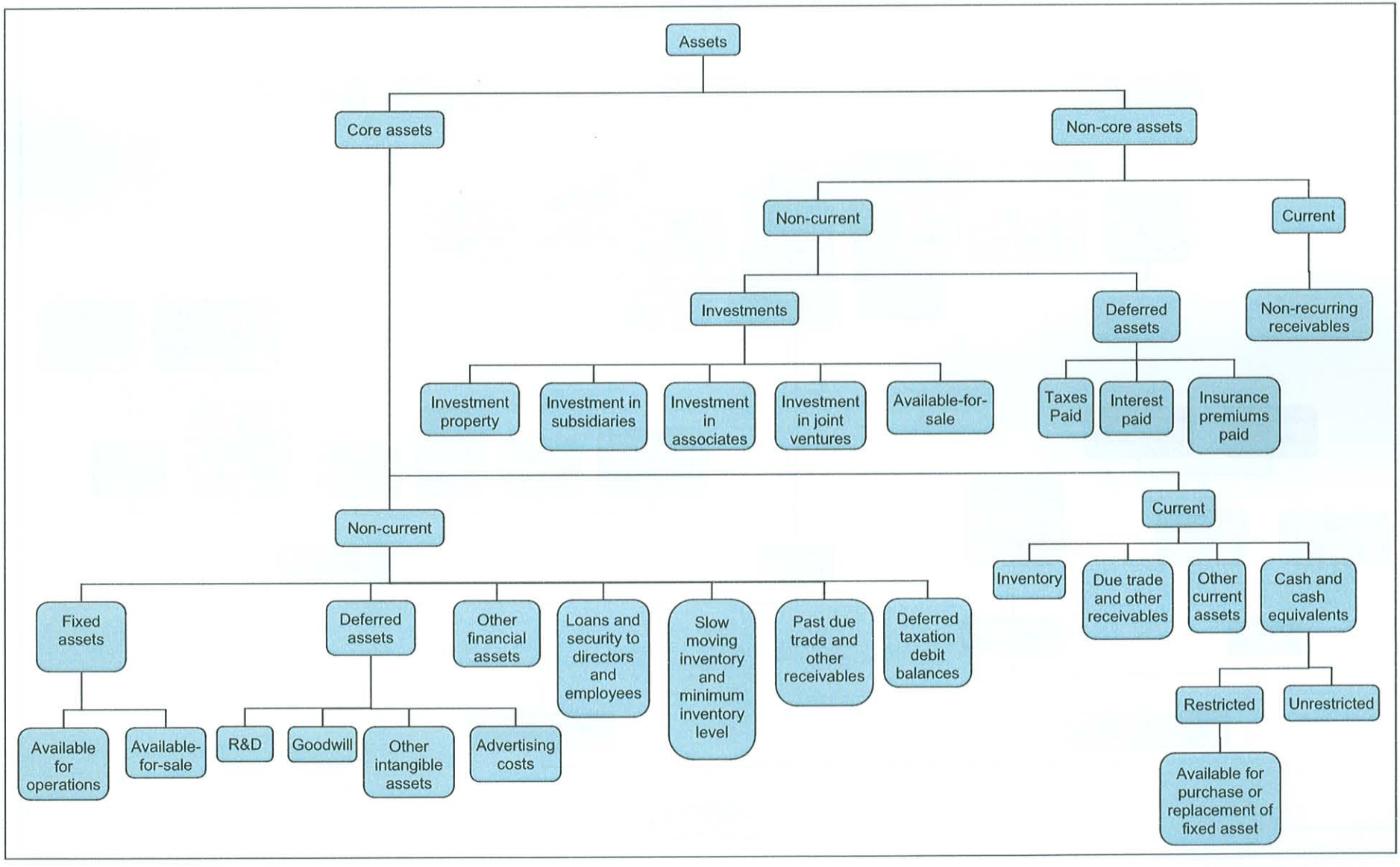

Equity
Begin
Share capital
Y
Classify as Share capital
N
Share premium
Y
Classify as Share premium
N
Reserves
Y
Distributable
Y
Classify as Distributable
N
Non-distributable
Y
Portion of deferred
Y
Classify as Portion of deferred taxation
N
Fixed asset replacement
Y
Classify as Fixed asset replacement reserve
N
Over-provision
Y
Classify as Over-provisions
N
Error
N
Retained earnings
Y
Realised
Y
Classify as Realised
N
Unrealised
Y
Classify as Unrealised
N
Error
N
Minority interest
Y
Classify as Minority interest
N
Error
Return


