

Contentious issues in accounting for intangible assets

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For I know the thoughts and plans that I have for you, says the Lord, thoughts and plans for welfare and peace and not for evil, to give you hope in your final outcome. Then you will call upon Me, and you will come and pray to Me, and I will hear and heed you.

Jer. 29:11-12

To my parents, husband and children

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ABSTRACT

Intangible assets have always been a prevailing concept within the economic milieu and hence in the accounting domain, but it has not been a prominent aspect, or even regarded as an asset, since the emphasis in the economic environment was invariably cast on property, production facilities and equipment.

Economic development and progress over the last +/- 30 years have plunged the issue of intangible assets into the limelight and it has now become a bone of contention in the doings of the financial accounting operating arena.

One has to look closely at the driving forces of the current economic environment to grasp the newfound impetus that brought the issue to the fore. The economic playground of the new millennium has all sorts of toys to toss around, such as information, innovation, services and relationships. The common denominator among these driving forces lies in its intangibility.

Users of accounting tools have stumbled across a significant dilemma by raising their disquietude about the relevancy of financial statements where intangible assets are concerned. There are resounding claims that intangible assets are not exhibited accurately in the financial statements of companies.

The general objective of the research project has been to single out certain aspects concerning the topic of intangible assets and to assert how the accounting fraternity is dealing with the situation at hand.

The study embraced the following aspects:

- A literature study;
- Empirical research by means of a structured questionnaire that gathered data about certain identified aspects of intangible assets and measuring how it is handled by the respondents in the marketplace; and

- Telephonic interviews with key banking officers in the bank sector in South Africa.

The findings of the questionnaires were used to flag crucial aspects of intangible assets and to identify the ensuing approach needed to handle intangible assets within the accounting body of knowledge. The results have shown that the recognition of and reliably measuring intangible assets have become a dilemma that is, in all probability, here to stay for a while to come. Users that responded in the empirical study clearly indicated that the reliable measurement of intangible assets outweighs the relevancy of information about intangible assets.

On the strength of the results of this study, by word of the users of financial statements, the recommendation is posed that relevant, additional information regarding intangible assets should be attached to the financial statements, or that additional notes should be provided.

Moreover, a supplemental recommendation entails that the classification and the recognition criteria of accounting standards should be revisited in order to establish clearer guidelines for the identification and recognition of intangible assets.

OPSOMMING

Ontasbare bates is nog altyd 'n bestaande konsep binne die ekonomiese omgewing en gevolglik in die rekeningkunde, maar dit was nie voorheen 'n prominente aspek of bate nie vanweë die tradisionele fokus in die ekonomiese wêreld op eiendom, aanleg en toerusting gelê het.

Die ekonomiese ontwikkeling gedurende die afgelope +/- 30 jaar het egter ontasbare bates in die kollig geplaas. Om te verstaan hoekom ontasbare bates so 'n prominente aspek in die ekonomiese omgewing geword het, moet die 21e - eeuse ekonomiese dryfkragte ondersoek word. Die ekonomiese omgewing word tans gedryf deur inligting, innovasie, dienste en verhoudings. Hierdie dryfvere is weliswaar almal ontasbaar.

Die prominensie wat ontasbare bates geniet is egter in omstredenheid gehul, veral wat die rekeningkundige hantering daarvan betref. Gebruikers het 'n probleem met die gebrek aan relevansie van finansiële state rondom ontasbare bates, omdat ontasbare bates volgens die gebruikers van finansiële state nie korrek weergegee word op die finansiële state van maatskappye nie.

Die algemene doelstelling van hierdie navorsing was om bepaalde aspekte van ontasbare bates te identifiseer en die rekeningkundige hantering daarvan te bepaal.

Die onderhawige studie het die volgende aspekte behels:

- Eerstens: 'n literatuurstudie;
- Tweedens 'n empiriese opname d.m.v. 'n vraelys wat die gebruikers van die finansiële state se siening rondom sekere geïdentifiseerde aspekte van ontasbare bates en die rekeningkundige hantering daarvan gemeet het; en
- Derdens: 'n gestruktureerde vraelys wat tydens 'n telefoniese onderhoud met sleutelpersoneel in die banksektor voltooi is.

Die resultate van die vraelyste is gebruik om die kritieke aspekte van ontasbare bates en die gevolglike rekeningkundige hantering daarvan, te identifiseer. Die resultate het getoon dat die erkenning van ontasbare bates - maar veral ook die betroubare meting van ontasbare bates - 'n probleem area is en in alle waarskynlikheid gaan bly, aangesien die respondente aangedui het dat betroubare meting meer belangrik is as relevante inligting.

Op grond van die resultate van hierdie studie is die aanbeveling dat relevante, addisionele inligting oor ontasbare bates, soos verlang deur die gebruikers, by die finansiële state aangeheg word of in 'n aantekening by die finansiële verskaf word.

Daar word voorts aanbeveel dat die klassifikasie en erkenningskriteria volgens die rekeningkundige standarde hersien moet word om sodoende 'n duideliker riglyn daar te stel vir die identifisering en erkenning van ontasbare bates.

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LIST OF ABBREVIATIONS

AC	Accounting standards
ASB	Accounting standards board
EU	Europe
FASB	Financial Accounting Standards Board
FRS	Financial Reporting Standard
GAAP	Generally accepted accounting practice
IAS	International accounting standards
IASB	International accounting standards board
IASC	International accounting standards committee
IC	Intellectual Capital
NBV	Net book value
PPE	Property plant and equipment
R & D	Research and development
ROI	Return on investment
UK	United Kingdom
USA	United States of America

CHAPTER 1

INTRODUCTION

1.1 BACKGROUND

The International Accounting Standard for Intangible Assets (IAS38/AC129) defines intangible assets as follows:

An intangible asset is an identifiable non-monetary asset without physical substance.

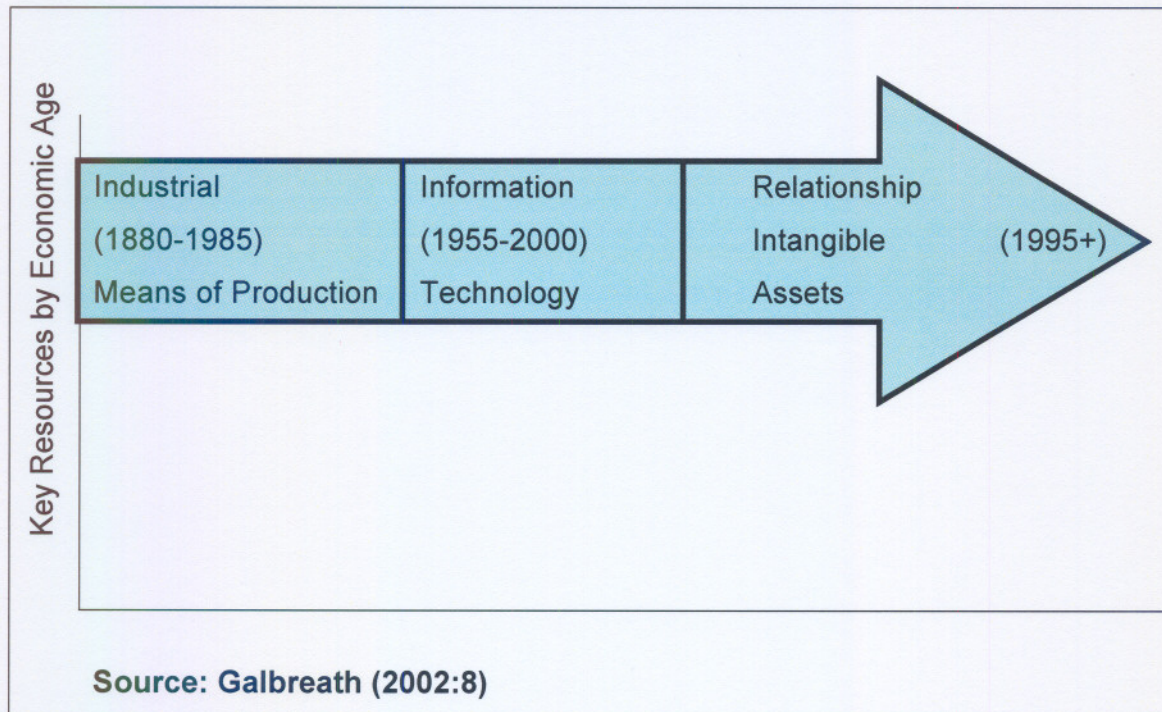
An asset is a resource:

- a) controlled by an entity as a result of past events; and
- b) from which future economic benefits are expected to flow to the entity.

Over the last thirty years, intangible assets have grown into a major concern, not only for academics conducting research in a number of areas of human knowledge, but also for business managers, investment and credit analysts, auditors, investors and other stakeholders, and policy-makers (García-Ayuso, 2003b:597).

To understand why intangible assets have grown into a major concern there must be an understanding of the economic development that occurred from 1880 onwards. Economic development could, according to Galbreath (2002:8), be divided into three economic ages as illustrated in Figure 1.1. page.2.

Figure 1.1 Economic transition



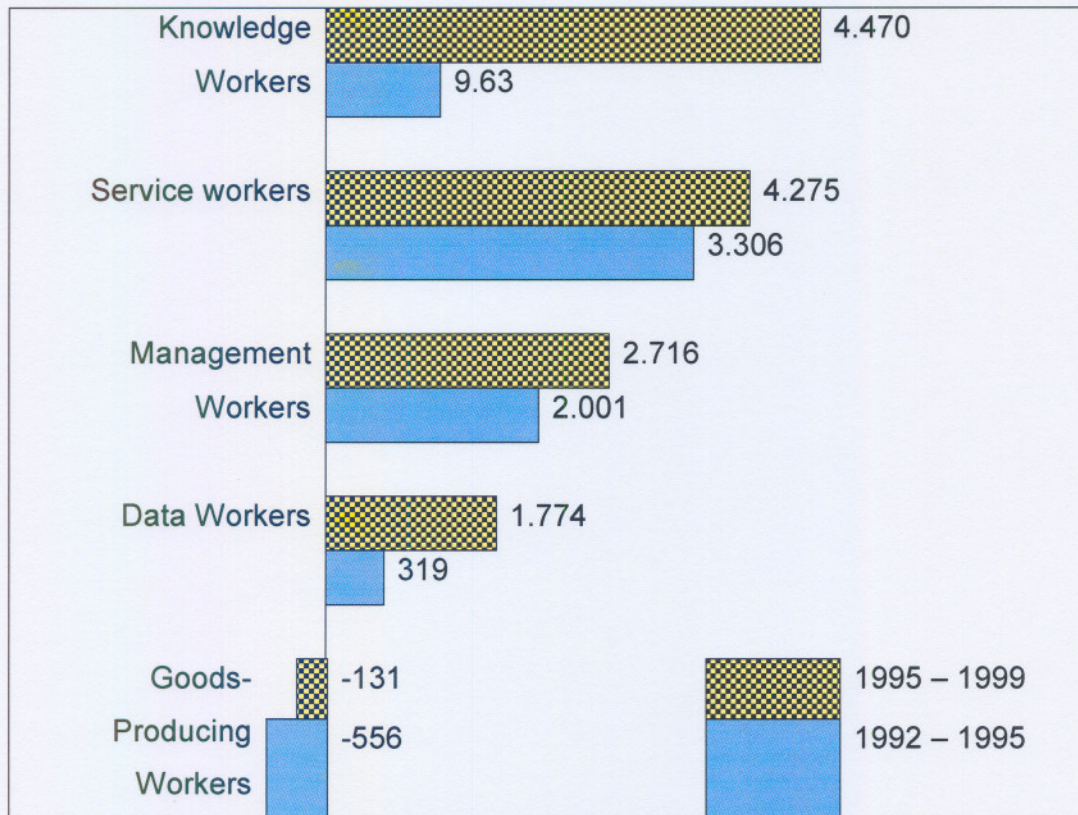
- *The Industrial Age (1880-1985)* – As machines and assembly lines generated higher rates of productivity, mass production fuelled economic growth, and competition was determined by size and scale.
- *The Information Age (1955-2000)* – With the arrival of information and advanced communications, the defining characteristics of economic success shifted from products to services. In the Information Age, businesses viewed themselves as specialists and information producers. This view formed the basis of their strategy to create customer value. The fundamental determinant of market value began to shift away from the tangible book assets, to a multiple of revenue earnings.
The primary goal of the Information Age business became that of converting products into a bundle of value-added, high-margin services.
- *The Relationship Age (1995+)* – Relationship Age businesses are leveraging knowledge about their network of relationships, including customers, employees, partners, suppliers and even investors, to convert their products and services – in fact, the entire lifecycle of customer events – into memorable experiences that

create unique value. The Relationship Age is truly about the value and the maximising of relationships that a firm maintains and manages. Customers, employees, suppliers and partners all contribute synergistically to the economic – and the experiential – output of the firm.

The economic growth sources have changed from machines and assembly lines (tangible assets) to services, knowledge, relationships and innovation (intangible assets). As intangibles increasingly plays a role in credit decisions, company performance and future growth, management wants to measure intangible assets and disclose this information in the financial statements.

The significance of intangible assets is further enhanced by the tremendous growth in knowledge workers (see Figure 1.2 page 4) and in the growing dissociation of stock market values from book values (Hurwitz *et al.*, 2002:52).

Figure 1.2 Employment growth in the USA and EU



Sources: Hurwitz et al., 2002:52

Intangible assets are important in management processes as intangible assets have become a crucial resource for companies and this is mainly due to the impact of intangible assets on innovation processes. Innovation is the dominant factor in national economic growth; and competitive advantages are gained through knowledge, thus knowledge is considered among the main production factors.

1.2 ACCOUNTING OF INTANGIBLE ASSETS

Intangible assets are important resources and ought to be measured. The measurement of knowledge as an intangible asset is a key issue because knowledge makes innovation possible and through innovation one gains a competitive advantage. There is also a need for information on the intangible determinants of the value of companies that will help improve the decision-making processes of managers and stakeholders (Sánchez *et al.*, 2000:312).

Words like measurement, information, determinants of companies' value, decision-making for managers and stakeholders, refer to accounting and accounting reports like financial statements. But the ineffectiveness of the accounting system in accounting for intangible assets in the financial statements has been a frequently mentioned topic for nearly a decade.

Financial statements have lost considerable meaning as the sources of wealth creation in the global economy have changed over time and the current accounting system does not fully accommodate the accounting of intangible assets (Grasenick & Low, 2004:268).

Nearly the same argument was voiced nine years earlier by Stewart (1995:157) in that the resulting effect of the accounting treatment of intangible assets is that managers, owners and investors struggle to understand a business that does not disclose its true assets in its books and thus, there is an absence of information regarding intangible assets. Lev (1997a:136) echoes the problem that users are confronted with, concerning the usefulness, relevance and reliability of financial assets.

Rodov and Leliaert (2002:323) are of the opinion that today's accounting systems are still dominated by the traditional factors of production, ignoring the increasing importance of knowledge as a factor of production of wealth. The double-entry accounting system that underpins worldwide accounting principles and practices is

based on the assumption that all business transactions constitute a unique and identifiable exchange of assets, resulting in equal credits and debits. Traditional accounting also struggles to recognise the value of access to knowledge next to ownership of such knowledge. Intangible asset valuation has largely been restricted to intellectual property rights such as patents, brands and copyrights.

Again, the above is not a new argument. It was mentioned by Lev (1997b:34) that the financial statements do not reflect the value of all intangible assets, as these intangible assets are regarded as the source of competitive advantage and thus the true value of the future economic benefits.

The value of intangibles as assets, has been acknowledged by investors, analysts and international accounting standard setters. Present regulations and valuation models are, however, ineffective in reflecting realistic values in annual financial statements (Heberden, 2000:5).

King and Henry (1999:33) use the following example to demonstrate how current GAAP produces seemingly irrational answers.

“Company A invested millions of dollars to develop Internet business-to-business software. Company B believes the value of Company A’s software is \$100 million and would pay that amount to exploit the software. Once company B purchases Company A it has to show this \$100 million transaction as an asset of \$100 million but the first company can never do the same.”

1.3 PROBLEM STATEMENT

During the literature study of intangible assets the continuous debate and critique regarding the accounting for intangible assets was noticed. The main factor in this debate is the inability of financial accounting to provide complete and accurate information on intangible assets in the financial statements,

Intangible assets are seen today as the generators of economic wealth for their respective companies and there is a need to reflect these intangible assets on the company's annual financial statements, as can be deduced from the introductory discussion in paragraph 1.1 page 1 above.

On the other hand the financial reporting of listed companies in various countries across the globe is regulated by accounting regulations or standards of practice. Therefore, to reflect the intangible assets of companies on the annual financial statements, one needs to adhere to the applicable accounting regulations.

1.4 RESEARCH OBJECTIVES

This research embraces primary and secondary objectives.

1.4.1 Primary objective

The general research objective of this study is to identify the key issues in this debate about the inability of financial accounting to provide complete and accurate information on intangible assets in the financial statements, and to determine the validity of these arguments against the accounting for intangible assets by comparing the critique and opinions with the International Accounting Standard for Intangible Assets, IAS38/AC129.

1.4.2 Secondary objectives

The secondary objectives of this research are as follows:

1. to determine the nature and relevance of intangible assets and compare these with the definitions of intangible assets by accounting regulatory bodies;
2. to determine and evaluate the recognition of intangible assets;
3. to determine and evaluate the measurement of intangible assets;

4. to evaluate the disclosure requirements and needs of users of financial statements with regard to intangible assets;
5. to formulate recommendations regarding the accounting treatment of intangible assets and the disclosure of intangible assets.

1.5 HYPOTHESIS

Financial statements of intangible-intensive companies do not reflect complete and accurate information on intangible assets, because intangible assets are not fully accounted for and disclosed.

1.6 RESEARCH METHOD

The research consists of both a literature and an empirical study.

1.6.1 Phase 1: Literature study

The literature study includes a comprehensive literature review (from books and journals) regarding the purpose, usefulness, reliability and relevance of financial statements, intangible assets, valuation techniques, disclosure requirements, as well as the stance of accounting standards in this regard. For this reason it will cover the most recent literature reflecting national and international views, statements and research on this topic. An international study is important, as most of the current research regarding intangible assets are being conducted by overseas universities, accounting bodies and independent research centres and business schools.

The nature of the proposed research is exploratory. Exploratory research is done on the literature review where an in-depth knowledge of the literature regarding the nature, recognition, measurement and disclosure of intangible assets in financial statements is to be acquired.

1.6.2 Phase 2: Empirical study

The research can generally be classified as qualitative research. Qualitative research is applicable to the questionnaire that was sent out, as the nature of the research deals with the views and opinions of the respondents and not with quantitative data.

The proposed methodology for the empirical study is discussed below.

- **Design:** the design is in the format of a questionnaire.
- **Study population:** the field of study involves the users of financial statements, and more specifically, CEO's, financial managers or any other representatives of senior management who is best acquainted with the topic of this research.
- **Measuring instruments:** questionnaires were sent by electronic mail to the selected recipients who completed the questionnaire and mailed their responses back to the researcher. A telephone interview was held with the chosen banks regarding the questionnaire sent to them by electronic mail.
- **Planned method for data processing:** the questionnaires were processed by hand and the data was analysed via a spreadsheet method. The processed data is used to make conclusions and recommendations. Through interpretation, the results of the questionnaire will be considered in the context of the literature review.

1.7 FIELD OF RESEARCH

The empirical study was divided into two groups. The first group being the CEO's, financial managers or any other representatives of senior management of companies listed under the financial sector of the JSE, and the second group was three of the largest commercial banks listed under the financial sector of the JSE. Of the first group 26 questionnaires were sent out and nine replied. Two of the banks responded and for confidential reasons they are referred to as bank 1 and bank 2.

1.8 SCOPE AND PROGRESS OF STUDY

Chapter 1: Introduction

- The first chapter aims to present the problem regarding the usefulness of the accounting and disclosure of intangible assets.
- The purpose, scope and method of research are clarified.

Chapter 2: Literature study: Definitions and relevance of intangible assets

- In this chapter the various descriptions of intangible assets will be considered to identify the scope of the topic research.
- The relevance and importance of intangible assets in the financial statements will be examined.
- There will be a brief explanation of the mechanism of establishing accounting standards by the accounting regulatory bodies and the reasons why financial statements must comply with these.
- The various accounting regulatory bodies will be compared to disclose the global thinking on the treatment of intangible assets.

Chapter 3: Literature study: Recognition of intangible assets

- This chapter will comprises of a study, discussion, and comparison of the recognition criteria for purchased as well as internally generated intangible assets by accounting regulators.
- The characteristics of intangible assets will be discussed.
- In light of the above the arguments for and against the capitalisation of intangible assets will be reviewed.
- The consequences of when intangible assets are recognised and not recognised will be discussed.

Chapter 4: Literature study: Measurement of intangible assets

- This chapter begins with a study on the measurement criteria of the IASB in order to establish an acceptable value of intangible assets.
- Consideration will be given to whether to amortise or not, with a comparison and conclusion between the accounting regulatory bodies.
- There will be a review of the revaluation, current valuation models and their shortcomings.
- A methodology for the valuation of intangible assets and the implications of inefficient valuation methods will be discussed.

Chapter 5: Literature study: Disclosure of intangible assets

- This chapter will consider the current disclosure requirements on intangible assets as prescribed by IAS38/AC129.
- The reasons for, and consequences of, inadequate disclosure on intangible assets will be given.
- Proposed guidelines for disclosure and proposals for disclosure on intangible assets will be considered.
- The chapter will conclude with a brief overview and discussion on the current accounting reporting model.

Chapter 6: Empirical study: Research methodology

- This chapter provides a description of the research methodology, the objectives of the empirical investigation, and the method of investigation.

Chapter 7: Empirical results

- This chapter entails a discussion of the results obtained from the empirical investigation.

Chapter 8: Conclusions and recommendations

- Conclusions
- Recommendations regarding the accounting treatment and disclosure of intangible assets in the financial statements of companies are made, based on the results of the empirical investigation.

CHAPTER 2

DEFINITIONS AND RELEVANCE OF INTANGIBLE ASSETS

2.1 INTRODUCTION

The first key issue to be addressed is the definitions of intangible assets (objective 1, paragraph 1.4.2, page 7). Firstly the various definitions of intangible assets in the literature are presented as well as the relevance of intangible assets in the financial statements. Secondly, the definitions as set out by the major accounting regulatory bodies in the world are discussed. This is done because current accounting is criticised for not properly coping with intangible assets, which implies that financial statements have lost their relevance. A comparison will be made between the two sections to ascertain if there is a meeting point between the users and accounting regulatory bodies.

2.2 DEFINITIONS OF INTANGIBLE ASSETS

In the literature it was observed that certain terms and definitions were frequently used to define intangible assets. These terms and definitions are presented below in chronological order to illustrate the development in the various ways of defining intangible assets. This will also explain the use of different terms for the generic term – intangible assets – used so far and indicated by the headings set out below.

Organisational resources

Lusch and Harvey (1994:101) are of the opinion that a new understanding is necessary for organisational resources. Resources are anything one can draw on for support or aid. The authors list the following characteristics of resources:

- tangible or intangible;
- they are not inherently valuable; they become valuable;
- they are not static, but dynamic.

Claim for future benefits

According to Lev (1997b:34), intangible assets are a claim for future benefits which do not have a physical or financial embodiment, like stocks and shares. A patent, trademark or a unique organisational structure, such as an internet-based provider chain that generates cost savings, can be regarded as intangible assets.

Lev (1997b:34) concludes that intangible assets are a source of intangible value (claim on future economic benefits) generated through innovation (discovery), a unique organisation, design and human resource management. Lev further states that there are three major nexuses of intangibles – innovation, organisational practice and human resources.

The following definitions can all be fitted into the above-mentioned three nexuses of intangible assets:

Corporate assets

O'Connell and Burton (1999) define the new meaning of corporate assets as follows:

- **Intellectual assets**

Traditionally, intellectual assets were referred to as intangible assets that included legally-protected property rights such as patents, copyrights, trademarks, trade secrets, an in-house labour force, client lists, and 'know-how'. These intangible assets were seen as by-products of the physical assets of the company, such as facilities, equipment and machinery. The assumption was that if intangible assets were being managed well, the physical assets were also being managed well.

- **Corporate value**

The fact that intangible assets comprise a larger component of corporate value has irreversibly changed the business terrain. For example, IBM earns a larger income by selling its services than it does by selling its computers. The Coca-Cola Company's value emanates from its intellectual assets, such as its secret formula.

Intangible assets may be divided into three categories.

- a) *Intellectual assets* are the collection of skills, capabilities, “know-how” and knowledge internalised in employees.
- b) *Intellectual assets emanate from intellectual capital*, flow from the documentation of employees of their knowledge or “know-how”, and include plans, procedures, memo’s, sketches, drawings, computer programs, products, product features and manufacturing processes.
- When the above is documented, these assets may be shared with others, inside or outside the organisation, to create value for the company.
 - Specific examples of intellectual assets are: the documentation of an effective computer code, committing an idea to paper by way of a design, recording the failure of an expensive experiment which teaches one not to make the same mistake in future, noting the preferences of guests in a data base, and acquiring a patent.
- c) *Intellectual property which consists of intellectual assets* that
- are legally protected as a result of their legal stature, ease of identification and relatively great value; and
 - intellectual property rights.

Intangible resources

According to Sánchez *et al.*, (2000:315) intangible resources are considered as “assets” in a broad sense, that is, intellectual property rights, trademarks, and certain information technology such as databases, networks, and “skills”.

Relationship assets

Relationship assets are defined by Galbreath (2002:17) as the difference between a company’s market value and the sum of its tangible assets. These uncounted assets are classified into three categories:

- *human assets*, or the knowledge assets of the firm;
- *organisational assets*, such as R&D, patents, trademarks, information systems;
- *market-based assets*, such as customers, brands, channels and business collaboration, and partnerships.

To further illustrate the complexity of the meaning of intangible asset in the economic world, the following intangible assets are uniquely defined. Brands feature in most of the above-mentioned definitions, but on brands alone there are a wide range of descriptions. Below are three of the many descriptions listed for illustration purposes.

Brands

Murphy as referred by Kim *et al.*, (2003:335) is of the view that a brand is not only an actual product, but also the unique property of a specific owner. It has been developed over time so as to embrace a set of tangible and intangible attributes that appropriately differentiate between products.

According to Haigh (2001) brands are more than a name or logo. They represent a defensible legal property that can be sold, transferred or licensed, quite separately from the related product manufacturing capacity.

Another definition by Seetharaman *et al.*, (2001:243) defines a brand as an asset that does not have physical existence and the value of which cannot be determined exactly until it becomes the subject of a specific business transaction of sale and acquisition.

It can be seen that the above-mentioned terms and descriptions, although different, refer to the same set of concepts. All the above apply to non-physical resources or activities that are generating income and which may or may not appear in corporate financial reports.

As observed by Grasenick and Low (2004:268) there is neither a unique nor an unanimously accepted definition or classification of intangibles. One reason for this is that the boundaries, constituents and definitions of intangibles vary according to the perspectives of the different interest groups considering them.

It is the view of Gallego and Rodríguez (2005:107) that one must assume that new forms of intangible assets will emerge in the future, that the universe of classification is subject to constant change, and that these are issues that remain to be fully elucidated.

By comparing the development in the definitions of intangible assets with the economic development it seems that these two go hand in hand, thus validating the above view of the emergence of new forms of intangible assets and the constant change in the classification thereof.

2.3 RELEVANCE AND IMPORTANCE OF INTANGIBLE ASSETS IN FINANCIAL STATEMENTS

Intangible assets are not a strange phenomenon for accountants and the users of financial statements, but due to the economic development they are more relevant today than 20 years ago. They are everywhere, in one form or another, i.e. goodwill, brands, patents – in almost all businesses.

The ability of a company to mobilise and exploit its intangible assets has become far more decisive than just investing and managing physical assets (Castka *et al.*, 2004:571). This is due to the fact that intangibles are important for the development and enhancement of sustainable competitive advantages and thus enhancement of the financial position of an entity (García-Ayuso, 2003b:600).

For this reason and to communicate the contribution of intangible assets to the business success, it has become imperative to disclose intangible assets properly in the financial statements.

2.3.1 Why have intangible assets become so important for the users of financial statements?

It is no longer the fixed assets that a company owns which are generating the profits; it is the brands, patents, software, and research programmes and other knowledge assets. Tollington (1995) quotes Aaker: "It will be more important to own markets than to own factories. The only way to own markets is to own market dominant brands".

The view of Cravens and Guilding (1999) is that the value of a business increasingly is present, not only in physical and financial assets disclosed on the balance sheet, but in intangibles: brands, patents, franchises, software, research programmes, ideas and expertise which are generally not disclosed as such.

The above change in views regarding the generators of profit and business value is a result of the critical changes in society, such as the globalisation of business activities, the intensification of competition and the unprecedented developments in information technologies. Knowledge has become the fundamental production factor. Productivity gains are mainly driven by the use of knowledge (intangible asset) and intangibles are the key drivers of competitiveness (García-Ayuso, 2003b:599).

It is acknowledged that the full value of companies who have trademarks is not always reflected in the financial statements or in the share price, and this leads to the realisation that intangible assets, and trademarks in particular, should be appraised and disclosed as such (Heberden, 2000:5).

The conclusion that can be reached is that there is apparently a perception change in the economic world as to what are regarded as the sustainable profit generators for a company.

2.3.2 Relevance of intangible assets on financial statements

The absence of information regarding intangible assets causes a decline in the usefulness of financial statements, creates problems for understanding a business firm's earnings prospects and future cash flows, and distorts the ability to determine a company's true value from the financial statements, as will be discussed below.

- Analysing an organisation's financial records and balance sheet, although important, does not provide management with an accurate assessment of the firm's capabilities because the organisation's performance is increasingly tied to intangible assets such as corporate culture, customer relationships and brand equity (Lusch & Harvey, 1994:101).
- The dilemma with financial statements, which professionals want to be both reliable and relevant, is that it is easy to achieve reliability, but relevance proves to be more difficult; especially when it comes to the Internet and high-tech financial statements, where the intangible assets are not referenced in the financial statements, yet these assets are highly relevant to an investor (King & Henry, 1999:33).

The following example by King and Henry (1999:33) illustrates the relevance of intangible assets." When Company Z buys an asset from Company Y and cash changes hands, this is good evidence that Y has made a sale and can recognise a profit and that company Z now has the asset. If tangible, this asset can be observed physically to determine its existence(reliability) as well as its nature to determine compatibility to the company's business(relevance)".

Therefore, King and Henry (1999:33) believe that intangible assets are just as relevant as fixed assets to understand a business firm's earnings prospects and future cash flows, as *intangible assets are seen as the drivers and creators of future economic growth.*

The above opinion regarding intangible assets as the drivers and creators of future economic growth was recently documented in research that established the existence of a positive relationship between certain intangible investments, and both the future earnings and the value of companies (García-Ayuso, 2003b:598).

King and Henry (1999:33) refer to the concept statements of the FASB that asserts that the purpose of financial statements is to provide investors and creditors with information about future earnings prospects and cash flows. But ask: how a company is able to claim that the information disclosed in the financial statements is sufficient to provide investors and creditors with information about future earnings prospects and cash flows, if it does not disclose its intangible assets.

It therefore seems obvious that the solution to the above lies in providing information about intangibles to the users of the financial statements.

2.3.3 What do users regard as relevant regarding information ?

Research done by AICPA (1994) on the views of the users (investors, creditors and their advisers) regarding the types of information that are often relevant is:

- 1) foundation of knowledge about the past and the present on which to evaluate alternative predictions about the future; the major components of that foundation are
 - a) segment's business
 - b) financial; and operating statistics for recent periods
 - c) explanations of relationships and changes among statistics between the periods;

- 2) leading indicators that include
 - a) the identity and possible effect of key trends
 - b) the company's broad goals, strategy and factors that are critical to successful implementation of strategy
 - c) major plans
 - d) opportunities and risks;
- 3) projected financial and nonfinancial information;
- 4) disaggregation of information;
- 5) qualitative information;
- 6) measurements must be comparable and consistent;
- 7) information must be timely;
- 8) information is needed within a sufficient time frame.

Information is relevant if it has the capacity to confirm or change a decision-maker's expectations. Thus the value-relevance of a financial statement is its ability to confirm or change investors' expectations of value. Therefore:

- the value-reference of financial statements could be measured by the response in the market price or volume when accounting numbers are published, or
- by its ability to explain variations in the marketplace or volume, or
- by the total return that could be earned from pre-disclosure knowledge of financial statement information (Høegh-Krohn & Knivsflå, 2000:255).

Høegh-Krohn and Knivsflå (2000:257) observe that if the current (and rather prudent) way of treating intangible resources in financial statements has affected the value-relevance of accounting numbers negatively, as suggested, an obvious way of improvement would be to be less prudent when recognising and measuring intangible assets.

But becoming less prudent involves the risk that it would undermine value-relevance, because measured income and equity would become too unreliable (Høegh-Krohn & Knivsflå, 2000:257).

This was a concern raised as early as 1994 in the research done by AICPA (1994) – that investors, creditors, and their advisors are worried about the relevance, reliability, comparability and neutrality of financial and other information used by them when taking decisions.

Set out below are some of the qualitative characteristics described according to the research done by AICPA (1994).

- **Reliability and credibility**

The credibility of accounting information rests on reliability and impartiality. Consumers can trust information to be a true reflection of the economic aspects or the events which it is supposed to represent.

Two primary characteristics make financial statements reliable:

- 1) Representative reliability refers to the likelihood that an accounting measurement, which accurately depicts the nature of the object, is being reflected.
- 2) Verifiability refers to the likelihood that, if various accountants review the same evidence, similar conclusions will be reached. This includes impartiality, thus furnishing information which is devoid of bias (AICPA, 1994).

- **Comparability**

Financial analysts depend on comparisons and the quality of comparisons is elevated to a level where financial accounting standards produce financial statements which are comparable from one period to another (AICPA, 1994).

The above is how the analysts (users of financial statements) define the more important qualitative characteristics. This is not, however, how it is experienced by them when analysing a company's financial statements.

According to the 1994 research done by AICPA, professional investors and analysts would like to have the financial statements of a company to be:

- a record of financial effects of true economic events in the simplest terms.

But it is their view that

- corporate managers naturally attempt to disclose the achievements of their companies in the most favourable light; and
- corporate financial reporting is not objective, and it is intentionally or unintentionally slanted to reflect the company in the best light, for example, the postponement of reporting negative information in the hope that the situation will right itself.

Therefore, professional investors and analysts use many varied sources of information because the impartiality of information on financial statements is questionable.

Financial analysts do not have a problem with disparities between companies, not even those in the same sectors, provided that they are able to obtain information enabling them to understand and interpret the disparities (AICPA, 1994).

Although it appears that the evaluation, recording and disclosure of intangible assets are of great importance, it also became clear that to find a suitable standard to do these things seems to verge on the impossible as will be seen from the discussion below.

2.4 DEFINITIONS BY ACCOUNTING REGULATORS

2.4.1 Background

The discussion in paragraph 2.2 page 13 disclosed a wide range of descriptions or definitions of intangible assets, as viewed by the various users of financial statements.

A review of the definitions of intangible assets by various accounting regulators will now be discussed to give insight not only into what is happening abroad but also what is done and required by business practices. These definitions could be influenced by the specific way a certain country is managing its economy as well as the emphasis on

financial reporting and accounting, which may differ from country to country and continent to continent.

Accounting has been called the language of business and business results are reflected via the accounting on the annual financial statements. However, accounting is regulated by accounting standards. Accounting standards are the rules for preparing financial statements, i.e. the “Generally Accepted Accounting Practice” (GAAP) that specify the type of information that financial statements ought to contain and how that information ought to be prepared. Accounting standards define what are acceptable and unacceptable financial accounting practices (Gernon & Meek, 2001:39).

Accounting and financial reporting are not the same everywhere, as accounting is shaped by the environment in which it operates. The following variables are mentioned by Gernon and Meek (2001:3) and Nobes and Parker (2002:18) to shape accounting development:

- external finance (providers of capital)
- legal system
- political and economic ties with other countries
- levels of inflation
- size and complexity of business entities, sophistication of management and financial community, and general levels of education
- culture

Historically, the world’s most influential standard–setting organisations or accounting regulatory bodies have been the FASB in the US, the ASB in the UK and the IASC, which is the organisation responsible for developing international accounting standards (Høegh-Krohn & Knivsflå, 2000:246).

It is the opinion of Høegh-Krohn and Knivsflå (2000:246) that the way in which the above standard-setting bodies account for intangible resources reveals few differences between them, presumably because they are all dominated by the Anglo-American

accounting tradition, focusing on the capital markets as the primary users of financial statement information.

Nearly the same argument is voiced by Stolowy *et al.*, (2001:148) stressing that the process and outcome of IASC standard-setting are heavily influenced by the Anglo-American accounting approach, which theoretically emphasises “relevance” and that this is one of the major reasons why countries with other accounting approaches (Continental and Central European countries) are clearly reluctant to adopt the international accounting standards.

Høegh-Krohn and Knivsflå (2000:254) are of the opinion that this reluctance could possibly be explained by the fact that Central European countries are credit-orientated economies, deeming it important to signal the value of the collateral to the banks as the main sources of finance, whereas the Anglo-American ones are more equity-orientated economies deeming it important to signal value to investors.

2.4.2 Comparison of accounting regulators’ definitions of intangible assets

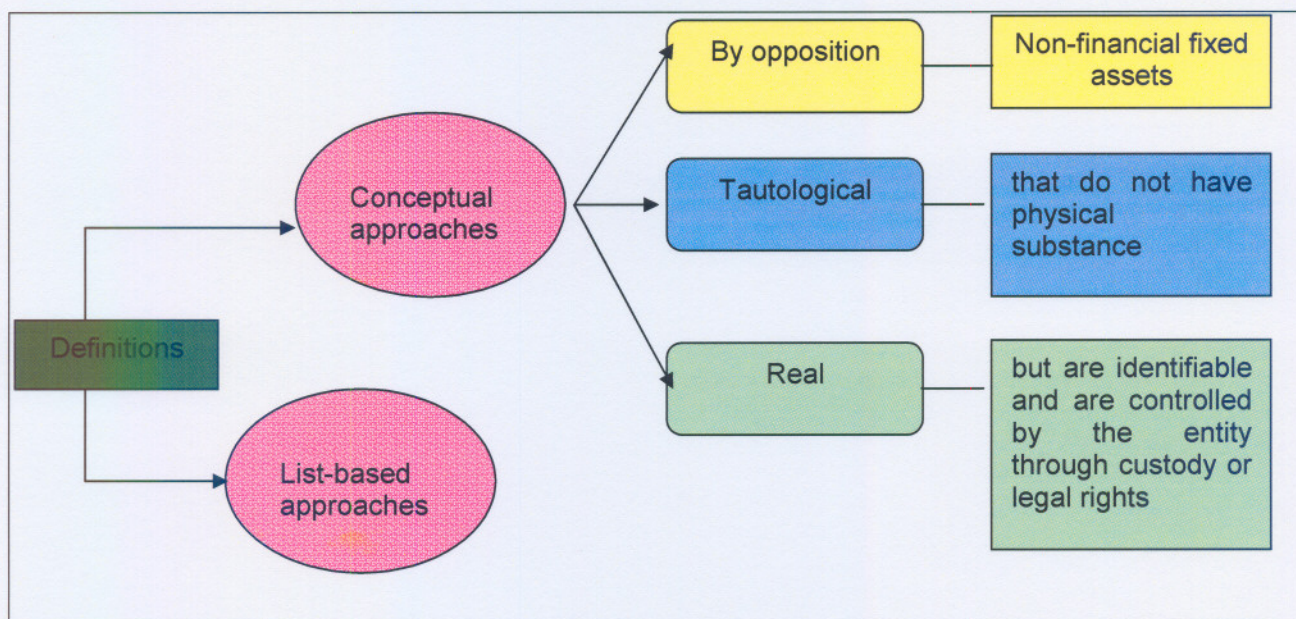
Research on definitions of intangible assets was done by Stolowy and Jeny-Cazavan (2001:480) where they based their study on the accounting regulations of a sample of 21 European countries and two international accounting regulatory bodies.

On the grounds of this research, they identified a twofold approach towards how intangible assets are defined, as illustrated in Figure 2.1 page 26:

1. actual definitions, which have been called “conceptual”, and
2. lists of intangible assets, a kind of inventory.

Their research shows that these approaches are not mutually exclusive in that an application of a conceptual approach also supplies a list of intangibles concerned.

Figure 2.1 How intangible assets are defined



Source: Stolowy and Jeny–Cazavan (2001:482)

The conceptual approaches as per Figure 2.1 can be divided into three categories:

1. definitions by opposition (for example, “fixed assets other than tangible or financial”);
2. tautological definitions (for example, “an intangible asset is characterised by a lack of physical substance”, in order to be included in the balance sheet category entitled ‘intangible fixed assets’, an asset must be intangible); and
3. real definition – definitions which make a genuine conceptual effort to determine what an intangible asset is.

The definition given in the UK (FRS 10) illustrates the above (see Figure 2.1 in that it defines intangible assets as non-financial fixed assets that do not have physical substance but are identifiable and are controlled through custody or legal rights.

The contention is that financial statements are no longer relevant because of the accounting treatment of intangible assets (paragraph 1.2 page 5).

To see whether this statement is valid it is necessary to look at how accounting regulatory bodies define intangible assets, in order to identify intangible assets followed by the way in which it is recorded.

Table 2.1 page 28 presents an overview of the research results by Stolowy and Jeny-Cazavan (2001:483). They studied 23 sets of regulations (15 EU members, six other countries and two international organisations). The total is higher than 23, due to the fact that some countries and organisations fall into more than one category.

Table 2.1 Definition of intangibles in accounting standards and explicit conceptual frameworks					
Countries and organisations	Conceptual approaches				Conceptual framework
	By opposition	Tautological	Real	List of intangibles	
European Union					
Austria	X			x	No
Belgium				X	No
Denmark				X	No
Finland				X	No
France	X			X	In development
Germany	X			X	No
Greece				X	No
Ireland*	X	x	x	X	In development
Italy				X	No
Luxembourg	X	x		X	No
The Netherlands	X	x		X	Yes
Portugal				X	No
Spain				X	No
Sweden				X	No
UK*	X	x	x	X	In development
Sub-total	6	3	2	15	
Other countries					
Australia				X	In development
Canada		x		X	Yes
Japan				X	No
Norway				X	No
Switzerland		x		X	No
USA		x	x	X	Yes
Sub-total	0	3	1	6	
Supra-national accounting organisations					
IASC		x	x		Yes
European Union				X	No
Sub-total	0	1	1	1	
Total	6	7	4	22	

*Ireland and the UK are grouped together under the EU, although not part of the EU.

Source: Stolowy and Jeny-Cazavan (2001:483)

It was found by Stolowy and Jeny-Cazavan (2001:482) that, of the 23 sets of regulatory bodies studied, all except the IASC define intangibles by means of lists comprising the types of intangible items which can be recorded as an asset.

Of the 23 regulatory bodies studied, 10 countries have a conceptual approach to intangible assets, whether by tautological definitions or by opposition or by both. Only three countries and one international organisation can indeed be considered as having real definitions: Ireland, the UK, the USA and IASC.

From Table 2.1 page 28, it can be observed that 13 countries without a conceptual accounting framework simply follow a list-type approach towards the identification and definition of intangible assets.

To conclude, it can be observed that for most of the countries there is no conceptual framework and this causes a lack of homogeneity in accounting standards. Those countries without a conceptual framework refer to intangible assets by means of a list of intangible assets, automatically limiting what is seen as intangible.

Tollington (1997:53) suggested that in a world dominated by the power of mental creativity and rapid technological change, e.g. software, branding and biotechnology a new way of defining an asset needs to be devised, if the balance sheet is to remain relevant in the 21st century.

2.5 CONCLUSION

2.5.1 Definitions from the literature

The major factors that contribute to the problem of a homogenous definition of intangible assets are that there are no boundaries to mental creativity (knowledge and innovation) and the rapid development in technology.

It is the view of the researcher that it is not possible to attain one clear-cut definition of intangibles that will address all of the users' views on intangible assets, because there are different views on what comprises intangible assets according to the perspective of the different interest groups considering them.

This view of the researcher is illustrated in Figure 2.2, where a list of categories of intangible assets provided by the FASB, is compared with a list of categories developed by the Working Group Schmalenbach Society in Germany.

A comparison of the two lists reveals that these are the same intangible assets, just called by another name, indicating differences in identification of intangibles and terms used.