Liabilities
Begin
Core liabilities
N
Goto Non-core liabilities
Y
Non-current
N
Goto Core current liabilities
Y
Deferred liabilities
Y
Long-term bank overdraft
Y
Classify as Long-term bank overdraft
N
Trade payables overdue
Y
Classify as Trade and other payables overdue
N
Error
N
Debentures and redeemable instr
Y
Classify as Debentures and redeemable instruments
N
Long-term borrowings
Y
Classify as Long-term borrowings
N
Deferred taxation credits
Y
Classify as Deferred taxation credit balances
N
Long-term provisions
Y
Classify as Long-term provisions
N
Indebtedness to subsidiaries
Y
Classify as indebtedness to subsidiaries
N
Error
Return

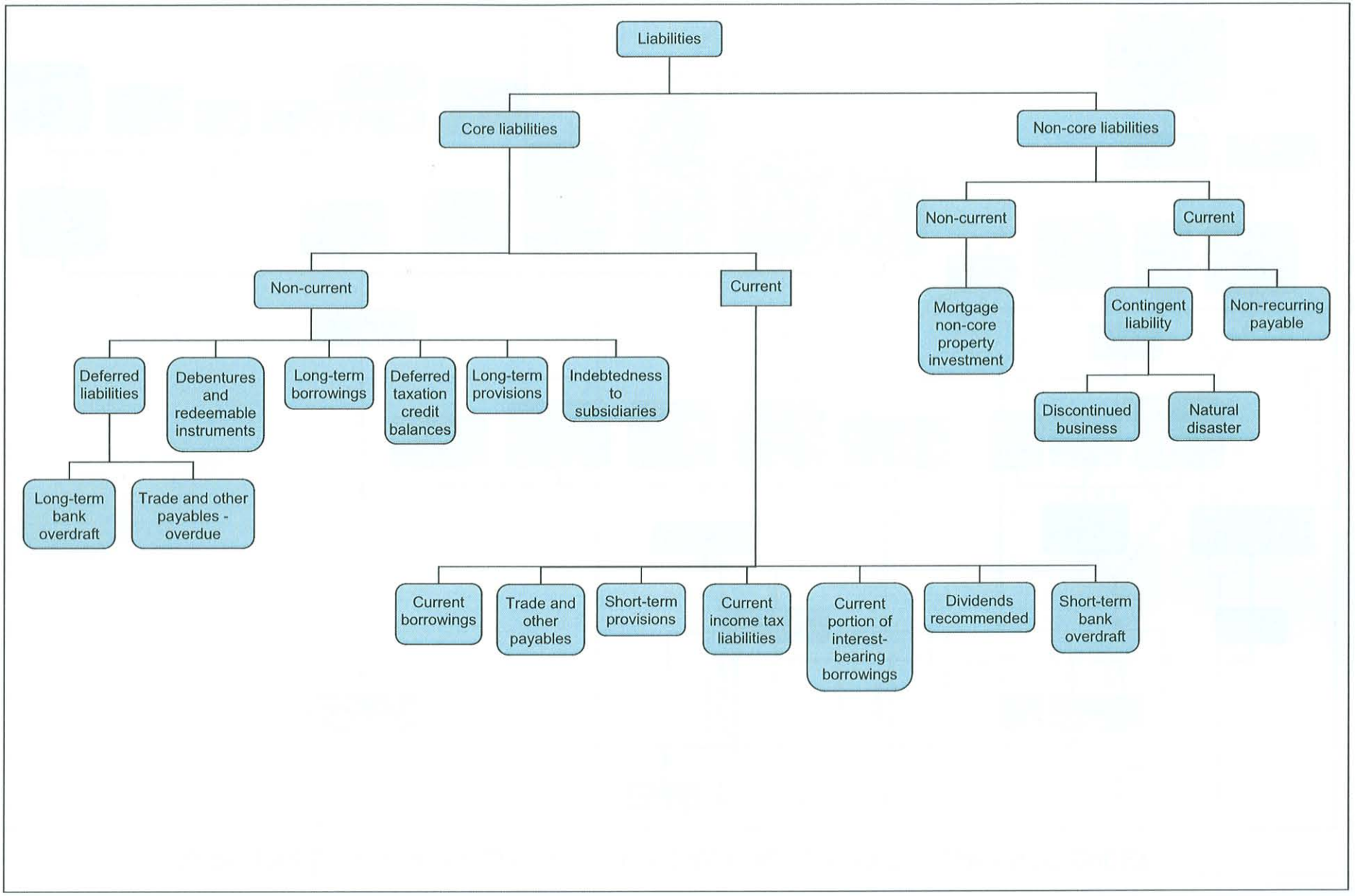

Core current liabilities
Begin
Current borrowings
Y
Classify as Current borrowings
N
Trade and other payables
Y
Classify as Trade and other payables
N
Short-term provisions
Y
Classify as Short-term provisions
N
Current income tax liabilities
Y
Classify as Current income tax liabilities
N
Current portion of int. bearing borrowings