Figure 2.2 Categories of intangible assets

FASB Categories	vs.	Working Group Schmalenbach Society
Technology-based Assets		Human Capital
Customer-based Assets		Customer Capital
Market-based Assets		Supplier Capital
Workforce-based Assets		Investor Capital
Contract-based Assets		Process Capital
Organisation-based Assets		Location Capital
Statutory-based Assets		Innovation Capital

Source: Kaufmann & Schneider, 2004:378

2.5.2 Relevance

Intangible assets became relevant in that they have been regarded as the drivers and creators of future economic growth. Due to this it became relevant for intangible assets to be capitalised on the financial statements. The true value of intangibles could, however, not be disclosed on the financial statements of companies and therefore the usefulness of these financial statements has declined.

2.5.3 Definitions from the accounting regulatory bodies

It is evident that most of the accounting regulators, except in the US, UK, Ireland and IASC, lack a conceptual approach and therefore a clear definition of intangible assets. This may be contributed to their:

- differences in accounting regulations and legal systems that have an influence on the way in which intangibles are defined or not; and
- accounting and economic development in those particular countries.

2.5.4 Summary

The phrase "identifiable non-monetary asset", as used by accounting regulatory bodies, is a simplistic term for a very complex situation. Considering the various descriptions of what are seen as the underlying components of intangible assets, it is far more complex than just a single phrase, as will be explained below.

The criticisms against the accounting regulators of this world for not coping with the accounting of intangible assets (with reference to the definitions of intangible assets) are not completely valid.

Criticisms are valid only for those countries which follow a list-type approach in defining intangible assets, as these countries, in doing so, will exclude some intangible assets because such assets do not answer to this narrow-minded approach.

However, for the countries that have a conceptual approach like the UK, US, Ireland and IASC, all of these above-mentioned descriptions in paragraph 2.2 page 13 can be fitted into their definition.

IAS38/AC129 paragraph 8 defines intangible assets as follows:

“An intangible asset is an identifiable non-monetary asset without physical substance.

An asset is a resource:

- a) controlled by an entity as a result of past events; and
- b) from which future economic benefits are expected to flow to the entity.”

Identifiability is determined by IAS38/AC129 paragraph 12 as follows:

“An asset meets the identifiability criterion in the definition of an intangible asset when it:

- a) is separable, i.e. is capable of being separated or divided from the entity and sold, transferred, licensed, rented or exchanged, either individually or together with a related contract, asset or liability; or
- b) arises from contractual or other legal rights, regardless of whether those rights are transferable or separable from the entity or from other rights and obligations.”

All of the above-mentioned descriptions discussed in paragraph 2.2 page 13 including organisational resources, claim for future benefits, intellectual assets, corporate value, intangible resources and relationship assets are:

- non-monetary assets
- without physical substance
- from which future economic benefits are expected to flow to the entity.

However, the criteria of “controlled by an entity as a result of past events” may not be applicable to some of these definitions, as it will be difficult to prove or establish, or exercise control over some of these intangible assets.

2.6 RECOMMENDATIONS

The researcher would suggest dividing the descriptions of intangible assets into two distinct groups based on control. For the researcher identifiability boils down eventually to control. Intangible assets must be separable from the entity in order to be sold or transferred, licensed, rented to obtain the future economic benefits flowing from the intangible asset and to restrict the access of others to those benefits (controlled).

Group 1. This refers to those descriptions of intangible assets where control by the entity can be established, for example the licensing of a product.

Group 2. This refers to those descriptions of intangible assets where control by the entity is difficult to establish. These are the intangible asset descriptions that consist of human resources, organisational practices, and market-based assets, such as brands, customer channels and business collaborations and partners.

These countries with the conceptual approaches are major role players in the economic environment and there is a process of harmonisation of countries and the European Union to harmonise their accounting regulations with the IASC accounting standards, thus further improving the overall definitions of intangible assets.

CHAPTER 3

RECOGNITION OF INTANGIBLE ASSETS

3.1 Introduction

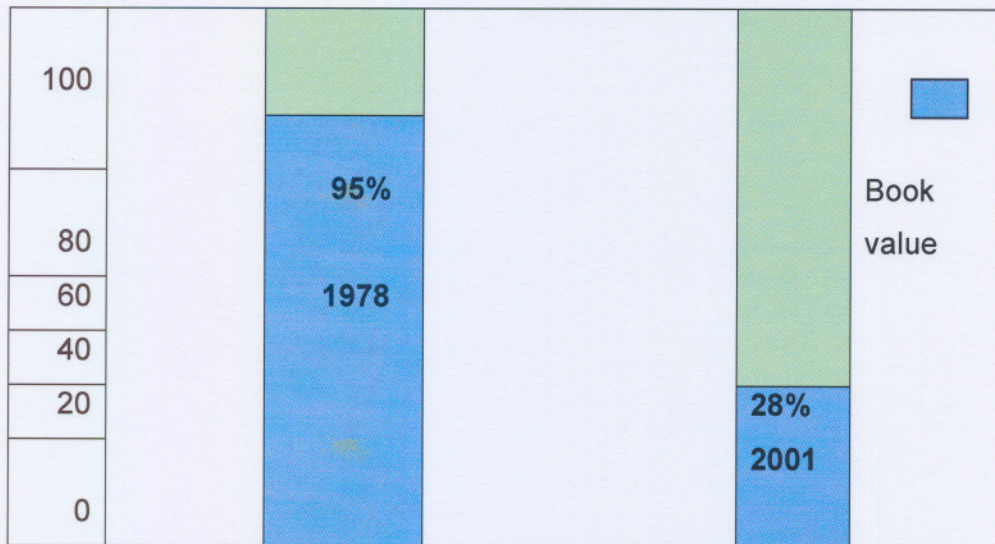
It is argued that the difference between book value and market value represents the intangible assets not recognised on the financial statements. The following is used to illustrate this argument:

Sullivan Jr and Sullivan Sr (2000:328) refer to Dr Margaret Blair of the Brookings Institute who studied the shift in the make-up of company assets over the 20-year period from 1978 to 1998. She found a significant shift in the relationship between tangible and intangible assets over time. In 1978 approximately 80 percent of corporate value was due to tangible assets, with 20 percent accounted for by intangible assets. By 1998, the proportions were reversed, with 80 percent of corporate value associated with intangible assets and only 20 percent with tangibles.

The book value of a company is reflected on the reported balance sheet. This is the official measure of a company's value and is reported to the shareholders and financial community. The market value of the company reflects the investors' perception of the company's present and future value (Eskildsen *et al.*, 2003:47).

The two measures of companies' value were very close by the end of the 1970s, as illustrated in Figure 3.1 page 35 the book value presented 95% of the market value but in 2001 the book value only presented 28% of the market value.

Figure 3.1 The change in market value vs. book value over time



Source: Eskildsen et al., 2003:47

In light of the above, one can then assume that the rest of the value – market value less book value – is represented by assets not disclosed in the balance sheet according to current accounting practices, but regarded by the market as assets. These assets reflecting the value placed on them by the market as goodwill, patents, trademarks and other assets are not as yet recognised as assets.

Thus Stewart (1995:157) declared that the accounting profession was slow in realizing that trademarks, patents, licenses, and franchises, can be developed, bought and evaluated in the same way as fixed assets and therefore also be recorded on the financial statements.

Recognition of intangible assets is the way in which the latter are recorded in the books of account and disclosed on the financial statements of business entities.

To recognise an intangible asset in the financial statements, the recognition criteria of the specific accounting standard must be met in order to conform to GAAP.

Therefore, the chapter layout will be as follows: first in this chapter and in Chapters 4, 5 and 6, the accounting treatment according to the IASB will be presented, followed by an international comparison of the relevant topic, before the topic is discussed.

It was decided to set out the accounting criteria of the IASB because South Africa has adopted it as GAAP and secondly, there is a worldwide harmonisation process going on, aimed at harmonisation with the IASB.

3.2 ACCOUNTING REGULATORS

3.2.1 Recognition criteria according to IASB

According to IAS 38/AC129 paragraph 21 and 22:

“An intangible asset should be recognised if, and only if:

- a. it is probable that the future economic benefits that are attributable to the asset will flow to the entity, and
- b. the cost of the asset can be measured reliably.

An entity should assess the probability of future economic benefits using reasonable and supportable assumptions that represent management's best estimate of the set of economic conditions that will exist over the useful life of the asset.”

3.2.2 Discussion of recognition criteria

As Lacroix (1996) suggests, the fragmented approaches in defining intangibles mentioned in paragraph 2.4.2 page 25 encourage the development of more general criteria for recording intangibles. Such an approach would enable the inclusion of relevant intangible assets in the books of account and disclosure on the financial statements.

Moreover, it is the opinion of Stolowy *et al.*, (2001:149) that, when the approach applied in defining intangibles has turned out to be conceptually weak, the recognition criteria

compensate for the gaps left by list-style approaches towards identifying intangible assets.

According to the literature study in Chapter 2, the approaches to define intangibles are weak. Obvious intangible assets are excluded as such following a close application of the definitions, therefore the recognition criteria must try to accommodate and overcome those weaknesses.

It is assumed by Høegh-Krohn and Knivsflå (2000:257) that the trade-off between relevance and reliability and the way these affect the information value of financial statements determines the recognition of intangible assets. The reliability of financial information is a major concern for the users of financial statements, and currently if measurement is not reliable, even if it is relevant, it is not included in the financial statements. Thus, reliability overrules relevance.

3.2.3 Comparison between accounting regulatory bodies on recognition of intangible assets

Table 3.1 page 38 summarises the research done on the recognition criteria by Stolowy and Jeny-Cazavan (2001:486) where they based their study on the accounting regulations of a sample of 21 countries and two international accounting regulatory organisations.

Table 3.1 Comparison of the recognition of intangible assets in various countries

Countries and organisations	Purchased intangibles	
	Recorded as an asset	Written off against reserves
European Union	R,G,O	
Austria	R,G,O	
Belgium	R,G,O	
Denmark	R,G,O	G
Finland	R,G,O	
France	R,G,O	
Germany	R,G,O	G
Greece	R,G,O	G
Ireland	R,G,O	
Italy	R,G,O	
Luxembourg	R,G,O	
The Netherlands	R,G,O	G
Portugal	R,G,O	
Spain	R,G,O	
Sweden	R,G,O	
UK	R,G,O	
Other countries		
Australia	R,G,O	
Canada	R,G,O	
Japan	R,G,O	
Norway	R,G,O	
Switzerland	R,G,O	G
USA	R,G,O	
Supra-national accounting organisations		
IASC	R,G,O	
European Union	R,G,O	R (research),G

Notes: R=R&D costs; G=Goodwill; O=Other intangible assets

Source: Stolowy and Jeny–Cazavan (2001:486)

In Table 3.1 it is observed that all the countries in the sample recognise purchased intangibles, and this shows that, once there is a reference to a market, the question of

recognition is no longer an issue, for there is no problem regarding identification (or separability), and reliable measurement of cost.

To conclude from Table 3.1 page 38, there is a high correlation between these countries and organisations on the recognition of purchased intangible assets, because the reliability of the measurement is not questioned.

3.3 RELEVANT CHARACTERISTICS OF INTANGIBLE ASSETS

According to Høegh-Krohn and Knivsflå (2000:257), intangible assets have some distinctive characteristics which are relevant when evaluating whether they should be recognised as assets or not.

- They have a few or no alternative uses, as many intangibles are rather specific to one firm and difficult to utilise by others.
- There are problems with, or even a lack of separability, as many intangibles only have value in combination with tangible assets.
- There are difficulties in determining whether the asset originally recorded is being maintained or whether a new asset is gradually replacing it.
- Greater uncertainty exists as to whether their cost will bring about future economic benefits.

The above characteristics of intangible assets clearly reveal the uncertainties regarding future economic benefits and reliable measurement of any benefits inherent in intangible assets. This uncertainty increases the risk attached to recognising intangibles on the balance sheet.

3.4 INTERNALLY DEVELOPED INTANGIBLE ASSETS

3.4.1 Recognition criteria according to IASB

IAS38/AC129 requires that, to assess whether or not an internally generated intangible asset meets the criteria for recognition, the entity classifies the generation of the asset into:

- a) a research phase and
- b) a development phase.

- **Research phase**

According to IAS38/AC129:54, no intangible asset arising from research (or from the research phase of an internal project) shall be recognised. Expenditure on research (or on the research phase of an internal project) shall be recognised as an expense when it is incurred.

If an entity cannot distinguish the research phase from the development phase of an internal project to create an intangible asset, the entity treats the expenditure on that project as if it had been incurred in the research phase only. (IAS38/AC129:53.)

- **Development phase**

According to IAS38/AC129:57, an intangible asset, arising from development (or from the development phase of an internal project) shall be recognised if, and only if, an entity can demonstrate all of the following:

- a) the technical feasibility of completing the intangible asset so that it will be available for use or sale;
- b) its intention to complete the intangible asset and use or sell it;
- c) its ability to use or sell the intangible asset;
- d) how the intangible asset will generate probable future economic benefits; among other things, the entity can demonstrate the existence of a market for the output

- of the intangible asset or the intangible asset itself or, if it is to be used internally, the usefulness of the intangible asset;
- e) the availability of adequate technical, financial, and other resources to complete the development, and to use or sell the intangible asset;
 - f) its ability to measure reliably the expenditure attributable to the intangible asset during its development.

Internally generated brands, newspaper mastheads, publishing titles, customer lists, and items similar in substance should not be recognised as intangible assets.

3.4.2 Problems with the recognition of internally generated intangible assets

The nature of the expenses incurred when doing R&D is causing uneasiness among users and stakeholders. Any costs can be attributed to R&D under the pretence of research and it will be difficult to establish what costs are really necessary for R&D and what costs are simply dumped there to manipulate earnings.

The high degree of uncertainty as to the nature of the expenses is one of the major arguments against the recognition of internally generated intangible assets (Stolowy *et al.*, 2001:156). Also, shareholders find it difficult to decide whether money spent by a company on research and development is necessary (Arnold, 1998:25).

According to Sánchez *et al.*, (2000:315), activities undertaken by companies to acquire or internally produced intangible resources are:

- always costly, and companies are not always able to measure and keep track of these costs;
- these costs are considered to be “intangible investments”, which can be defined as a set of expenditures sometimes not expressed in financial terms, that may or may not appear in the corporate financial reports but are likely to increase the future value of the company in general and its innovation capacity in particular.

In his research Stolowy *et al.*, (2001:147) refers to the CNC (Conseil National de la Comptabilité) that developed a framework for recognising internally generated intangible assets. The CNC report (CNC, 1992) states that an intangible item developed internally by an entity should be included in the balance sheet's fixed assets if:

- it is possible to demonstrate, with reasonable probability, that the item is capable of generating future economic benefits in favour of the entity;
- it is intended to be used durably in the entity; and
- its cost can be calculated in a reliable way, with the help of a specific individual project.

The CNC report undertakes an in-depth study of the process of brand creation and proposes step-by-step solutions for recording a brand as an asset, based on the different stages of this process. All the reasoning is based on the concept of a "project," where the following seven criteria must be met to record the output (brand) as an asset:

1. specification of the output (brand) (What is the product going to be?);
2. identification of the process to develop this output (brand) (How is the product going to be developed?);
3. allocation of human, financial, commercial means (resources) to the project; (With what resources are the product developed?);
4. implementation of management tools to control the process, in order (a) to measure the cost of the brand created, (b) to match the expenses to the different steps of the project, (c) to evaluate, at each step, the probability of commercial success or failure;
5. explicit commitment to produce the output (use the brand) whose development is in process;
6. reasonable probability of generating future advantages (commercial profitability);
7. long-term use of the output produced (brand created).

If criteria 1 to 5 are adhered to, then one has a real project. If criteria 1 to 5 plus 6 and 7 are satisfied, the output (brand) can be capitalised. The report goes on to describe the different phases of development of a brand and explains when (at which phase) the brand can be recorded as an asset (Stolowy *et al.*, 2001:147).

Research on the economic value of the R&D intangible asset was done by Ballester *et al.*, (2003:606) to establish that if current expenditure on intangibles such as R&D and advertising are associated with the future benefits and cash flows, they should be regarded as assets by the investors when market stock prices are set. Their results indicated that investors consider a significant proportion (about 80-90%) of R&D expenditure to have future benefits, and that the cumulative R&D asset accounts for over 40% of the difference between the market and book value of equity.

It is the opinion of Tollington (1999:214) that because internally generated trade marks, brands and goodwill are still excluded, financial statements do not accurately reflect the value of businesses. It disregards the fact that most of the world's best-known and valuable brands such as Coca-Cola, Sony and Rolls Royce, have all been developed internally.

3.4.3 Comparison between accounting regulatory bodies on internally generated intangible assets

Table 3.2 International comparison on internally generated intangible assets

Countries and organisations	Internally generated intangibles	
	Capitalised	Non-capitalised
European Union		
Austria		R,G,O
Belgium	R,O	G
Denmark	D	R,G,O
Finland	R,O	G
France	R,O(software)	G, O (brands)
Germany		R,G,O
Greece	R,O	G
Ireland	D,O	R,G
Italy	D,O	R,G
Luxembourg	R,O	G
The Netherlands	R,O	G
Portugal	R,O (start-up costs)	G
Spain	R,O	G
Sweden	R,O	G
UK	D,O	R,G
Other countries		
Australia	R,O	G
Canada	D	R,G
Japan	O,DC	R,G
Norway	R,O	G
Switzerland	D,O	R,G
USA	O (namely software)	R,G
Supra-national accounting organisations		
IASC		
European Union	R,O	G

Notes: R: R & D costs, D = only development costs (some countries and organisations make the difference between research and development costs); G= Goodwill, O = Other intangible assets; C = Classified as deferred assets.

Source: Stolowy and Jeny-Cazavan (2001:486)

Table 3.3 Recognition criteria for internally generated intangible assets

Countries and organisations	Inclusion criteria		Exclusion criteria	
	Market	Identifiably	Risk level	Value measurement
Belgium			x	x
Denmark			x	
Finland			x	
France		x	x	x
Ireland	x	x	x	x
Italy			x	
Luxembourg			x	x
The Netherlands		x	x	x
Spain		x	x	x
Sweden		x	x	
UK	x	x	x	x
Australia			x	
Canada		x	x	x
Switzerland		x	x	x
USA			x	
IASC		x	x	x
Total	2	9	16	10

Source: Stolowy & Jeny-Cazavan (2001:488)

From Table 3.2 page 44 it can be observed that nine out of the 15 European Union countries capitalise R&D costs. IASC and some of the major role players (USA, UK, Ireland and Canada) did not allow R&D to be capitalised but the revised IAS 38/AC 128 under the IASB now makes allowance for development cost to be capitalised.

Table 3.3 summarised the inclusion and exclusion criteria for recognising internally developed intangible assets, but the countries that capitalise R&D have the same

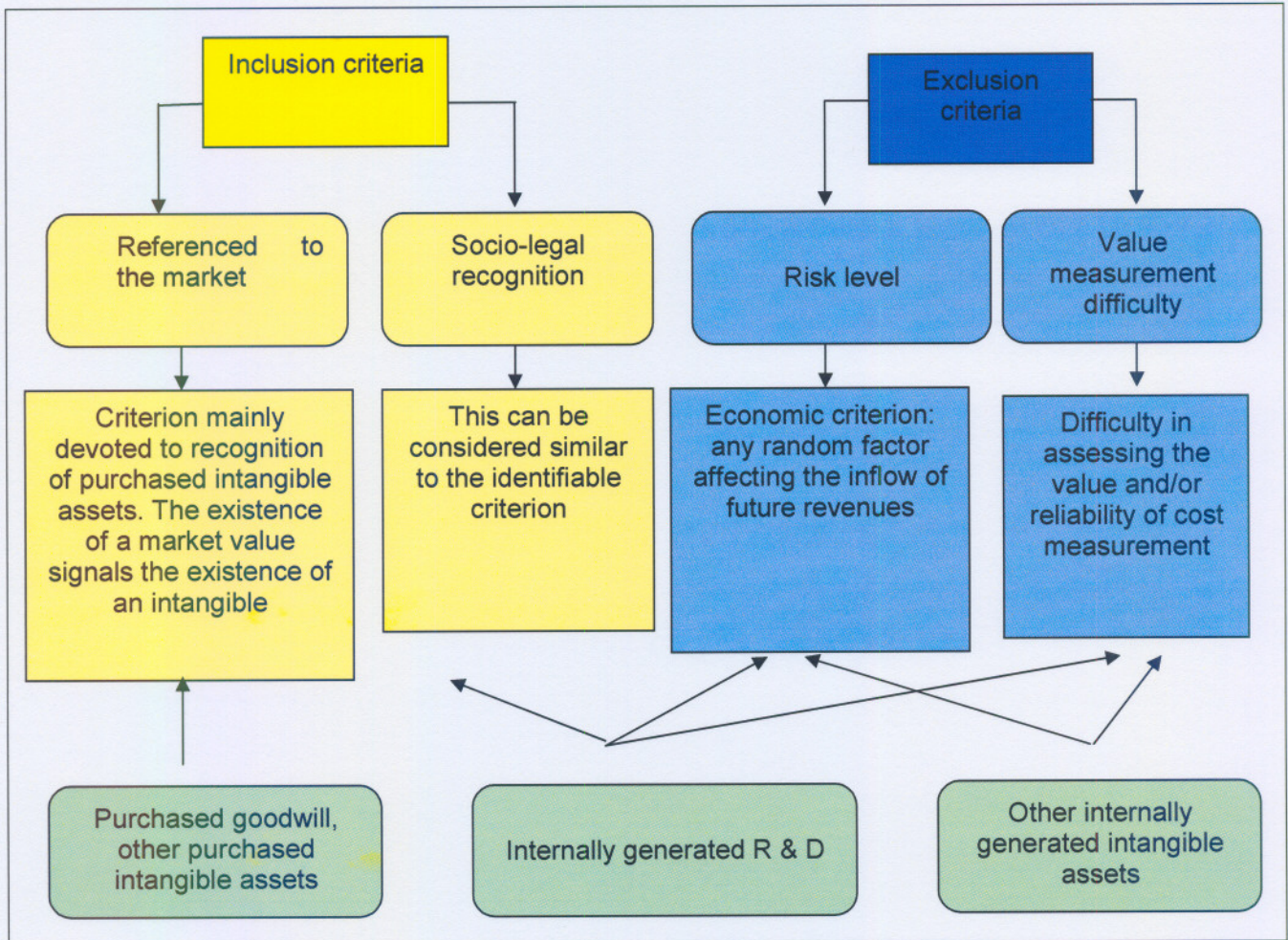
exclusion criteria as those countries and accounting regulatory bodies that do not allow the capitalisation of R&D.

To conclude, it can be observed that risk level and value measurement are important as exclusion criteria because it has a direct relation to the reliability of financial statements.

3.5 SUMMARY OF RECOGNITION CRITERIA BY ACCOUNTING REGULATORY BODIES

In Figure, 3.2 page 47 Stolowy and Jeny-Cazavan (2001:487) classified intangibles based on the recognition criteria by applying the various accounting definitions and the recognition criteria to intangibles. This leads to a clearer understanding of the various accounting standards' approaches to intangibles, where the definitions alone would not have sufficed.

Figure 3.2
Classification of intangibles based on the recognition criteria



Source: Stolowy and Jeny-Cazavan (2001:487)

3.6 ARGUMENTS FOR AND AGAINST CAPITALISATION OF INTANGIBLE ASSETS

Wyatt (2002:74) is of the opinion that sources limiting the discretion to capitalise intangible assets include:

- the drafting style of accounting standards which leaves the task of operationalising accounting concepts to managers;

- limitations on external auditors' capacity to evaluate and adjudicate on unobservable intangible assets;
- information asymmetry between external parties and managers about the extent and expected value of the firms' intangible investments.

Other reasons for the delaying of recognising intangible assets are mentioned by Seetharaman *et al.*, (2002:133). They are as follows:

- It causes competition-sensitive information to end up in public domain.
- Leaves room for information manipulation.
- It increases operating costs as a result of new rules and bureaucracy.

According to Lev (1997b:34) proposals to capitalise intangible assets have been generally opposed by managers, financial analysts, and accountants for the reasons set out below:

- Intangibles are too uncertain (risky) to be considered assets.
- Amortisation of the capitalised values is subjective and could be misused to manipulate financial reports.
- The costs of intangibles (the basis of capitalisation) bear no relationship to their real value in the light of future benefits.
- Failure of intangible projects presented on balance sheets as assets may expose the manager and auditors to frivolous shareholder litigation.

Arguments for capitalisation of intangible assets

Lev (1997b:35) insists that the above-mentioned concerns are overstated, for the reasons below:

- 1) Investors already act as if intangibles are capitalised.
- 2) Investors largely adjust for the expensing of intangibles; they also appear to discount the value of intellectual capital substantially.
- 3) Although the cost of intangible assets generally differs from its real value (which is also true for tangible assets), research on the recent acquisition of in-process

R & D and technology shows that there is a high correlation between the prices paid for such intangibles and the cumulative R & D cost of the acquired entities.

3.7 THE CONSEQUENCES WHEN INTANGIBLE ASSETS ARE RECOGNISED

According to Farquhar and Han (1992), in a survey by Coopers and Lybrand Deloitte at that stage, the senior executive officers of Britain's top 500 companies said that their primary reason for evaluating trademarks was to "improve" the balance sheet. The recognition of trademarks decreases the debt ratio and makes it easier for the company to obtain capital.

This is actually what happened in the U.K., according to Farquhar and Han (1992) in that the British companies capitalised their recently acquired brands by maintaining that these were separate identifiable assets and not goodwill. For example, in August 1988, Grand Metropolitan's balance sheet valued several brands bought from Heublein at £588 million, and since then several other U.K. companies have followed suit. Certain British firms went so far as to capitalise "home grown brands". For example, RHM (Rank Hovis McDougall) reflected trademarks on its balance sheet for an amount of £678 million (externally acquired and "home grown").

The acknowledgement of these trademarks on the balance sheet of RHM tripled the assets of RHM, which resulted in it being possible for RHM to lower their debt ratio and obtain the necessary funds to acquire Nabisco's cereal rights in Britain (Farquhar & Han, 1992).

According to Tollington (1995), capitalising intangible assets reflects a desire to show a realistic state of a company's total economic worth. However, it may even be more subtle than this, in that the primary motivation may be to avoid excessive reserve depletion as a result of goodwill write-offs and /or to avoid having to comply with stock market regulations in respect of raising capital.

The same observation is made by Høegh-Krohn and Knivsflå (2000:258) that, since intangible resources (assets) are difficult to verify, they could be used to manage or even manipulate reported earnings.

3.8 CONSEQUENCES WHEN INTANGIBLES ARE NOT RECOGNISED

According to Lev (1997a:136), investments in intangible assets grow at a more rapid rate than investments in tangible assets. However, the current accounting of intangible assets – generally written off immediately – makes it practically impossible for investors and others to:

- calculate the rate of return of an intangible assets investment and the change in the efficacy of the firm's investment activity over a period of time;
- evaluate the changes in the character of intangible investments, for example, from long-term (basic) research to short-term development;
- determine the value of the firm's intangible capital and expected economic lifespan;
- determine to what degree in the reported research and development costs, non-related research and development costs have been included, such as maintenance, engineering, and quality control expenses.

3.9 CONCLUSION

As described in Chapter 2, there is once again, evidence of the difference between market value and book value, the difference, being that the intangible assets are not recognised.

As described in Chapter 2 paragraph 2.2, page 13 intangible assets are seen as:

- organisational resources
- claim for future benefits
- intellectual assets
- corporate value
- intangible resources
- relationship assets (human, organisational, and market based).

In addition most of these descriptions fit into the conceptual definition of IAS 38 (see Chapter 2 paragraph 2.5.4, page 31).

However, by reviewing the recognition criteria and applying them to the above descriptions of intangible assets, all of the previous descriptions will be categorised as internally generated intangible assets, unless paid for when purchased from a third party.

As discussed in paragraph 3.4.2, page 41, these internally generated intangible assets are difficult to recognise. So the argument by the users of financial statements, that financial statements have lost their usefulness and relevance because there is no disclosure of intangible assets on the financial statements, refers to the internally generated intangible assets, because purchased intangible assets are recognised and disclosed in the financial statements but internally generated intangible assets are not.

One can conclude then that the users' arguments about the relevance and usefulness of financial statements related to intangible assets are valid when internally generated intangible assets are under review.

3.10 RECOMMENDATIONS

The researcher wants to address two issues of this argument by referring to the distinction made on these definitions of intangible assets by dividing them into group 1 and group 2. (See Chapter 2 paragraph 2.6, page 33.)

Firstly, it is the researcher's view that these internally generated intangible assets that can be allocated to group 2 (difficult to establish control) are all the underlying building blocks of goodwill that will only materialise when an external party is willing to pay for this difference between market and book value. This difference in price paid over the book value must be called goodwill. For the researcher fails to see how these internally

developed intangible assets can be split from each other, as they are dependent on each other, or how a reliable measurement of their cost is going to be determined.

These internally generated intangible assets as a package create future earnings for a company. So the value of these internally generated intangible assets will not be reflected on the balance sheet but will be reflected through reported earnings. Neglect of these internally generated intangible assets will have a direct impact on earnings.

Secondly, the argument that users employ in their motivation that the financial statements do not reflect the value of the business accurately, because internally generated intangible assets are not recognised, refers to long-standing brand names like Coca-Cola and Rolls Royce that create huge income for the shareholders. (See paragraph 3.4.2, page 41.)

The researcher is of the opinion that this argument is partially true. The researcher motivates this opinion by splitting internally developed intangible assets between fixed intangible assets and variable intangible assets as follows:

Group 1 will now be called fixed internally generated intangible assets (control can be established) while group 2 will be called variable internally generated intangible assets (difficult to establish control).

- *Fixed internally developed intangible assets* refer to those where “fixed” means the creation and innovation process is finished. There is a final product not to be tampered with. A purchased intangible asset will fall into this category; for an intangible asset to be purchased by an external entity, it must have been internally developed by the seller. For example, at Coca-Cola, there will be no changes, development or innovation to Coca-Cola’s secret recipe. The only ongoing activity regarding this specific intangible asset is advertising. The same can be said of Pepsi, pharmaceutical companies developing specific drugs, and Lindt chocolate.
- *Variable internally intangible assets* are those where “variable” means that the creation and innovation processes are never finished. There is no final product. This

refers to any internally developed intangible asset where there is a link to technology and knowledge and innovation like Microsoft, Nike, Daimler-Benz and Nokia. They are building and sustaining the goodwill attached to that name, which is a never-ending process.

In regard to the above suggested split, the question remains whether to recognise or not?

The researcher suggests the following:

- *Fixed internally generated intangible assets*: should be recognised if it meets the recognition criteria as per IAS 38. This is an asset as there will be future economic benefits to be derived from it.
- *Variable internally generated intangible assets*: the researcher is of the opinion that the inherent characteristics of these intangible assets (see paragraph 3.3, page 39). Complicate the recognition of these assets as well as the problem regarding separability of one of these intangible assets from the package chain of intangible assets, contributing to sustaining goodwill as a whole.

The motives for doing so may be criticised, as it is suggested that this leads to:

- manipulation of reported earnings
- avoiding excessive reserve depletion
- overstatement of the balance sheet
- decreases in debt ratio.

Apart from the above, it is the researcher's contention that internally generated intangible assets should not be recognised because the process of developing is never finished. As research, development, and innovation costs are ongoing processes, the researcher advises that these be written off against income. If there is income derived from the internally generated intangible assets, it will be matched against the development and innovation costs expensed in the income statement.

The above suggestion to expense all variable internally developed intangible assets is a solution to the problem of capitalisation of these internally developed intangible

assets in that it addresses the nature of these intangible expenses and the problem that shareholders experience when calculating which expenses are really necessary.

Following the discussion above in respect of the recognition of intangible assets, the measurement there-off will be discussed in chapter 4.

CHAPTER 4

MEASUREMENT OF INTANGIBLE ASSETS

4.1 INTRODUCTION

The difference between book value and market value of an entity is again used as support for an argument but this time for the inaccurate measurement of intangible assets, as it is the view of Cravens and Guilding (1999) that companies do not measure their assets properly. They support this view by referring to the growing gap between the stock market value of the shares and the book value of its assets. For example, between 1973 and 1993, the median ratio of market values to book values of American public companies doubled; a difference that has grown with the boom in high-tech shares. Companies which did not rapidly boost spending on research and development showed the largest gap (Cravens & Guilding, 1999).

The problem with measurement is that, according to the recognition criteria (paragraph 3.4), measurement must be reliable. For assets that are traded in an active market, the reliability of the measurement is determined by the consideration paid. This is confirmed by the research of Stolowy and Jeny-Cazavan (2001:486) (see Chapter 3, paragraph 3.2.3, page 37) that, once there is reference to a market, the question of recognition is no longer a problem.

The current accounting regulation regarding the measurement of intangible assets will first be presented and subsequently discussed thereafter.

4.2 MEASUREMENT CRITERIA BY IASB

4.2.1 Initial measurement

According to IAS 38.22 and AC 129.23: "An intangible asset should initially be measured at cost."

4.2.2 Measurement after recognition

According to IAS38/AC129 paragraph 72 an entity shall choose either the cost model in paragraph 74 or the revaluation model in paragraph 75 as its accounting policy. If an intangible asset is accounted for using the revaluation model, all the other assets in its class shall also be accounted for using the same model, unless there is no active market for those assets.

- **Cost model**

According to IAS38/AC129 paragraph 74 after initial recognition, an intangible asset shall be carried at cost less any accumulated amortisation and any accumulated impairment losses.

- **Revaluation model**

According to IAS38/AC129 paragraph 75, after initial recognition, an intangible asset shall be carried at a revalued amount, being its fair value at the date of the revaluation less any subsequent accumulated amortisation and any subsequent impairment losses. For the purpose of revaluation under this standard, fair value shall be determined by reference to an active market. Revaluation shall be made with such regularity that at the balance sheet date the carrying amount of the asset does not differ materially from its fair value.

The topic regarding measurement will be addressed in two sections, first amortisation, and then revaluation.

4.3 AMORTISATION OF INTANGIBLE ASSETS

4.3.1 Introduction

By amortising an intangible asset it is assumed that there is a limit to the useful life of that intangible asset. The problem here is: how does one determine the useful life of an

intangible assets or does one assume that all intangible assets have indefinite lives? The amortisation treatment according to IAS38/AC129 is given below with a discussion of the various arguments to amortise or not. Finally, there will be an international comparison on amortisation.

4.3.2 Amortisation according to IASB

According to IAS38/AC129 paragraph 88 reads as:

“An entity shall assess whether the useful life of an intangible asset is finite or indefinite and, if finite, the length of, or the number of production or similar units constituting, that useful life. An intangible asset shall be regarded by the entity as having an indefinite useful life when, based on an analysis of all the relevant factors, there is no foreseeable limit to the period over which the asset is expected to generate net cash inflows for the entity.”

According to IAS38/AC129 paragraph 97, the depreciable amount of an intangible asset with a finite useful life shall be allocated on a systematic basis over its useful life.

Paragraph 104 – the amortisation period and the amortisation method for an intangible asset with finite life shall be reviewed at least at each financial year end. In paragraph 107 – an intangible asset with an indefinite useful life shall not be amortised. Paragraph 109 – reads that the useful life of an intangible asset that is not being amortised shall be reviewed each period to determine whether events and circumstances continue to support an indefinite life assessment for that asset.

4.3.3 To amortise or not

When conducting the literature research on the amortisation of intangible assets it was found that most of the arguments referred to the amortisation of brands. The researcher is of the opinion that these arguments are applicable to all classes of intangible assets.

There is considerable discussion about whether a brand should be subject to amortisation at all, and when amortising, how to determine the amortisation period.

The main arguments against a definite useful life, and therefore against amortisation of brands, are presented below:

- The legal protection of brands is unlimited, or at least renewable indefinitely (e.g., for Community Trademarks within the European Union, in France, Germany, and the USA). Hence, from a legal point of view, the use of a brand is not limited to its owner (Stolowy & Jeny-Cazavan, 2001:492).
- Some brands are very old, sometimes as old as 150 years in certain sectors: in France, for instance, 150 years for champagnes such as Moët, or cognacs like Martell and Rémy Martin, 100 to 150 years for mineral water (Evian, Vittel, and Badoit), 50 to 100 years for spaghetti (Lustucru), chocolate (Lanvin), and pastis (Ricard). Other examples of "old" brand names are The Times, Coca-Cola, and Walt Disney. Although the useful life cannot be determined with certainty, particularly in advance, age is an ex post facto proof of a long economic life (Stolowy & Jeny-Cazavan, 2001:492).

The longevity of brands is also supported by Tollington (1995) by referring to a report by the Boston Consulting Group illustrating the longevity of brands, that out of 22 US product categories, in 1985 nineteen of them had the same market brand leaders as in 1925 – a 60-year gap.

O'Malley (1991:108) mentions that, contrary to popular rumour in the accountancy profession, it takes years of neglect and bad management to kill off a genuine brand, and not an act of God.

- Some authors argue that the value of a brand is maintained or even increased by huge advertising expenses, which are recognised as expenses and do not therefore justify amortisation or a limitation of the useful life. In a similar situation, the useful

life of tangible assets would be estimated based on the assumption of regular maintenance. In addition to this, amortisation of the brand would result in a double impact on the profit margins (amortisation and maintenance) (Stolowy & Jeny-Cazavan, 2001:492).

- There are no doubts about the possibility of a brand value declining, but there are doubts about the frequency of the decline. Consequently, brands should be subject to write-downs if necessary but not to regular amortisation (Stolowy & Jeny-Cazavan, 2001:493).

The above arguments are mainly concerned with the useful life concept. Another reason for the avoidance of amortisation is motivated by the negative effect that the amortisation of intangibles has on earnings. However, there is evidence to suggest this motivation is partly motivated by a firm's actual economic performance (Wyatt, 2002:73).

Those in favour of amortisation and a limited useful life for brands put forward the following responses to these arguments:

- For the purposes of financial accounting, the economic approach is more relevant than a legal point of view. Although the legal right to use a brand might last indefinitely, the ability to achieve future economic benefits from this brand is what settles the question of amortisation and useful life. It is not the legal aspect of a brand that creates future economic benefits but the increased sales of products, the stabilised connections between customers and the branded products, and the savings on advertising expenses (Stolowy & Jeny-Cazavan, 2001:493).
- Brands are closely connected with the product sold under the brand name. But products, their technology, customer expectations, and market conditions change constantly. So, if the brand is not supported by management action to anticipate or oppose these changes, the value of the brand diminishes quickly (this conclusion has been reached from several different perspectives). The question raised by this argument is whether, from this point of view, the brand is still an identifiable and

separable asset, or whether it is in fact too closely connected to the products or services to allow for separate recognition (Stolowy & Jeny-Cazavan, 2001:493).

- The expenses incurred in maintaining a brand, e.g., advertising costs, are not an argument in favour of an indefinite life. The value of a brand is a certain customer connection that leads to higher sales. With time, this connection loses strength, then advertising creates new customer connections. So even when sales levels are constant, they are in fact different in substance from the original sales. This line of thought concludes that the purchased brand is eventually replaced by an internally generated brand, which should not be recognised as an asset (Stolowy & Jeny-Cazavan, 2001:493).
- Just as there seem to be examples of brands consistently retaining their value, there are also brands that have vanished, like Steinhäger (spirit), Simca and Triumph (cars) (Stolowy & Jeny-Cazavan, 2001:493).

4.3.4 Amortisation period

With regard to the amortisation period there are two groups of views on the *amortisation period* of intangible assets.

- Intangible assets with a long lifespan can be amortised over a period of 20 years or less, except when conditions are met or followed – the view does exist that an annual depreciation test should be done for intangible assets with a long lifespan, in preference to an amortisation of the assets.
- There are those who believe that intangible assets should be handled on the same basis as tangible assets, namely that intangible assets should always be amortised, but without a top limit to the amortisation period (Rivat, 1997:68).

4.3.5 Comparison of the amortisation between different countries and organisations

Before the harmonisation process IAS 38 limited the amortisation period to 20 years. To determine how the IASC positioned itself (before the harmonisation process) in relation to the amortisation period between other countries and organisations one needs to investigate the amortisation periods of other countries and organisations.

Table 4.1, page 62 is a summary of the comparison on amortisation between countries and organisations.

This summary is based on the research of Stolowy and Jeny-Cazavan (2000:490). See Chapter 2, paragraph 2.4.2, page 25.

The summary in Table 4.1, page 62 reveals that most of the countries and organisations amortise. However, it is apparent that most of the countries in the European Union have limited the useful life to five years.

Therefore, as to the position of the IASC regarding the maximum amortisation period, it is observed that the IASC are the same as Finland, Ireland, U.K., and Switzerland. The other European countries have a more conservative approach to the amortisation period of intangible assets by using a shorter amortisation period.

Table 4.1 International comparison on the accounting treatment of amortisation

Countries and organisations	Useful life	Decrease in value ^a		Impairment	No decrease in value		Inc. value Revaluation
		Max: five years	Amortisation Max: 20 years		No explanation	No amortisation Unlimited useful life	
European Union							
Austria	O, G						
Belgium	R, G, O	R, G				R, G, O	
Denmark	D, G, O	D, G, O					
Finland		R, G	R, G, O ^b				G, trademarks
France	O	R, G ^c					
Germany	G, O						
Greece	O	R, G, O					
Ireland	D, G, O		G, O	G, O		G, O	O ^d
Italy		D, G, O ^e					
Luxembourg	R, G, O ^f	R, G					
The Netherlands	O	R, G ^g		G			
Portugal	G, O	R, G					
Spain	O	R	G ^h				
Sweden	R, G, O	R, G, O	G ⁱ				
UK	D, G, O		G, O	G, O		G, O	O ^j
Other countries							
Australia	R, O		G				
Canada	D		O, G ^k	G, O		O	O
Japan	O						
Norway	R, G, O	D, G	G ^l				
Switzerland	R, G, O	R, G					
USA			R, G, O		G, O		
Supra-national accounting organisations							
IASC	D, G, O		G, G, O	D, G, O			O ^m
European Union	R, G, O	R, G				O	

Notes: R = R&D costs; D = only development costs; G = goodwill; O = other intangible assets. If, for a given country or organization, both the "Useful life" column and a maximum duration column are marked, this means that the country or organization concerned amortizes the intangible asset over its useful life, subject to an upper limit which may be exceeded if details are disclosed in the notes.^a This category has been called "decrease in value" for simplicity's sake, although the amortization is not strictly speaking a decrease in value, but a cost allocation.^b Five years is the main rule.^c Goodwill on consolidation can be amortized over longer than five years (no specified rule).^d Only in rare cases ("readily ascertainable market value").^e For goodwill, it is possible to increase this period "slightly" provided that this increased length does not exceed the period of use of the asset.^f + formation costs.^g Goodwill on consolidation can be amortized over longer than five years.^h 20 years (new law dated November 16, 1998, effective January 1, 1999). No amortization rules mentioned for patents and trademarks.ⁱ five years is the main rule.^j Only in rare cases ("readily ascertainable market value").^k An exposure draft published in February 2001 and adopted in June 2001 replaced the amortization of goodwill by an impairment test.^l Consolidation Goodwill (Consolidation Adjustment Account).^m Reference to an active market. Source: Stolowy and Jeny-Cazavan (2001:490)

4.3.6 CONCLUSION ON AMORTISATION

By looking at the accounting treatment as prescribed by the IASB paragraph 4.3.2, page 57 the revised IAS38/AC129 accommodates all the above arguments. An entity can choose for the amortisation of an intangible asset an indefinite or definite life with no limit on the period of amortisation.

4.3.7 RECOMMENDATIONS

IAS38/AC129 does not elaborate on the definite vs. indefinite useful life. The researcher wants, however, to make out an argument and clarify the distinction between definite and indefinite useful lives by referring to the classification of intangible assets.

To amortise or not depends on the views regarding the useful life of an intangible asset. It is the researcher's opinion that the useful life of an intangible asset is dependent on many actions that have to be undertaken by management to ensure that an intangible asset sustains its value.

If an entity decides to amortise, there must be an estimate of the useful life of the intangible asset. How then does one determine the useful life of an intangible asset? It is not the same as a physical asset which one can observe and calculate its useful life by production output or usage, but one knows the intangible asset is there because of its contribution towards the income of the entity usually in conjunction with other assets.

Once again, the researcher wishes to point out the classification made in Chapter 3 paragraph 3.10, page 51 as to fixed internally generated intangible assets and variable internally generated intangible assets. The researcher emphasises the differences between the amortisation methods between these two classifications.

4.3.7.1 Fixed internally generated intangible assets

The useful life of fixed internally generated intangible assets may be indefinite, for example Coca-Cola, or definite, like Stainhäger.

- Indefinite life intangible assets will be those intangibles which are not subject to any further technology and innovation processes and therefore it is suggested that these intangible assets are not amortised.
- Definite life intangible assets will be those intangible assets which will become obsolete through new innovations or knowledge and therefore it is suggested that such intangible assets be amortised over the best estimate of their useful life.