Y
Classify as Current portion of interest bearing borrowings
N
Dividends recommen-ded
Y
Classify as Dividends recommended
N
Short-term bank overdraft
Y
Classify as Short-term bank overdraft
N
Error
Return

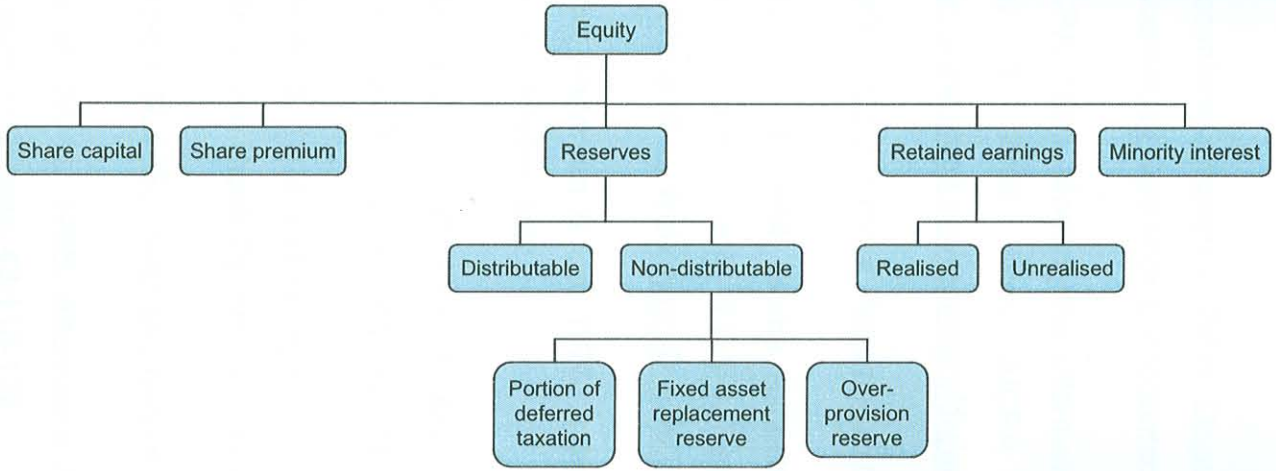

Non-core liabilities
Begin
Non-current
N
Current
N
Error
Y
Contingent liability
N
Non-recurring payable
Y
Classify as Non-recurring payable
Y
Disconti-nued business
Y
Classify as Discontinued business
N
Natural disaster
Y
Classify as Natural disaster
N
Error
Y
Mortgage property investment
Y
Classify as Mortgage non-core property investment
N
Error
Return

APPENDIX L – PROPOSED STATIC SUBFRAMEWORK FOR THE BALANCE SHEET



Appendix L – Proposed framework for the balance sheet




Equity
Share capital
Share premium
Reserves
Retained earnings
Minority interest
Distributable
Non-distributable
Realised
Unrealised
Portion of deferred taxation
Fixed asset replacement reserve
Over-provision reserve

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