In regard to the amortisation period there is a direct correlation for the researcher between the fixed internally generated intangible assets exposure to innovation together with management efforts, and the economic life of a fixed internally generated intangible asset.

In determining the use-full life over which to amortise the original cost of the fixed internally generated intangible asset, the degree of the exposure to innovation will be a indicator of the duration of the fixed internally generated asset useful life.

Management efforts consist of continuous research on new technology, market conditions, customer expectations, and advertising to maintain the value of these intangibles to its customers. Does one then maintain the original value of the intangible indefinite by these actions or strengthening the value or is one creating a new intangible?

For fixed internally generated intangible assets these actions by management are maintaining and strengthening the value of that intangible asset.

It is the researcher's opinion that all these team-building efforts, enhancing customer experiences, marketing to convince the customer to use the product must be done to

maintain the value of the original intangible asset. As soon as these efforts are discontinued, the intangible asset will not survive but will become obsolete.

Therefore the researcher would not amortise, but expense all of the above costs.

If the amounts spent on the above activities create new markets or customers, surely this will realize in the earnings figures of that entity. This is what is actually achieved by matching the expenses of this ongoing maintenance, development, or improvement of the product or market share with the income that will flow to the entity as a result of the expenditure.

4.3.7.2 Variable internally generated intangible assets

The nature of variable internally generated intangible assets is innovation through knowledge. Knowledge is linked to human intellectual capacity and these cannot be separated from one other. There is no barrier or limit to knowledge and innovation; therefore it seems that the useful life of these intangible assets is dependent on their ability to stay with and ahead of the competitive market's knowledge and innovations, therefore these costs are expensed when occurred.

4.4 REVALUATION OF INTANGIBLE ASSETS

4.4.1 Introduction

In the subsequent measurement of intangible assets (paragraph 4.2.2, page 56) reference is made to fair value. The consequences of this are that at each financial year-end one has either to test for impairment or to revalue the intangible asset. Both methods imply that the intangible asset cannot be shown at the original historical cost – the historical cost being the price paid for the asset.

To comply with the recognition criteria for reliable measurement (see Chapter 3 paragraph 3.2.1, page 36) testing for impairment or revaluation must be in relation to an active market or projected cash flows discounted at a relevant discount rate. However,

one of the inherent characteristics of intangible assets is that they are not freely exchangeable (see Chapter 3 paragraph 3.3, page 39).

Therefore, it could be difficult when doing an impairment test or revaluation to refer to an active market, with the result that the alternative seems to be discounted cash flows or any other model that would reflect the intangible assets recoverable amount.

In practice this is actually what is happening. Various valuation models are used, but the valuation models are not without flaws, as will be seen from the discussion below.

4.4.2 Views regarding current valuation methods

From the literature it is perceived that the existing valuation methods and methodologies in use are not reliable due to their subjectivity. Some of the views are listed below.

- Directors' valuations are seen as subjective.

According to Bartram (2000:17), Brand Finance's 1999 report found that nearly four out of five analysts and investor relations directors believe brand valuations based on directors' estimates, and subject only to a review by the auditors, will lead to creative accounting.

- The existing valuations methods are, however, also seen as subjective.

According to Tollington (1999:212) the existing brand valuation methods are subjective and offer no high degree of reliability as is clearly evident in the methods with their shortcomings as discussed in paragraph 4.4.3, page 71.

The difficulty in valuing intangible assets is at least partial because of its inherent untradeability. There is no market for intangible assets (Phelan, 1997:167).

The above statement could possibly be the reason why there is such a wide variety of valuation methods and methodologies on intangible assets, as will be discussed below.

There are several methods of determining the value of intangibles. Generally, they can be classified into four types of methods based on existing uses (Cravens and Guilding, 1999), which are:

- cost-based approaches;
- market-based approaches;
- income-based approaches;
- formulary approaches.

According to Sánchez *et al.*, (2000:316) the Cambridge Institute for Applied Research, when approaching the measurement of intangibles, identified three different methodologies:

- 1) The first method is based on the concept of return on assets (ROA).
- 2) The second method is based on the concept of evaluation premium in the capital market.
- 3) There is a third method based on measuring the value of the intangible by first identifying its different components.

Hurwitz *et al.*, (2002:51) argue that due to the lack of a generally accepted methodology for valuing intangible assets, there are instead numerous different methods, most of which build the valuation from the ground up. However, no-one has attempted to develop a comprehensive valuation methodology across all classes of intangible assets for a broad spectrum of firms.

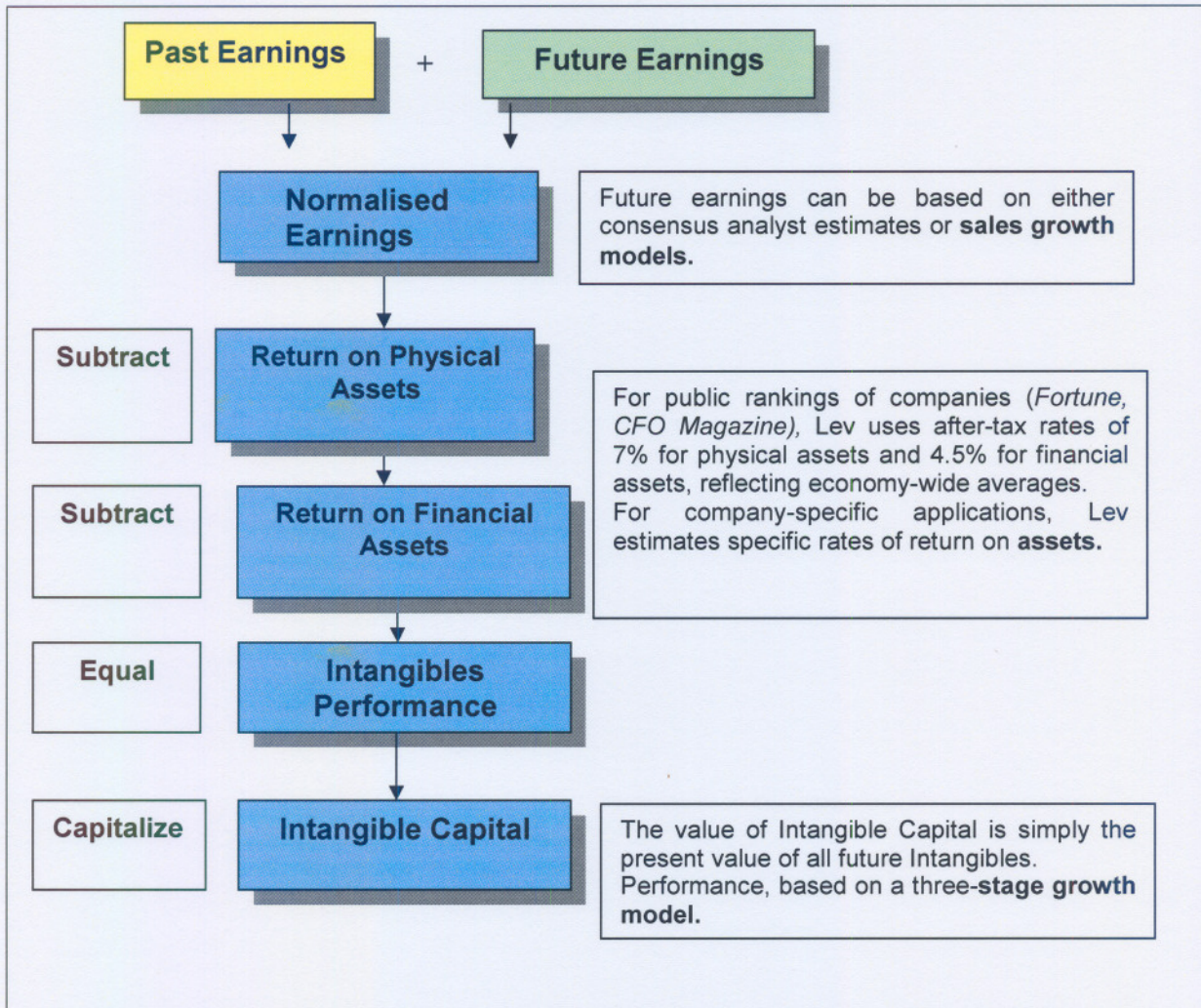
There is one researcher who seems to try to develop a comprehensive valuation methodology from the top down.

The following methodology (see Figure 4.1, page 69) was developed by Lev (2001) in which basically all classes of intangible assets of a firm are valued from the top down.

- First the company's normal earnings are calculated taking into account actual earnings as well as expected future earnings.

- Secondly, earnings attributable to physical and financial assets are subtracted leaving a residual of “excess” earnings.
- Lastly these excess earnings reflect the performance of intangible assets, which can then be capitalised to determine the value of the company’s intangible assets.

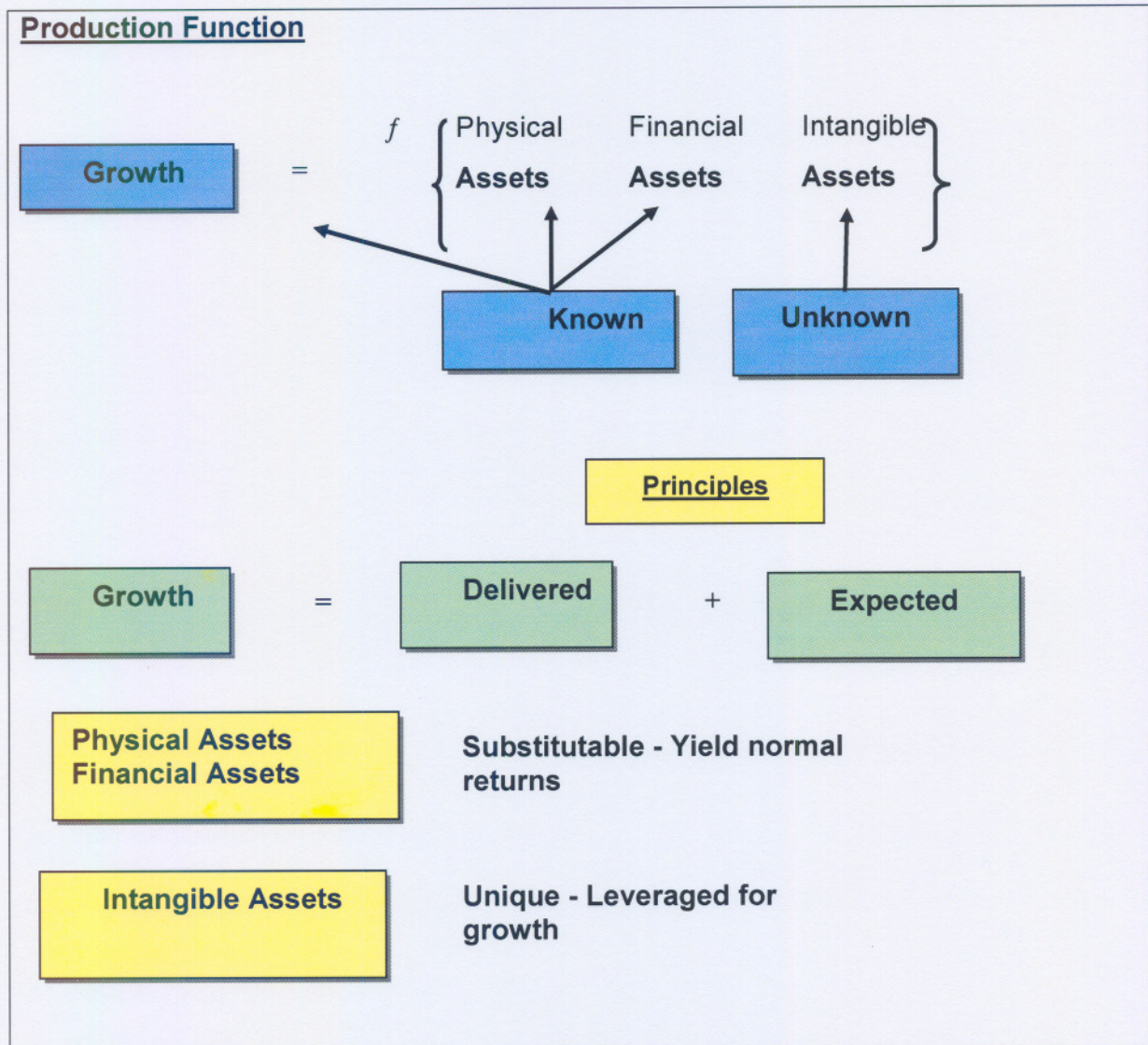
Figure 4.1 Quantifying the value of intangible assets



Source: Lev, 2001

The conceptual basis for Lev's methodology is that the realized value of intangible assets can be seen in a company's earnings performance. The measuring of the value of intangible assets is based on a production function where economic performance is generated by three major classes of inputs: physical, financial, and intangible assets (see Figure 4.2, page 70).

Figure 4.2 Methodology for measuring the value of intangible assets



Source: Lev, 2001

The value of the third performance driver - intangible assets - is simply the solution to the above production function for one unknown. To derive this, one must first estimate the "normal" rates of return on physical and financial assets in order to subtract their contributions from the estimated economic performance of the entity. What remains after the subtraction is the contribution of intangible assets to the performance of the entity. Capitalising the expected stream of these earnings yields the value of intangible assets.

The researcher is of the opinion that this is a good valuation methodology in determining a total value for an all inclusive intangible asset of an entity. A corporate or entity-specific intangible asset that may be called, goodwill? This so-called intangible asset that is now valued according to this method is the total sum of brands, patents, intellectual capital, innovation and technology and could not be separately identified. Included in this valuation will be separate identifiable intangible assets that must be valued and disclosed separately. These intangible assets could then be deducted from the total intangible assets value to determine real corporate goodwill. This corporate goodwill may be disclosed in the notes to financial statements but not capitalised.

4.4.3 The traditional vs. the new generation valuation methods

In the literature study, as will be proved below, it was observed that the published articles (between 1994-2000) on the valuation of intangible assets all referred to the same valuation techniques, but from 2000 onwards, the published articles on the valuation of intangible assets featured new valuation techniques, hence the reference to traditional techniques (1994-2000) and the new generation valuation techniques(2000+).

4.4.3.1 So-called “traditional” valuation methods in use and their shortcomings

a) The **Price Premium** method is where the revenues of an unbranded competing product are deducted from the revenues of a comparable branded product to establish the excess or premium revenue of the brand.

Shortcomings:

1. There is subjectivity in predicting future cash flow construction
2. Selecting an appropriate discount rate could cause a problem
3. There may be no unbranded product comparable to the branded product (Mars Bar).

4. Concentrating solely on price, ignoring costs and other factors such as manufacturing economies of scale from a high volume brand (Tollington, 1999:210).

b) The **Earnings Valuation** method is one where a prudent price/earnings ratio or similar multiplier is applied to a brand's profits after eliminating, first, the profits from unbranded goods (e.g. own label) which are often produced in parallel to the brand and, second, the profits from assets that do not contribute to the strength of the brand.

Shortcomings:

1. There is an underlying and perhaps unjustified assumption that the brand profits can be valued in the same way as the business as a whole.
2. Other multipliers often rely on an assessment of the brand's strength, i.e. longevity, leadership and legal protection, using a point-scoring system with all the attendant subjectivity associated with such a mechanism.
3. Multipliers are of limited value if there is difficulty in isolating the brand's profits in the first place.
4. Also the year(s) from which the brand's profit(s) are selected may not be a representative basis upon which to use a multiplier (Tollington, 1999:210).

c) The **Royalty Payments** method involves determining the royalty income from the licensing out of a brand/trademark such as the Cadbury name to Premier Brands. This provides a sum upon which either a discounted cash flow or multiplier can be applied.

Shortcomings:

1. First there is the appropriateness of the selected multiplier or discount rate.
2. The next question is whether royalties are an effective surrogate for brand premiums (Heberden, 2000:5; Tollington, 1999:211).

d) The **Market Value** method is one where it is almost impossible to determine a market value.

Shortcomings:

1. The market for brands is at best very thin and volatile (Seetharaman *et al.*, 2001:249).
2. Where the brand is being sold, willingly or otherwise, the value (realisable value) is dependent on the circumstances of the sale, e.g. Nestle was competing with Suchard for control of Rowntree, which forced up price premiums.
3. Where the brand is being acquired it is usually valued by reference to the entry price or replacement costs involved in creating similar brand loyalty, consumer and trade awareness, and recognition in general.
4. Costs derived by this method are highly subjective. For example, there is no doubt that a replacement Disney brand would be expensive, but until it is undertaken there is no way of calculating the amount of money involved. It is interesting to note that in the limited reference made to intangible asset values in FRS7 Fair Value in Acquisition Accounting, the ASB recommends the use of replacement cost (Heberden, 2000:6; Tollington, 1999:211).

- e) The **Historical Cost** method involves the aggregation of marketing and R&D expenditure relating to a brand.

Shortcomings:

- 1) The isolation of costs specific to the brand alone may require the capitalisation of costs incurred from decades ago.
- 2) However, this would be inconsistent because historic-cost-based balance sheets require that asset values should represent the aggregation of costs not yet charged to the profit and loss account, rather than those which have already been expensed.
- 3) It is also inconsistent because there are brands, such as Rolls-Royce, where the cost of marketing is negligible and yet the brand value is substantial (Heberden, 2000:6; Tollington, 1999:211).
- 4) This method fails to capture the value-added through the application process of strategic brand management (Seetharaman *et al.*, 2001:248).

f) **Economic Value Added (EVA™)** is a comprehensive performance measure which uses the variables of capital budgeting, financial planning, goal setting, performance measurement, shareholders' communications, and incentive compensation to account properly for all ways in which corporate value can be added or lost (Rodov & Leliaert, 2002:326).

Shortcomings:

1. This method is very complex (it consists of 164 adjustments)
2. It assumes governance structure is in the exclusive interest of shareholders.
3. It uses historical cost for assets, which gives little indication of current market or replacement value (Rodov & Leliaert, 2002:326).

g) The **Return On Assets (ROA)** method is the ratio of a company's average earnings divided by average tangible assets over the same period of time. This ratio is compared with the industry average to calculate the difference. A positive difference indicates that the company has intellectual capital.

Shortcomings:

This method is backward-looking and based on historical asset values (Rodov & Leliaert, 2002:328).

h) The **Market Capitalisation Method (MCM)** assumes that the excess of a company's market capitalisation over its shareholders equity is its intangible assets. It is based on the capital markets' premium and share price quotations.

Shortcomings:

1. Historical financial statements must be adjusted to allow for the effects of inflation or replacement costs, distorting the measurement.
2. It is not to say that intangible assets make up this difference (Rodov & Leliaert, 2002:328).

As seen from the previous paragraphs there are many valuation models in use, each with its own shortcomings. One must then ask oneself, as there seem to be no

consensus on an appropriate valuation model, whether it is worth trying to evaluate intangibles.

Heberden (2000:7) is of the opinion that brand valuation methodology has matured and become more robust, allowing for a more reliable and consistent method of measuring intangible assets. International standards need to recognise the validity of such methodologies and make it easier for companies to use such valuations as a means of realizing the full value of their intangible assets.

This opinion of Heberden seems to be in direct contradiction with the previous paragraphs, highlighting the shortcomings of the various valuation techniques. It is clear from the above critique of the main valuation methods that they lack consistency, that there is a lack of general agreement on methodology, and subjectivity at every stage of the valuation process (Tollington, 1999:211).

4.4.3.2 New generation valuation techniques

As the discussion of what entails a company's intangible assets continues, the descriptions keep changing, and, as the descriptions of what is seen as an intangible asset changes, the valuation techniques seems to keep up with the measuring of that description. It is observed that these valuation models keep them busy mainly with the measuring of intellectual capital.

The following list of valuation techniques as compiled by Rodov and Leliaert (2002:323) are given below, together with a short description of each:

- a) The **Invisible Balance Sheet (IBS)** approach divides the company's intellectual capital into individual capital and structural capital. The aggregation of these two is the total intellectual capital.

Shortcoming:

This model is based on relative and qualitative measures and fails to quantify the actual value of intellectual capital (Rodov & Leliaert, 2002:324).

- b) The **Intangible Assets Monitor (IAM)** aims to measure intangible assets in a simple fashion and display a number of relevant indicators for measuring IC. The purpose is to gain a broad picture of a company's IC status (Rodov & Leliaert, 2002:325).

Shortcomings:

The intangible assets monitor do not use values, norms, or other yardsticks and therefore cannot be considered as a valuation method (Andriessen, 2004:239)

- c) The **Balanced Score-Card (BSC)** is a performance measuring system to quantify intangible assets. It offers a framework for describing strategies for creating value from both tangible and intangible assets (Kaplan & Norton, 2004:10). It shows the extent to which the strategy of the company has been implemented, using qualitative indicators with casual relationship to the eventual execution of strategic objectives (Rodov & Leliaert, 2002:325).

Shortcomings:

1. The model is quite rigid, static and company-specific.
2. It cannot be used for external comparison (Rodov & Leliaert, 2002:325).

- d) The **IC-Index** focuses on providing an overall picture of the value-creating processes of the company. It attempts to consolidate the various individual indicators into a single index, and to correlate the changes in intellectual capital with changes in the market (Rodov & Leliaert, 2002:326).

Shortcomings:

The IC-Index do not use values, norms, or other yardsticks and therefore cannot be considered as a valuation method (Andriessen, 2004:239).

- e) The **Technology Broker (TB)** approach enables companies to calculate the dollar value of IC. TB results in 20 audit questions that make up the IC indicator. The fewer

questions a company is able to answer, the more it needs to focus on strengthening its intellectual capital.

Shortcomings:

1. There is difficulty in converting the qualitative results of the questionnaire to the actual values of these assets.
2. The audit questions are subjective in nature.
3. The income-based model suffers the uncertainties inherent in future cash flow and from subjectivity of rational estimations (Rodov & Leliaert, 2002:327).

- f) The **Direct Intellectual Capital method (DIC)** focuses on measuring the value of intellectual capital by first identifying its various components and then directly evaluating them.

Shortcoming:

Many components have to be identified and measured, which makes it complex and expensive (Rodov & Leliaert, 2002:329).

- g) **Skandia AFS Business Navigator (SBN)** is based on the structure of concepts presented in the invisible balance sheet. Performance is measured based on 30 key performance indicators in various areas. Next to the traditional financial focus area it includes customer focus, process focus, human focus, and development/renewal focus.

Shortcoming:

It does not yield any quantification of IC (Andriessen, 2004:239; Rodov & Leliaert, 2002:329).

- h) The **Financial Method Of Intangible Assets Measuring (FiMIAM)** consists of six steps:

- **Step 1** is determining the realised intellectual capital. This is the difference between book value and market value.
- **Step 2** is identifying the relevant components of intellectual capital – the intangibles that underpin and explain its future revenue potential.

- **Step 3** is to assign relative weights to the IC components.
- **Step 4** is justifying the assigned weights(coefficients).
- **Step 5** is assigning the value by multiplying the respective coefficients by the total realised IC value.
- **Step 6** These calculated IC values are now added to the company's book value (Rodov & Leliaert, 2002:330).

It can be observed that these new generation valuation methods are dealing with the softer concepts of intangible assets - the knowledge component – of intangible assets.

The researcher is of the opinion that these valuation methods are highly subjective and would not pass the recognition test for inclusion in the balance sheet.

4.4.4 IMPLICATIONS OF INEFFICIENT VALUATIONS

García-Ayuso (2003a:58) states that the inefficient valuation of intangibles has significant implications for firms and their stakeholders. Some of the negative consequences are listed below:

- Stock price volatility arises as a result of the difficulty in accurately estimating future payoffs and the risk associated with the investment in intangible-intensive companies.
- The uncertainty regarding the financial position of intangible-intensive companies increases bid-ask spreads, raises the cost of capital, resulting also in higher interest rates.
- Information asymmetry increases the opportunities for insider gains.
- The overstatement of the value of companies in the capital markets results in significant losses for the investors when stock prices revert to their fundamental values. Conversely, undervaluation reduces the ability of the firm to raise additional capital and increases the risk of a hostile takeover.

García-Ayuso (2003a:58) suggests possible reasons why the valuations on intangible assets are inefficient.

- **Quality of financial statements**

There is a general lack of meaningful and useful disclosure of intangible assets in financial statements. Corporate financial reports do not provide investors with an accurate view of the value of the value creation process within the firm.

- **Market imperfections**

There are no markets for intangibles and there are imperfections in capital markets.

- **Limited capability of financial analysts**

Financial analysts are sophisticated users of accounting information. However, there may be significant differences among analysts in their ability to access relevant and timely information, as well as in their capability to extract all its value-relevant content to make accurate predictions.

- **Ethics**

Inefficient valuations may be caused by misleading management practices such as the disclosure of false information in conference calls or the manipulation of accounting numbers and earnings by reducing R&D investment.

4.4.5 CONCLUSION ON VALUATION MODELS

Whether one is carrying the intangible asset at revalued amounts or testing for impairment, there is a reference to an active market. Due to the absence of active markets for most of the intangible assets. Valuation models are used to determine a value.

Throughout the literature study, it was noticed that there is no perfect valuation model preferred by all the users. The problem with these valuation models is the underlying assumptions that they incorporate in the various models such as:

- future cash flow;
- discount rate;
- comparative markets.

4.4.6 RECOMMENDATION

The researcher questions the reliability of determining:

- Future cash flows; here again the nature of intangible assets, together with the rapid changes in innovation, makes it such an unreliable asset to determine sustainable future cash flows;
- The discount rate that is used: What is the benchmark for using that particular rate?
- There is such a lack of comparative markets that this is also not a reliable measurement.

The researcher is of the opinion that for fixed internally generated intangible assets, due to their nature, as described in Chapter 3 paragraph 3.10 page 51, it will be possible to achieve a reliable valuation.

The researcher is also of the opinion that it is not possible to ensure a reliable valuation on variable internally generated intangible assets (assuming that they have passed the recognition test to be capitalised) because there is no benchmark against which to test for a value. Most of the value will be company-specific. So, to be conservative, the researcher again would expense the amount to the income statement.

CHAPTER 5

DISCLOSURE OF INTANGIBLE ASSETS

5.1 INTRODUCTION

The present disclosure requirements prescribed by IAS38/AC129 are inadequate. This chapter will deal with the reasons for this statement and the problems that it presents. Guidelines and proposals to improve the disclosure requirements will also be discussed.

The details about the current disclosure requirements according to IAS38/AC129 on intangible assets, are set out in Appendix 2, page 174.

5.2 PROBLEMS WITH CURRENT DISCLOSURE

Current disclosure requirements are all about useful/indefinite lives, amortisation rates and methods, increases or decreases due to revaluation, methods and significant assumptions applied in estimating fair value, impairment losses recognised or reversed (see Appendix 2, page 174).

Within the accounting profession, the problem of intangibles is often described as one of "relevance lost". This includes a loss of relevance of financial reporting to external stakeholders (Andriessen, 2004:234).

The basic problem with the present disclosure requirements is a need for additional information, apart from that already disclosed, as mentioned above.

While disclosure of information on intangibles has been increasing there are no clear signs that investors' and analysts' demand for information have been met (Bukh, 2003:54).

Globalisation of markets and technological advances make investors increasingly homogeneous and companies are encouraged to provide more useful information to compete for investor-share; however, the information presently provided is not perceived as valuable (Lim & Dallimore, 2002:262).

Research conducted among the investment community by Lim and Dallimore (2002:273) revealed that companies tend to disclose information on the method of measurement used and a reliability level that investors are not aware of and these companies tend to release information on everything except negative issues, with the result that they release information similar to that of their competitors.

By comparing the disclosure requirements of IAS38/AC129 and the problems as perceived by the above authors, the problem is not with the information currently disclosed, but with the information that is not disclosed and not required by IAS38/AC129.

Financial statements in their present form only present a limited account of the real economic conditions of a company. Financial statements provide no information about the growth and adaptation of a company, nor do they disclose how efficient the company is in utilising its bundle of resources, assets, and capabilities to generate future revenue and income (Lev & Daum, 2004:8).

There is a need to inform shareholders about the condition of intangible assets and what the company is doing to build them. Shareholders are entitled to know how their company approaches the creation and management of cash flow (Ambler, 2002).

5.3 REASONS FOR INADEQUATE CURRENT DISCLOSURE

The evaluation and disclosure related to intangible assets are so complicated and not understood, that they cause enormous problems for standard setters all over the world to improve the disclosure of intangible assets (Lev, 1997a:136).

Looking at the development in the definitions on intangible assets (Chapter 2 paragraph 2.2, page 13) it is observed that none of these descriptions are setting any boundaries or clearly defining what is perceived as an intangible asset. The same can be said for the measurement of intangible assets and especially the revaluation methods that seem to keep on developing in an attempt to keep up with the developments in the descriptions of what is perceived as an intangible asset.

The researcher is of the opinion that the above statement by Lev is still very relevant.

5.4 CONSEQUENCES OF INADEQUATE DISCLOSURE ON INTANGIBLE ASSETS

According to García-Ayuso (2003b:598) and Heberden (2000:5) studies have shown that the lack of information on intangibles may:

- increase uncertainty regarding stock selection and asset allocation decisions;
- lead to the undervaluation of companies;
- produce greater errors in analysts' earnings forecasts;
- in intangible intensive companies there is a risk that the opportunistic behaviour of managers may result in significant insider gains and earnings management that is harmful for stakeholders;
- not reflect the full asset value of entities;
- result in the improper allocation of resources on company level (Kaufmann & Schneider, 2004:366);
- cause volatility of stock prices (Lev & Daum, 2004:7); and

- make it difficult for companies that lack tangible assets to raise money from investors or banks (Andriessen, 2004:235).

5.5 GUIDELINES FOR DISCLOSURE

In a study analysing current annual report content, Herremans and Ryans Jr. (1995) asked shareholders and professional users about their information needs. They identified a need for guidelines to standardise the content and presentation of annual reports in order to maximise the usefulness of the non-financial information to the readers.

Herremans and Ryans Jr. (1995) did not identify the guidelines, but the researcher, in conducting the literature study, found the following that may help in establishing proper guidelines.

The aim of proper disclosure guidelines is:

- to increase the relevance of financial accounting (Catasús & Gröjer, 2003:341);
- to broaden the scope of disclosure beyond a financial focus to ensure that sufficient and meaningful qualitative information is included (Hooks *et al.*, 2002:502);
- to seek a useful level of disclosure without increasing the reporting burden, compromising confidentiality or attempting a “one size fits all” approach that would require inappropriate disclosures from too many companies (Ambler, 2002);
- to ensure that the information provided is valuable, because currently the investment community does not perceive the information presently provided as valuable (Lim & Dallimore, 2002:263).

5.6 PROPOSALS FOR DISCLOSURE

The following proposals regarding disclosure can be made to adhere to the aims as set out above:

5.6.1 Disclosure of non-financial information

Accountability requires broadening the scope of disclosure beyond a financial focus to ensure that sufficient and meaningful qualitative information is also included in the annual report (Hooks *et al.*, 2002:502).

The following arguments by Eskildsen *et al.*, (2003:47) for the need of non-financial disclosure are listed below:

- There is a need for relevant and reliable information on intangible assets to explain the gap (the intangible assets) between the book value and market value of a company.
- Increasing volatility in stock markets is expected because of the increasing importance of intangible assets accompanied by a lack of systematic non-financial information.

The purpose of non-financial disclosure is to remedy some of the shortcomings of traditional accounting so that the verification of market values will be more fact-based and this will hopefully reduce price volatility in the stock markets.

5.6.2 Separate statement

In view of the valuation and reporting problems (see Chapter 4 paragraph 4.4.2, page 66) one has to consider either the supply of a radically different set of financial statements that are prepared under a different set of rules, thus bringing another revolution to financial reporting, or consider including a separate statement of intangibles, an evolution of the existing system (Negash, 2003:35).

5.7 WHAT KIND OF INFORMATION IS NEEDED?

- **Predictors of future financial performance**

This includes information about the predictors of future financial performance, to include indicators related to customer assets, human capital, brand assets and the value of corporate citizenship (Eskildsen *et al.*, 2003:48; Lev & Daum, 2004:8).

- **Annual valuations**

Bartram (2000:17) and Heberden (2000:5) mentioned that in the Brand Finance's Report of 1999 more or less two-thirds of analysts and investors wanted annual valuations of internally developed brands provided in the notes to the accounts. This information can be furnished in the notes attached to the financial statements.

- **Current cost statement**

The primary medium must be the historical cost account, but there is nothing to prevent a company giving a current cost statement in its accounts. There is no reason why companies with a heavy brand portfolio should not have a separate set of current cost-adjusted sheets to give their investors a good idea of what underlies their investment (Bartram, 2000:17).

- **Characteristics of intangible assets**

Research done by the AICPA (1994) concluded that consumers prefer that more information be made available about the characteristics of assets in the external reports which are furnished so that they are themselves able to judge value.

If fair or market values are disclosed, these should preferably be shown in the notes attached to the financial statements or to the attached schedules (AICPA, 1994).

- **Market values against utilisable measurement**

This is part of the required disclosure of fair or market values against the utilisable measurement for certain types of assets and liabilities, for example:

- non-current assets;
- financial assets;
- assets earmarked for sale, redemption or destruction;
- assets for which there are active market prices with secondary markets available.

- **Market share**

The market share attributable to a company's brand equity is "the reputational asset" that a successful business builds in the minds of the customers and other stakeholders. Disclose this market share by value and/or volume, together with a brief definition of the "market" (Ambler, 2002).

- **Marketing investment**

Marketing investment, i.e. the expenditure on marketing intended to build brand equity (Ambler, 2002).

- **Intangible resources companies control** (García-Ayuso, 2003b:600).

These are intangible resources that a company control, includes human capital, structural and relational capital.

- **Intangible investments undertook** (García-Ayuso, 2003b:600).

5.8 PROPOSALS FOR A SOLUTION TO THE ACCOUNTING OF INTANGIBLE ASSETS

The revision of current accounting principles and standards on intangible assets would only be justified if it were to result in an improvement of the usefulness of accounting information and to lead to overcoming important problems facing companies and their stakeholders (García-Ayuso, 2003b:598).

A proposal for a solution is given by Høegh-Krohn and Knivsflå (2000:243). They are of the opinion that there are two ways of combining matching with prudence regarding the accounting treatment of intangible assets.

1) Capitalisation with amortisation and impairment tests

When an intangible resource is acquired or created and the recognition criteria of an asset are satisfied, its cost should be capitalised and subsequently amortised over its useful life.

If the expected value of the asset falls below its book value, the book value has to be written down immediately to its expected value. Should the expected value later increase, the book value has to be revalued, but not above cost.

This view is adopted by the ASB, FASB and IASC. This method could be applied to externally generated or acquired intangible assets (Høegh-Krohn & Knivsflå, 2000:243).

2) Expensing with conditional reversion

When an intangible resource is acquired or created, but its future economic benefit is beyond “reasonable certainty”, so that the ordinary criteria for asset recognition are not valid, its costs should be expensed in the period in which the costs were incurred. The costs should be expensed even though the expected value of the intangible resource is positive. If in a subsequent period, the future economic benefits start to flow and thus become within “reasonable certainty”, the previously expensed costs should be capitalised and amortised over its remaining life.

The capitalisation should be performed using the original acquisition or production costs with the deduction of accumulated amortisation from the time of expensing to the time of capitalisation.

None of the standard-setting organisations FASB, ASB or IASC are currently recommending entities that are expensing the costs of intangible resources to capitalise some of the costs at a later period, if the asset recognition criteria are then satisfied.

The above method could be applied to internally generated or created intangible assets, since the economic benefits from internally generated assets are less reliable. A way of further limiting the use of conditional reversion is to require that, in order to reverse previously expensed costs, the entity should initially disclose in its notes that a possible intangible asset has been created, but the extent of uncertainty requires that it should presently be expensed and not capitalised. If this is done, the entity has an off-balance sheet portfolio of potential intangible assets.

5.9 ACCOUNTING REPORTING MODEL

5.9.1 Financial statements

Accounting Standards, developed by the main accounting standard setting bodies, describes financial statements as set out below:

Objectives

IAS 1-4 and .03 General purpose financial statements are those intended to meet the needs of users that are not in a position to demand reports tailored to meet their specific information needs.

AC000.12 This states that the objective of financial statements is to provide information about the financial positions, performance, and changes in financial position of an entity that is useful to a wide range of users in making economic decisions.

From the above-mentioned definitions it is clear that financial statements are supposed to provide useful information that meets the needs of users not in a position to demand reports tailored to their specific information needs.

If the aim of financial statements is the above, there should be no problem for the users. According to the literature researched in Chapter 2, paragraph 2.3.2, page 19, users of financial statements have a problem with financial statements especially regarding the accounting treatment and disclosure of intangible assets.

5.9.2 Qualitative characteristics of financial statements

To achieve the aim of financial statements, qualitative characteristics were identified and by adhering to these qualitative characteristics, the aim of financial statements could be reached. The qualitative characteristics are listed below:

AC000.24-.42 This discusses the qualitative characteristics of financial statements, which are: understandability, relevance, materiality, reliability, faithful representation, substance over form, neutrality, prudence, completeness, and comparability.

AC000.26 To be useful, information must be relevant to the decision-making needs of users. Information has the quality of relevance when it influences the economic decisions of users.

AC000.27 To be useful, information must also be reliable. Information has the quality of reliability when it is free from material error and bias and can be depended upon by users to represent faithfully that which it either purports to represent or could reasonably be expected to represent.

The role of financial reporting requires that impartial, neutral or unbiased information be provided. With the exception of short-term discomfort, full disclosure increases management's credibility (AICPA, 1994).

Cravens and Guiding (1999) are of the opinion that external financial reporting has resulted in an accounting culture honed to provide data that are reliable, verifiable and free from bias.

5.9.3 Historical cost accounting vs. market value accounting

It seems that the unease arises from the use of market value accounting instead of the historical cost model. As will be discussed below the historical cost model is seen by the analysts and investors as stable, reliable and consistent, whereas market-value accounting is seen as unreliable.

According to research done by AICPA(1994) the principal view is that consumers are not in favour of replacing the present accounting model of historical costs with a market-value model. The research (AICPA, 1994) suggests that many investors, creditors and their advisers trust historical costs due to its consistency and reasonable objectivity.

Reasons for the above opinion are set out below:

- The historical costs basis provides consumers with a stable and constant benchmark/frame of reference, on which they can rely to establish historic trends from one period to the next.
- Although the historic costs model is a model with diverse attributes, it is primarily a transaction-based model and the reported values are predominantly reliable.

Consumers are against the market-value model for the following reasons set out below (AICPA, 1994).

- Estimates of the reasonable market value are determined by the subjectivity of management or based on meagre markets or models of hypothetical markets, and for these reasons lack sufficient reliability to replace the historic costs model.

- There is a lack of consensus on the most applicable definition of rationality or market value together with the subjectivity of value information and the reflection of its varied uses.
- A market value accounting model does not reflect the nature of the continuous business of an entity. This can lead to a potentially negative change in management's economic behaviour.
- It is not the purpose of a balance sheet to provide planning or provisions for the company's economic or market value.
- Timeliness is a problem; information will already be out-dated by the time it is disseminated.
- Consumers are not convinced that the costs attached to reasonable values – in cases where market values are not available - are justifiable based on the benefits.
- It is the responsibility of the analyst rather than that of management to calculate value. Analysts believe that accountants must provide information which is objective and consistent as well as information which can be used in conjunction with reasonable values where applicable.

According to Ryan and Tibbits (1997:54) historical cost accounting statements, which are properly and faithfully prepared to represent the basic concepts of money capital and monetary profit, provide financial information relevant to two important purposes. These are:

- a. a report to shareholders from the directors on their stewardship of the funds entrusted to them;
- b. to disclose to shareholders
 - whether the paid-in money capital has been maintained;
 - whether the amount of monetary profit for the period is a genuine money surplus over capital and retained profits;
 - the amount of retained profits available for dividends.

Ryan and Tibbits (1997:54) are of the opinion that it is not a function of balance sheets on the historical cost basis to measure net worth in current market values without

compromising its measurement base. A balance sheet's function is principally to account for individual assets and liabilities that have arisen through exchange transactions with third parties. It is not – and should not be – the function of a balance sheet to reflect the value of the business unit in aggregate. That is properly the function of the market.

Not everybody agrees with this assertion. Tollington (1997:52) argues that the tendency to cling on exclusively to transaction or event-based recognition of an asset, whilst the rest of the business world is busy creating hugely valuable intangible assets, represents 19th century thinking in an 21st century environment.

Companies depend on their information systems to be reliable as to the current situation and informative about the company's opportunities in the future. The traditional accounting-based information system has proved to be insufficient in both respects because the data reported is about decisions in the past, rather than information on which real decisions can be based. Another type of information is required for management to set strategic goals and make plans for the future (Eskildsen *et al.*, 2003:46). Adequate information regarding corporate intangible assets and their economic impact is needed (Lev & Daum, 2004:10).

The result of the whole issue regarding the value of intangibles and how to account for it within the current accounting regulations has been that the last few years have witnessed a growing incidence of litigation between investors and managers, as the former find it difficult to evaluate the firm's performance based on accounting numbers. This may be partly due to managers' propensity to manipulate earnings with intangible investments and to cut down R&D before going public in order to increase earnings and influence investors' expectations (García-Ayuso, 2003a:59).

Dunse *et al.*, (2004:240) argue that the debate concerns whether the present accounting model can adequately capture and report useful information about intangibles.

5.10 CONCLUSION

General purpose financial statements are those intended to meet the needs of the users by providing information. The information provided must however be useful, and information is useful when relevant and reliable.

The problem is that the current disclosure regarding intangible assets is not viewed as relevant enough. The lack of relevant information is not attributable to the accounting standard on intangible assets or the accounting reporting model. The accounting standard IAS38/AC129 prescribes the minimum information that has to be disclosed in the financial statements. Therefore, companies may disclose any other information on intangible assets the company deemed necessary for the users to know.

The researcher views the main issue here, as that information on intangible assets the users want to put through the financials, but due to the unreliable measurement of that information, the accounting standard does not allow that information to be recognised.

The information that the financial statements communicate to the users must be relevant and reliable but the nature of intangible assets endangers reliability.

It is the view of the researcher that financial statements can not compromise on reliability, therefore the solution to the problem of providing relevant information lies in providing that information in the notes or separate appendices attached to the financial statements within the limits of relevancy and cost effectiveness.

CHAPTER 6

RESEARCH METHODOLOGY

6.1 INTRODUCTION

The research was planned by the researcher after extensive reading and the draft proposal was presented to the study leaders. The study field was identified. A formal research proposal was compiled and presented to the research committee of the School of Accounting Sciences of the North-West University for approval. Logistic requirements were planned and discussed with the study leaders.

Research should always embrace the principles of science in order to contribute to the body of knowledge (Neuman, 2000:5). In this chapter the method of investigation will be discussed, describing the scientific procedures followed according to the specification of the research designs proposed for this project (see Chapter 1, paragraph 1.6, page 8).

6.2 OBJECTIVES OF EMPIRICAL INVESTIGATION

The specific objectives that address the primary research objective of this research as discussed in Chapter 1 paragraph 1.4.1, page 7 are as follows:

- to evaluate the relevance of intangibles in a South African economic context (objective 1);
- to evaluate the recognition of intangible assets (objective 2);
- to evaluate the measurement of intangible assets (objective 3);
- to evaluate the disclosure requirements and disclosure needs of the users of financial statements regarding intangible assets (objective 4);
- to formulate recommendations regarding the accounting treatment of intangible assets and the disclosure of intangible assets (objective 5).

6.3 METHOD OF INVESTIGATION

6.3.1 Research design

Qualitative vs. Quantitative Research Methodologies

Berg (2001:2) holds that in many social sciences, quantitative techniques are often more highly valued than qualitative techniques. This is reflected in the public's inclination to regard science as related to numbers and therefore, implied precision. Qualitative techniques are, however, able to offer a greater depth of understanding on a research topic that might have arisen from quantitative research techniques (Berg, 2001:2).

Neuman (2000:418) discusses the similarities and differences between quantitative and qualitative analysis as follows:

Similarities

- In both forms of data analysis, the researcher carefully examines empirical information to reach a conclusion.
- Both forms of analysis involve a public method or process.
- Comparison is a central process to all data analysis, qualitative or quantitative.
- In both qualitative and quantitative forms of data analysis, researchers strive to avoid errors, false conclusions, and misleading inferences.

Differences

- Quantitative analysis is highly developed and builds on applied mathematics. By contrast qualitative data analysis is less standardised.
- Quantitative researchers do not begin with data analysis until they have collected all of the data and condensed it into numbers. Qualitative researchers can look for patterns or relationships, early in a research project, while they are collecting data.
- In relation to social theory, quantitative researchers manipulate numbers that represent empirical facts in order to test an abstract hypothesis with variable

constructs. By contrast, qualitative researchers create new concepts and theory by blending together empirical evidence and abstract concepts.

- There is a degree of abstraction or distance from the details of social life. Quantitative researchers use the symbolic language of statistical relationships between variables to discuss causal relations. Qualitative researchers are less abstract than statistical analysis and closer to raw data. Qualitative analysis does not draw on a large, well-established body of formal knowledge from mathematics and statistics. The data is in the form of words, which are relatively imprecise, diffuse and context-based, and can have more than one meaning.

Wisker (2001:137) claims that the nature of one's research will dictate the kind of methodology to be utilised to underpin one's work and also the methods to be utilised in the collection of data. Should one decide to collect quantitative data, the goal is mostly the measurement of variables, the verification of existing theories or hypotheses and the questioning of the said theories or hypotheses. Often the collection of statistics and the interpretation of numerical data are not the answer to understanding meanings, beliefs and experience. These are better understood through the interpretation of qualitative data. Certain ideas should be kept in mind.

- **Quantitative data (research)** is collected in accordance with certain research vehicles and underlying research questions. The production of numbers is guided essentially by the kinds of questions posed to the subject and is therefore essentially subjective – though it appears to be less so than with qualitative research data.
- **Qualitative research** is carried out when one wants to understand meanings, to look at, describe and understand experiences, ideas, beliefs and values.

In view of the nature of the empirical objectives (see paragraph 6.2, page 95) that are:

- the understanding and relevance of intangible assets in the economy;
- the accounting treatment of these intangible assets in the financial statements; and
- the problems, experiences and opinions the users of the financial statements have with the accounting treatment of the intangible assets;

it was decided to conduct qualitative research.

6.3.2 Study sample design

A problem was experienced in the selection of the population. The target population is the users of the financial statements, but the professional bodies (CFA and CA) that were targeted refused access to their database of members. It was then decided, because of the availability of information on listed companies, that all of the 38 companies listed under the financial and investing sector on the JSE should be selected. Their core business being investing, and/or lending money to a wide spectrum of businesses, typifies them as prime users of financial statements in order to establish the viability of a prospective investment.

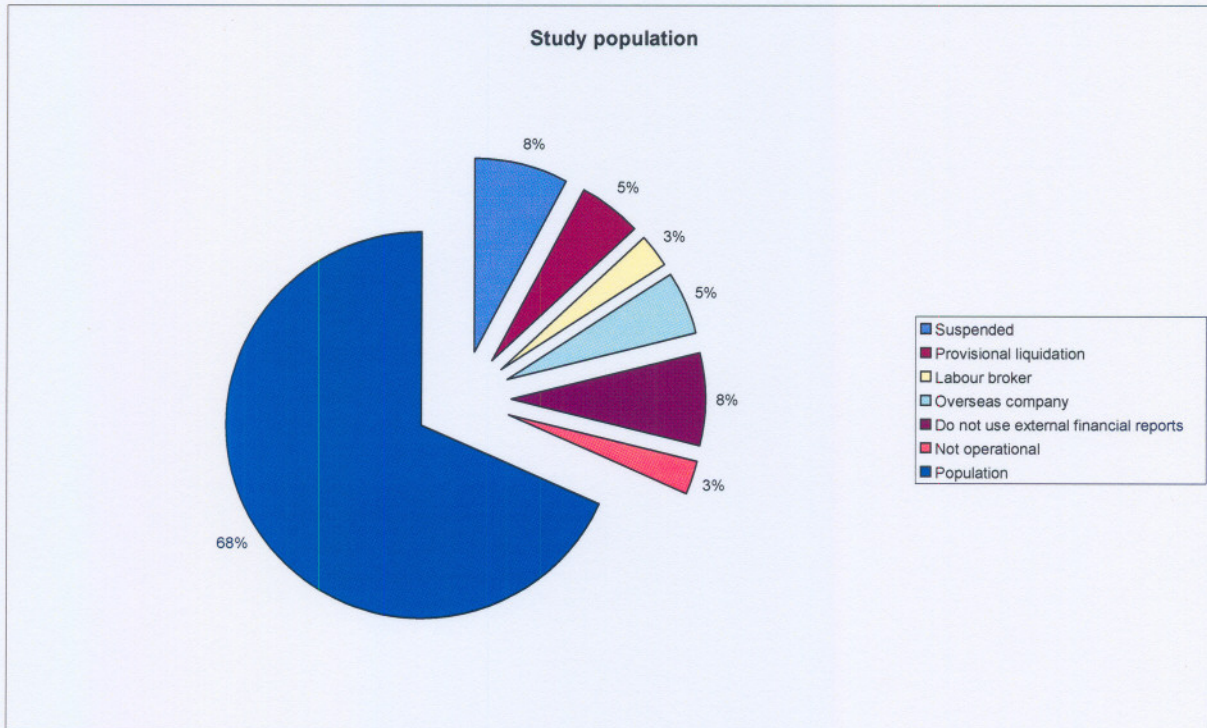
Upon identification of the population, it was observed that banks were included in this population, and it was decided to divide the population into two separate groups. The motivation for this was that the nature of business and financial activity of the banks are different from the investing companies.

- **Investing companies**

The CEO, managing director, or representative of senior management of these selected companies was identified. It was assumed that these respondents were the most experienced in using the external financial statements of companies in making investment or credit-lending decisions.

Of the 38 investing companies, 26 qualified for this research on account of the fact that they are users of external financial statements. In Diagram 6.1, page 99 the reasons for the disqualification of the other companies are set out.

Diagram 6.1 Study population



- **Banks**

The CEO, managing director, or representative of senior management of the selected banks was identified. It is assumed that these respondents were the most experienced in using the external financial statements of their companies in making investment or credit lending decisions.

The three largest commercial banks in regard to market capitalisation were selected.

6.3.3 Research techniques for data collection

The compilation of the measuring instruments was driven by an extensive literature study (Chapters 2-5). The measuring instruments were furthermore compiled according to the research design proposed in the approved research proposal. Questions for the semi-structured interviews and the questionnaires were compiled and presented to

experts for their inputs (see the reliability and validity descriptions of the measuring instruments).

The empirical research included the following measuring instruments:

1. a survey questionnaire addressed to the specific respondents in the investing companies; and
2. using the same questionnaire as above, but conducting semi-structured exploratory telephone interviews with senior management of the banks listed under the financial sector on the JSE.

6.3.3.1 The survey questionnaire

The structure, administration, analysis and reliability and validity of the survey questionnaire will be discussed next.

- **Structure of the questionnaire**

The questionnaire (appendix 1, page 167) was developed to fulfil the research objectives in paragraph 6.2, page 95. It was developed based on the guidelines and recommendations on questionnaire design as provided by Breakwell *et al.*, (2000:58-174) as set out below.

The questionnaire was e-mailed to the selected respondents. It comprised a fill-in format with interval rating scales and sections where the respondents were asked to express their views and needs. The answers were filled in directly onto the electronic version of the questionnaire. The completed questionnaire could then be mailed back electronically to the researcher.

The issues that the questionnaire addresses can be grouped together under five headings:

- The first objective dealt with the relevance of intangible assets (questions 3 and 19).
 - The second objective addressed the recognition of intangible assets (questions 2, 20 and 25).
 - The third objective addressed the measurement of intangible assets (questions 6, 7, 9, 10, 12, 13, 14, 15, 18, 21 and 22).
 - The fourth objective was to gather information on the disclosure of intangible assets in financial statements (questions 1, 4, 5, 8, 11, 16, 23, 24, 26, 27 and 28).
- **Administration of the questionnaire**

The survey questionnaire (Appendix 1, page 167) was delivered to the identified respondents by electronic mail after identifying the responsible CEO, manager or representative of senior management by telephone and requesting a response. The questionnaires were followed by a second e-mail to those who did not respond. Those who then did not respond the second time were again contacted by telephone and asked for their cooperation. This process was followed until it was established that all possible respondents had been given a fair opportunity to respond.

- **Reliability and validity of the questionnaire**

The opinions of experts (academics) regarding the construct and items were obtained in order to ensure the face and content validity of the questionnaire. The items in the questionnaire were based on the literature, thereby enhancing the content and construct validity of the items.

A trial run was implemented to enhance the validity and reliability of these measuring instruments. During a trial run, the questionnaires were presented to five analysts at a stock broking firm. This was done to ensure that the questions were clearly understood and measured what they were supposed to measure (to ensure the validity and reliability of the construct). During the completion of the questionnaires the trial run raters were questioned about their understanding of each question and the researcher

noted all the biased questions. These questions were reformulated and again presented to the trial run raters until the researcher was satisfied that all the questions were well understood and unbiased.

- **Analysis of the questionnaire results**

Qualitative data analysis tends primarily to be an inductive process of organising data into categories and identifying patterns among the categories (Leedy, 1997:165). However, qualitative researchers rarely explain their analysis strategies in detail. Furthermore, the researcher may move back and forth between overlapping phases, making it not only a lengthy process to describe, but also a “messy” one (Leedy, 1997:165).

The results obtained from the questionnaire were fed into a spreadsheet program, where they were summarised and analysed.

6.3.3.2 The telephone interview

The following section describes the objective, description, sample, administration, analysis and the reliability and validity of the interviews with the banks.

a) Objective of the interview

The goal of an interview is to obtain specific information from another person (Neuman, 2000:274). Interviews were used as a measuring instrument in this study to gain an understanding of the views and opinions of senior management in banking on the reliability and relevance of external financial statements and the accounting treatment and disclosure of intangible assets in financial statements.

b) Types of interviews

Poggenpoel (2003:148) holds that, depending on the research objectives, there are various types of interviews that can be conducted.

- A structured interview is an interview where a set of questions has been decided on before the interview and only these questions are asked in the interview. This type of interview resembles a questionnaire, except that the researcher asks the questions.
- Semi-structured interviews use structured questions as well as open-ended questions. An open-ended question is asked and the interviewer follows up on the clues that the participant provides about a specific topic.
- Unstructured interviews are used when a researcher does not really want to investigate a concrete topic, but wants to know more about a group of people.

It is possible to utilise more than one type of interview when conducting research. Circumstances will most likely dictate which type to use. The interview type utilised must be appropriate for the research being conducted (Greenfield 1996:171).

c) Type of interview questions

Questions can be either open-ended or closed-ended.

With the open-ended question the respondent can give any answer, whilst the closed-ended question asks the question but also gives the respondent fixed responses from which to choose (Neuman, 2000:260). The closed-ended format, therefore, requires the researcher to have a reasonable idea of all the possible responses. The closed-ended question has the advantage of reducing the possibility of ambiguous answers as well as the possibility of clerical errors in coding the data. The closed-ended question can, however, force the respondent to give a certain answer and rules out the possibility of an unexpected response (Breakwell *et al.*, 2000:161).

d) Appropriate method for an interview

According to Greenfield (1996:171) there are three permutations that are worth considering when selecting the most appropriate method for one's particular research. These are set out below.

- **Telephone interviewing:** this method of interviewing keeps the cost down if respondents are dispersed over a wide geographical area. It may, however, be difficult to develop a rapport with the respondent over the telephone.
- **Group interviewing:** might be used when the respondents are part of a group or when the collaboration of the respondents is an objective.
- **Elite interviewing:** this interview consists of the specialised treatment of interviewing that focuses on a particular type of respondent. The elite are considered to be the influential, the prominent and the well-informed people in an organisation or community.

e) Application to the study

The author has opted for an approach that includes various aspects of the aforementioned pointers and is described below.

- **Standardised open-ended interview methodology:** the same questionnaire (Appendix 1, page 167) as in paragraph 6.3.3.1, page 100 was used. The questionnaire was sent
- beforehand to the respondents by electronic mail, whereupon the telephone interview was conducted by addressing the questions in the questionnaire. The telephone interview was conducted to uncover facts, opinions, reasons, and possibilities not anticipated in the questionnaire.

f) Phases of the interview

The interview consisted of different phases, the preparation phase, the interview phase and the post-interview phase (Poggenpoel, 2003:146).

- **Preparation phase:** this starts where the interviewer identifies the respondents, comes into contact with them, explains what the research is about and asks them to participate, whereupon an appointment is arranged.
- **Interview phase:** the main part of the interview is where the interviewer asks the questions and the interviewee responds. The interviewer must record the responses accurately and comprehensively. The response should be recorded exactly as it is

given and no information should be left out or summarised as this could lead to information being lost or distorted (Neuman, 2000:277).

The interviewer can use questions where appropriate in order to obtain clarification of an ambiguous answer, to obtain further information or to complete an incomplete answer (Neuman, 2000:277). He suggests that the interviewer can use techniques such as pausing for three or four seconds. The interviewer can also repeat the question or the response and then pause. Neutral questions such as "Any other reasons?" or "Can you tell me more about that?" can be asked.

- Post-interview phase: directly after the interview the researcher should make notes about the observations made during the interview.(Poggenpoel, 2003:147) and (Neuman, 2000:277) suggests that the following should be recorded immediately after the interview:
 - date, time and place of interview;
 - description of the respondent and interview situation;
 - the respondent's attitude;
 - any unusual circumstances.

g) Conducting a successful interview

Leedy (1997:201) suggests certain steps for conducting a successful interview. These are listed below:

- Set up the interview well in advance.
- Send the agenda of questions the researcher will be asking the interviewee.
- Ask for permission to tape the interview.
- Confirm the data immediately in writing.
- Send a reminder, together with another copy of questions for your interviewee in case he or she has mislaid his or her own copy.
- Following the interview, submit a typescript of the interview and obtain either a written acknowledgement of its accuracy or a correct copy from the interviewee.

- After the researcher has incorporated the material into the research report, send that section of the report to the interviewee for final approval and written permission to use data in the report.

The questionnaire for the semi-structured interview is presented in Appendix 1, page 167.

h) Administration of the interview

The administration of the interviews was conducted prior to the compilation of the questionnaires. The interviewees were selected on the basis of their position and responsibilities in the company. Appointments were scheduled with the interviewees and the interviews were conducted in a semi-structured way, as described in paragraph 6.3.3.2., page 102.

Semi-structured telephone interviews were conducted with the respondents as indicated in paragraph 6 3.3.2, page 102. The atmosphere during the interviews was informal and relaxed. The interviewer took cognisance of the guidelines listed below (Neuman, 2000:276-277).

- The survey interviewer must remain neutral and objective.
- The interviewer should be non-judgemental and avoid revealing his/her opinions, verbally or non-verbally. Even if the respondent asks the interviewer for his or her opinion, the interviewer should redirect the respondent politely. The interviewer should treat all answers in a matter-of-fact manner.
- The questions should be asked exactly as they appear on the questionnaire and no words or information should be added or left out.
- The interviewer should conduct the interview at a reasonable pace and non-directive feedback can be given to maintain interest.

The steps, as proposed by Leedy (1997:199), were followed in conducting the interviews.

- The interviewer assured the respondents of absolute confidentiality before beginning the interview.
- The interviewer built rapport by engaging in small talk before beginning the interview and by using an everyday conversational style.
- The interviewer explained the potential benefits of the study to the respondents.
- The interviewer ensured that she spoke less than the respondent did. As a rule, the less the interviewer talks, the more information is produced.
- The interviewer endeavoured to do the things listed below:
 - a) Pose questions in a language that was clear and meaningful to the respondent.
 - b) Ask questions that contained only a single idea.
 - c) Use simple probes when appropriate, for example: "Can you tell me more about that?"
 - d) Avoid contradicting answers or cross-examination styles.
 - e) Avoid asking many close-ended questions in succession.
 - f) Avoid changing interview topics too often.
 - g) Avoid leading questions.

i) Reliability and validity of the interview

The reliability of a measuring instrument demonstrates the consistency of the measurement. Validity, on the other hand, refers to the degree in which the measuring instrument measures what it is supposed to measure (Uys, 2003:122-123). Reliability is necessary to ensure that a measure is valid, but it does not guarantee validity (Neuman, 2000:170-171).

In conducting the interviews the researcher attempted to address the following factors mentioned by Woods & Catanzaro (1988:136-137) that might have influenced the reliability of the results obtained:

- The first is the researcher's status position. The investigator may be well-known to the participants. The gender of the investigator may influence the openness with which participants share information.
- The second is the participant's choice. The intermediary may approach only those judged "good" participants. Those who elect to participate may possess characteristics that differ from non-participants.
- Third are the social situation conditions. Participants may judge the appropriateness of information in relation to the context.
- Finally there are the methods of procedure because replication of qualitative studies are not possible and constant comparative analysis may result in lack of agreement on a description or composition of events.

Validity was ensured by taking into account the factors that could influence the validity of the interview as set out below (Woods & Catanzaro, 1988:137):

- The first was history and maturation. There is a particular problem when data is generated over time, (e.g., longitudinal studies).
- Researchers may see and report data as a function of their position.
- A third factor is observer effects. Participants may become dependant on researchers for status enhancement or satisfaction or psychological needs. Participants may behave abnormally to put themselves in the best light, lie, omit relevant data, or misrepresent their claims.
- Fourthly, there is selection and regression. Distortion of data by the selection of participants is possible(see above).
- Finally, there is mortality. Longitudinal study requiring hours of commitment.

j) Analysis of the interview results

The interviews were recorded and transcribed by an independent transcriber within a day after the interview. The researcher checked and verified the transcriptions. Responses were recorded exactly as they were given and no information was left out or summarised (Neuman, 2000:277).

Several questions were put to more than one person, thereby corroborating the information obtained.

6.4 SUMMARY

In this chapter the objectives and method of investigation were discussed. This included a description of the study samples and the measuring instruments. Where applicable, the relevant objectives (see Chapter 1 paragraph 1.4.2, page 7) were referred to. The interviews were described and the process of interviewing was outlined. The method of analysing the interviews was described and the reliability and validity of the interviews were discussed. This was followed by a consideration of the research questionnaire, which included reviews on the objectives, study sample, structure of the questionnaire, administration, analysis and reliability and validity of the questionnaires. The chapter concluded with a discussion of the proposed research method outlining the steps followed in conducting the research.

In Chapter 7 the results of the empirical investigation will be reported and considered.

CHAPTER 7

EMPIRICAL RESULTS

7.1 INTRODUCTION

The general research objective of this study is to identify the key issues in the debate about the inability of financial accounting to provide complete and accurate information on intangible assets in the financial statements, and to determine the validity of these arguments against the accounting for intangible assets by comparing the critique and opinions with the international accounting standard for intangible assets, IAS38/AC129 (see Chapter 1 paragraph 1.4.1, page 7). A broad spectrum of global opinions was identified in the literature study, and to that end, various secondary objectives were set. An empirical study as per Chapter 6, page 95, was done to establish the current practice and needs in South Africa.

The research methodology most suitable for this study was discussed and a motivation was provided for the chosen methodology (Chapter 1, paragraph 1.6, page 8). It must be kept in mind that owing to the size of the sample of respondents, their views are not conclusive of the SA situation. At most, it is a reflection of existing perceptions in the financing industry.

The results of the empirical study done to test the opinions of the business world in this regard, by means of the questionnaire in Appendix 1 page 167 are reported and discussed in this chapter under the following headings as described in Chapter 6, page 95:

- relevance of intangible assets;
- recognition of intangible assets;
- measurement of intangible assets; and

- disclosure and information needs of the users.

Interview responses received from the two banks on each question as well as their views on follow-up questions will be treated separately in the discussion and disclosed statistics of the findings of the questionnaire.

7.2 QUESTIONNAIRE RESULTS

The response on the questionnaire will now be summarised. Out of the 26 qualified respondents, nine returned a completed questionnaire, giving a response percentage of 34,6%. The response from the interviews with the banks will be reported in commentary after each diagram. Three banks were approached and two responded.

7.2.1 Relevance of intangible assets

Questions 3 and 19 of the questionnaire (Appendix 1, page 167) aimed to determine the relevance and importance of intangible assets (objective 1, paragraph 1.4.2, page 7).

Question 3 asked respondents to indicate what represents the true value of an entity.

Results

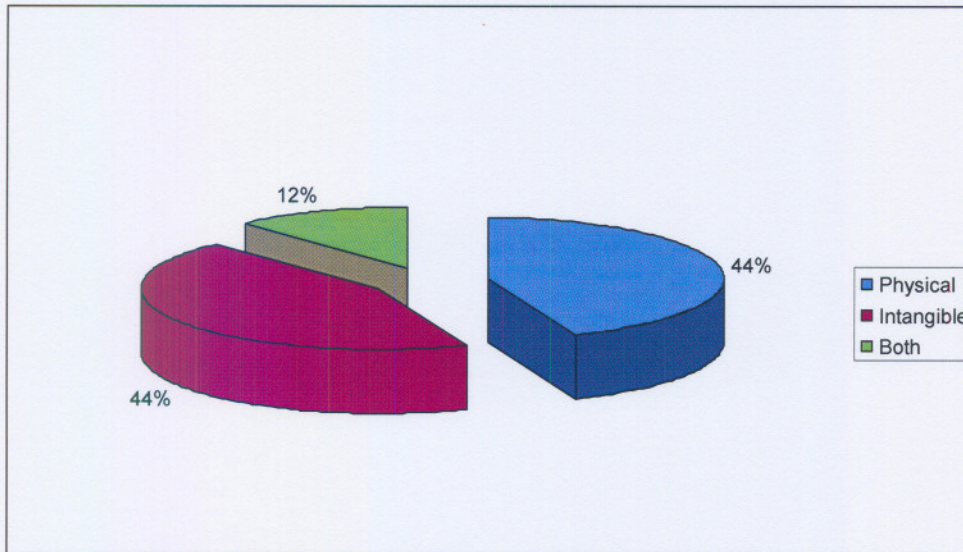
N = 9

Physical / financial = 4

Intangible assets = 4

Both physical and intangible = 1

Diagram 7.1 Identification of the true value of an entity



Question 3 disclosed no definite answer and the results were mixed due to the fact that a respondent indicated that the value of a company lies with both physical and intangible assets. An equal number (44%) of respondents indicated either physical or intangible and one respondent (12%) indicated both. The banks indicated both physical and intangible assets to be representative of the true value of an entity.

Question 19 Do intangible assets comprise a larger component of corporate value than 10 years ago?

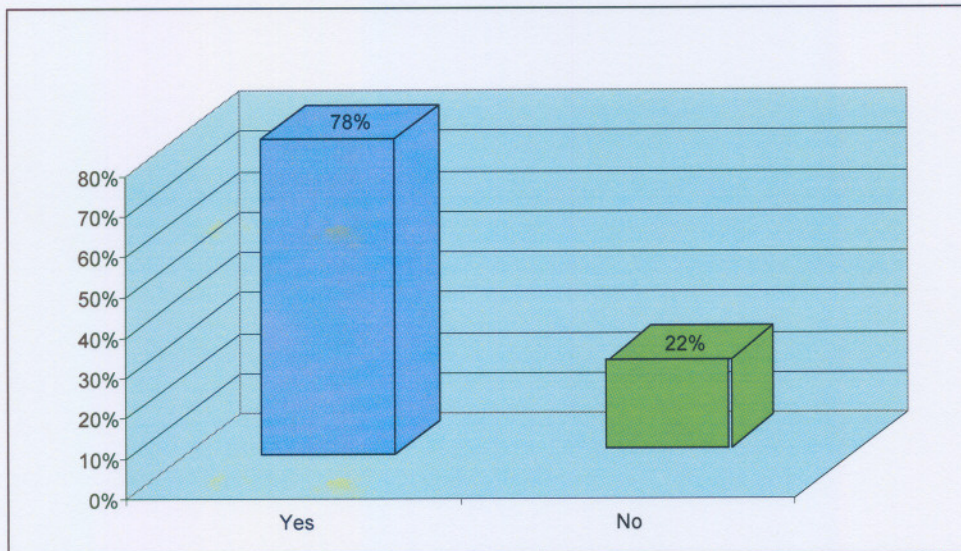
Results

N = 9

Yes = 7

No = 2

Diagram 7.2 Relevance of intangible asset value today



Seven of the respondents (78%) indicated “yes”, and two respondents (22%) indicated “no”.

Both banks indicated “yes”. Bank 1 made the comment that this is especially so for the service and IT industries but, if corporate value is an indication of market capitalisation, then the answer would be a “no”.

7.2.2.1 Summary of the relevance of intangible assets

The results obtained from the analysis of the questionnaire with regard to the relevance of intangible assets (question 3, 19) indicate the points below.

- From the results it can be deduced that intangible assets are definitely part of an entity’s corporate value, more so than 10 years ago (Diagram 7.2, page 113). However, not all of an entity’s value can be attributed to intangible assets. As indicated by the results, a proportion of an entity’s value lies with the tangible assets integrated with the intangible assets, but for the service and IT industries intangible assets comprises a larger role than tangible assets (Diagram 7.1, page 112).

7.2.2 Recognition of intangible assets

Questions 2, 20 and 25 (Appendix 1, page 167) addressed the recognition of intangible assets (objective 2, paragraph 1.4.2, page 7).

Question 2 In valuing a company's full value/potential, do you consider internally generated intangible assets such as research & development costs, brands and employee talents as important for the economic growth of the company?

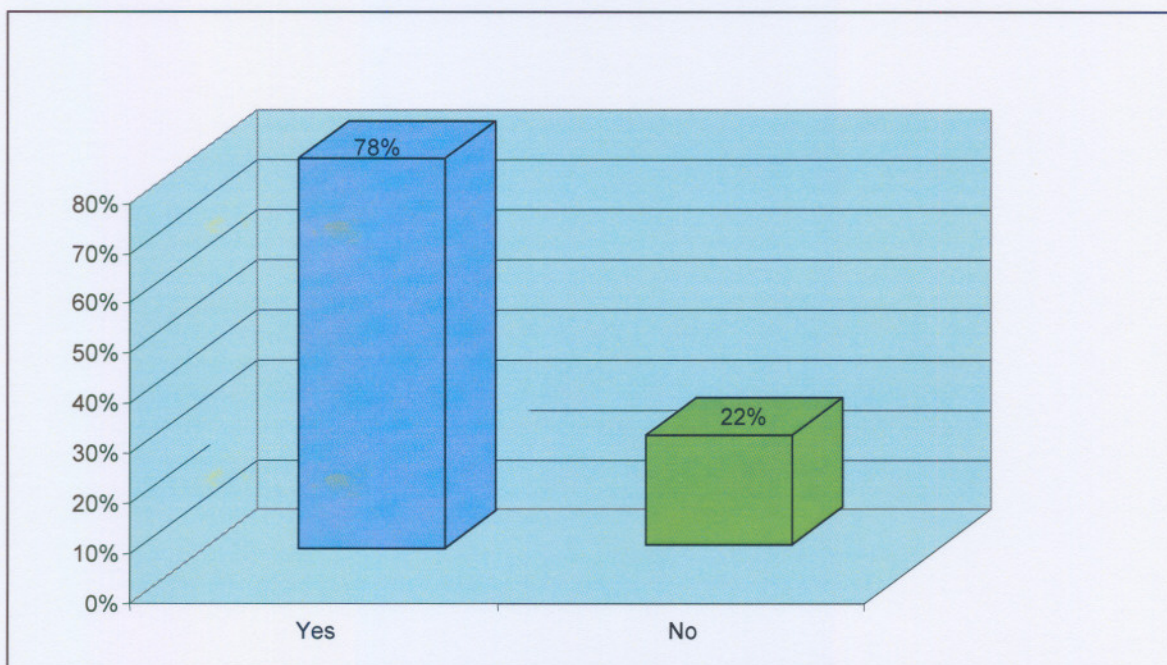
Results

N = 9

Yes = 7

No = 2

Diagram 7.3 Importance of internally generated intangible assets



Seven of the nine respondents (78%), as well as the two banks, regarded internally generated intangible assets as important for the economic growth of companies. No reasons were given for the “no” answers.

Question 20 In your opinion, should intangibles be capitalised as investments?

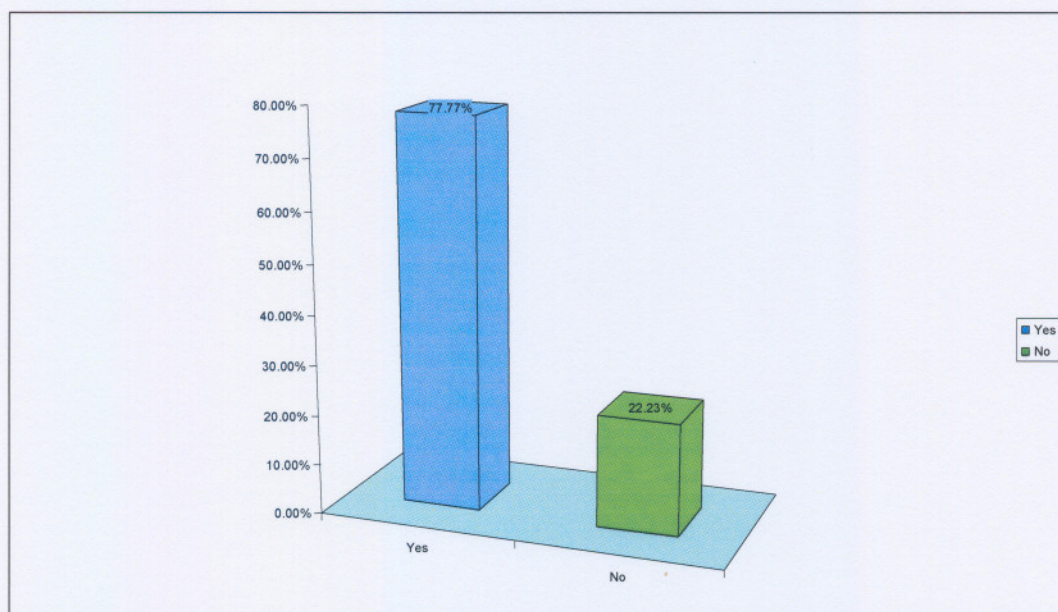
Results

N = 9

Yes = 7

No = 2

Diagram 7.4 To recognise intangible assets or not



Seven of the respondents (78%) agreed on the need to capitalise intangibles as investments and two (22%) indicated that there is no need to capitalise intangibles.

The banks do not have a problem with the capitalisation of intangible assets. Bank 1 however, would not like internally generated intangible assets to be capitalised.

Question 25 Would you prefer that internally-generated intangible assets, after meeting certain recognition criteria, be capitalised?

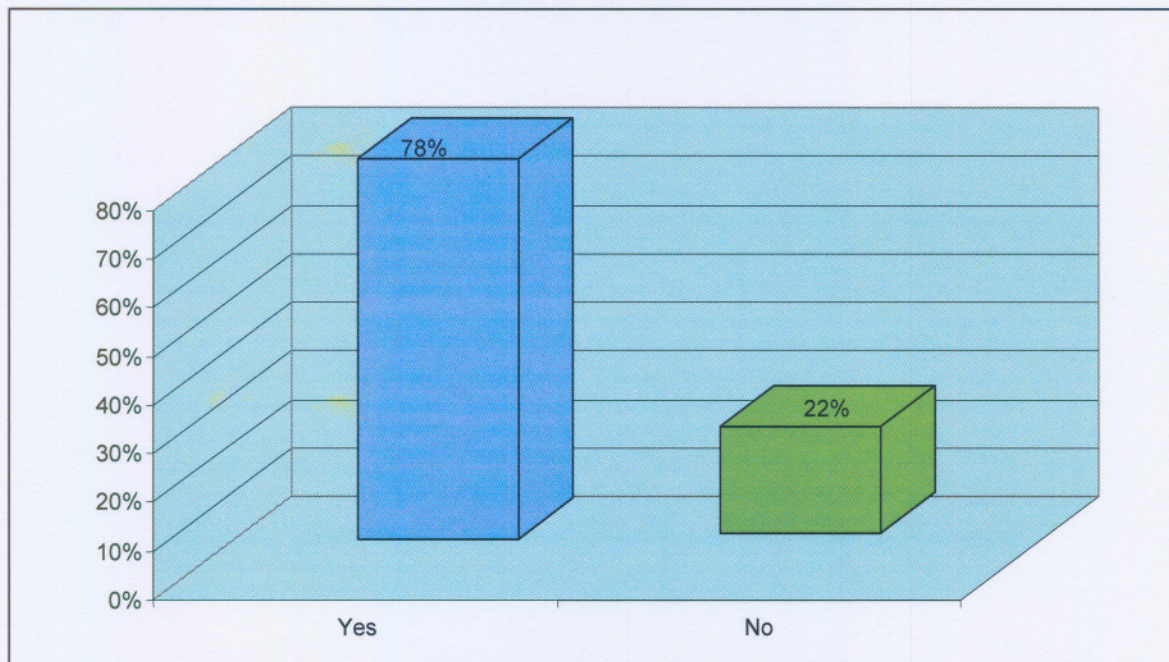
Results

N = 9

Yes = 7

No = 2

Diagram 7.5 Capitalisation of R&D cost



Seven of the nine respondents (78%) as well as Bank 2 want R&D costs to be capitalised. No reasons were given for the “no” answers.

Bank 1 does not want R&D costs to be capitalised, therefore bank 1 and bank 2’s response to this question correlates well with their opinions in question 20.

7.2.2.1 Summary on the recognition of intangible assets

From the results it can be deduced that internally generated intangible assets are important for future economic growth and they are an important consideration in determining a company's sustainable future growth (Diagram 7.3, page 114). Moreover it is necessary to capitalise intangible assets (Diagram 7.4, page 115) and R&D costs (Diagram 7.5, page 116), except for bank 1 who does not want R&D costs or internally developed intangible assets to be capitalised.

7.2.3 Measurement of intangible assets

Questions 6, 7, 9, 10, 12, 13, 14, 15, 18, 21 and 22 (Appendix 1, page 167) addressed the issues regarding measurement (objective 3, paragraph 1.4.2, page 7).

Question 6 Are you of the opinion that it is a function of the balance sheet based on the historical cost to measure net worth in current market values without compromising its measurement base?

Results

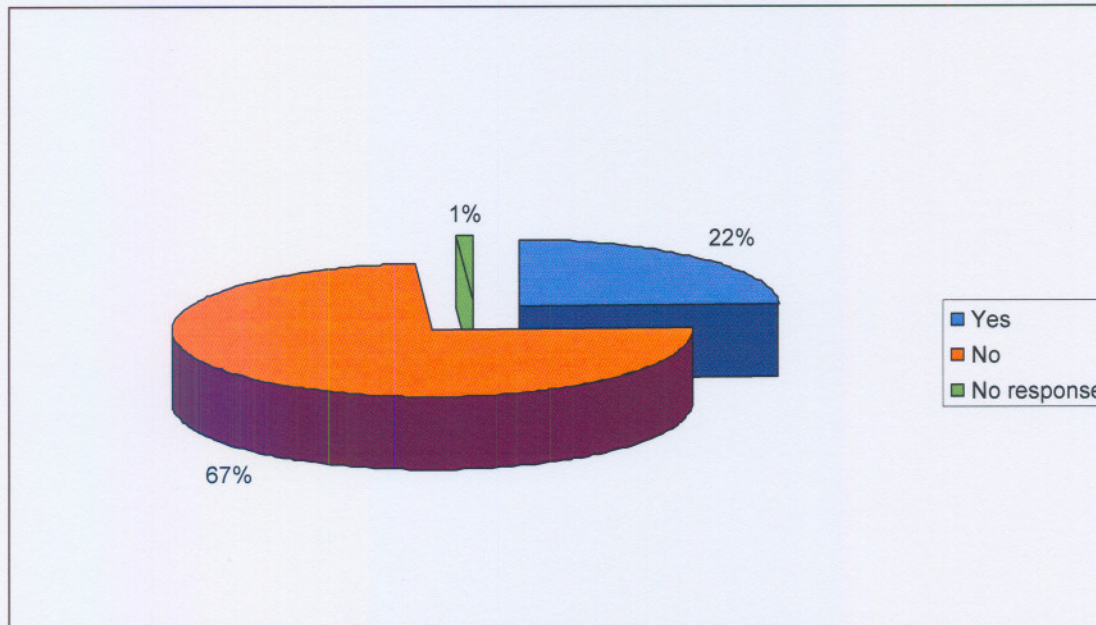
N = 9

Yes = 2

No = 6

No response = 1

Diagram 7.6 Measuring of net worth



Six of the nine respondents (67%), as well as the two banks, indicated that it was not the function of the balance sheet to measure the net worth in current market value. This is a strange answer as the financial statements do not claim to be a current cost statement; however, in light of better disclosure, market values are given without compromising the historical measurement basis.

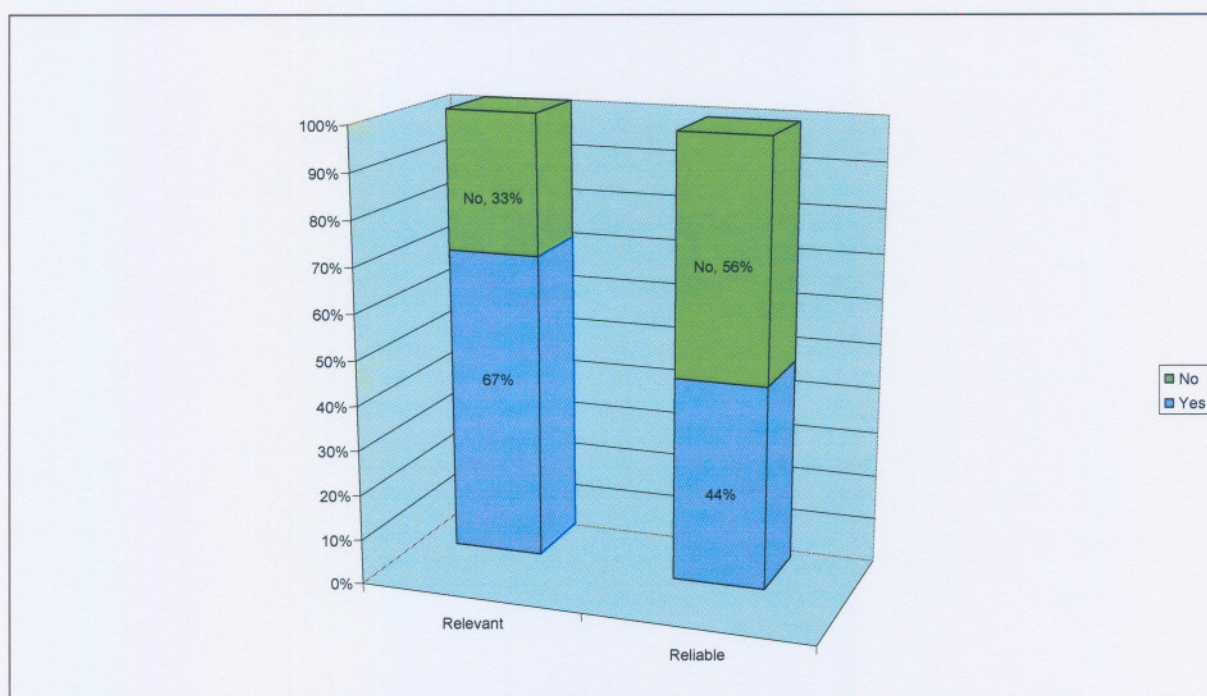
Question 7 Do balance sheets, on the historical cost basis, in regard to intangible assets provide:

- relevant information?
- reliable information?

Results

	Relevant	Reliable
N	9	9
Yes	6	4
No	3	5

Diagram 7.7 Relevance and reliability of the historical cost model



Out of the nine respondents, six (67%) indicated that the information regarding intangible assets was relevant and three (33%) indicated that it was not. Concerning the reliability, four respondents (44%) indicated that the information was reliable and five (56%) indicated that it was not reliable.

Bank 1 indicated that the balance sheet, in regard to intangible assets on the historical cost basis, does not provide relevant nor reliable information due to the fact that there is no standard to measure the quality and format of disclosure. Bank 2 is of the opinion

that the balance sheet, on the historical cost basis in regard to intangible assets, provide reliable but not relevant information.

Question 9

Which of the following do you prefer as a basis for financial reporting?

Historical cost basis?

or

Current market value basis?

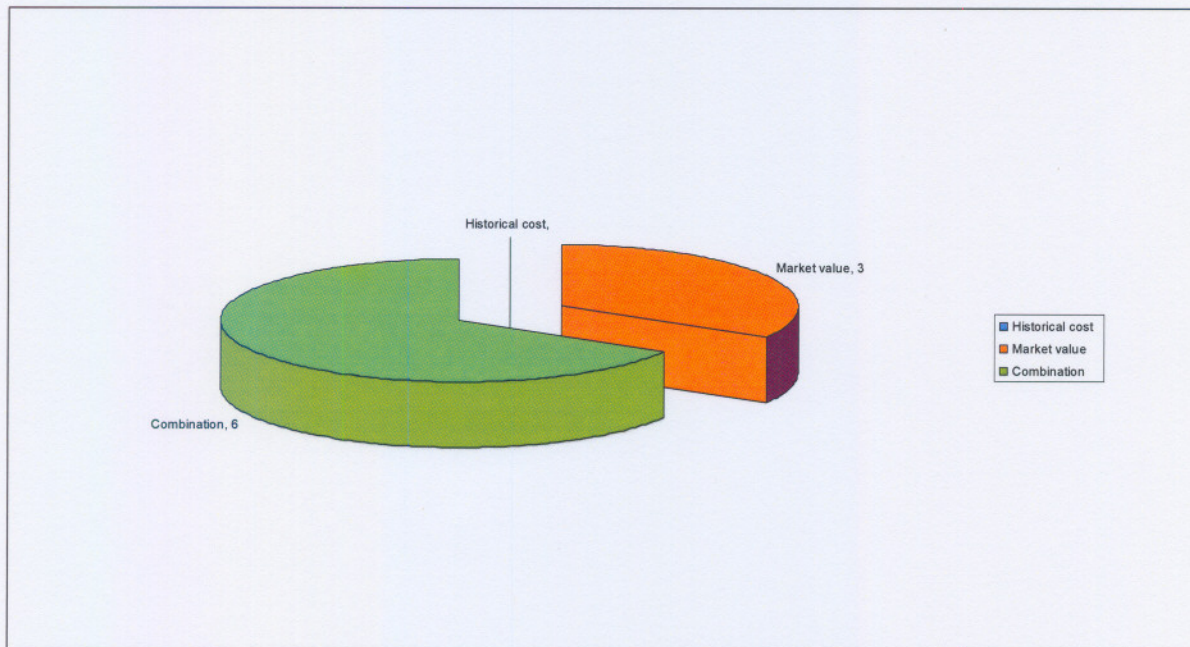
or

A combination of the above?

Results

	Yes
Only historical cost basis	0
Only market value basis	3
Combination of the above	6
Total respondents	9

Diagram 7.8 Preferred accounting reporting model



The majority, namely six of the nine respondents (67%), as well as the two banks, indicated that the combination of historical cost and current market value was the preferred choice. None of the respondents indicated the use of the historical cost model on its own. The response received for the current market value basis gives support for the direction taken with the combined model, i.e. the historical basis is not sufficient as a proper measurement of value in this regard.

In **Question 10** the respondents were asked to indicate their preferences between the three accounting reporting models, with reasons.

The three accounting reporting models were historical cost basis, current market value basis and a combination of these two bases.

Results

Some of the reasons for the choices are set out below:

10 a) Historical cost model

No-one selected this model.

10 b) Market value model

A respondent who indicated the preference for a market value basis motivated this because current market value gives a better understanding of returns on capital.

10 c) A combination of historical cost model and the market value model

- Currently, financial assets and liabilities are disclosed at fair value and investment properties at market value. PPE, intangibles, and associate companies should be disclosed at NBV and tested for impairment on a regular basis. There are certain assets/intangibles that cannot be measured/valued reliably, therefore they must either be disclosed at historical cost or net book value if they satisfy their specific recognition criteria, or otherwise not be recognised in the annual financial statements. Thus, a combination of fair value / historic cost for different assets is a more suitable compromise than the two extreme reporting bases, for providing reliable and relevant financial information.
- A combination of the two bases will allow users of financial statements to make their own assessment of the value of assets and liabilities, if all the relevant information relating to the historical cost and market value, is disclosed reliably.
- With the historical cost basis, one can see where the company has come from and perhaps where it is going, but current market values of assets, in this instance intangible assets, gives one the true value of the company at a certain point in time.
- Historical cost offers objective and reliable information. The shortcomings are easily understood and can be supplemented by additional disclosure. Intangible assets eventually generate "hard" assets. When intangible assets are currently generating additional profits, this will be self-evident in the analysis of the results of the company. Intangible assets that are expected to generate future earnings but have not yet demonstrated the ability to do so, should not meet recognition criteria in any event. The view is that the historical cost basis should only be

supplemented by market values to the extent that a high level of reliability can be assured, such as from sources generated in an efficient market.

- Current market value gives significantly more relevant information on the present state of the affairs of the company. It does not allow companies to hide profits or losses inherent in assets and liabilities as was allowed under historical cost accounting. There are certain classes of assets, liabilities and equity that must remain at historical cost.

Question 12 Do you think that accountants when recognising and measuring intangible assets, are less prudent?

Results

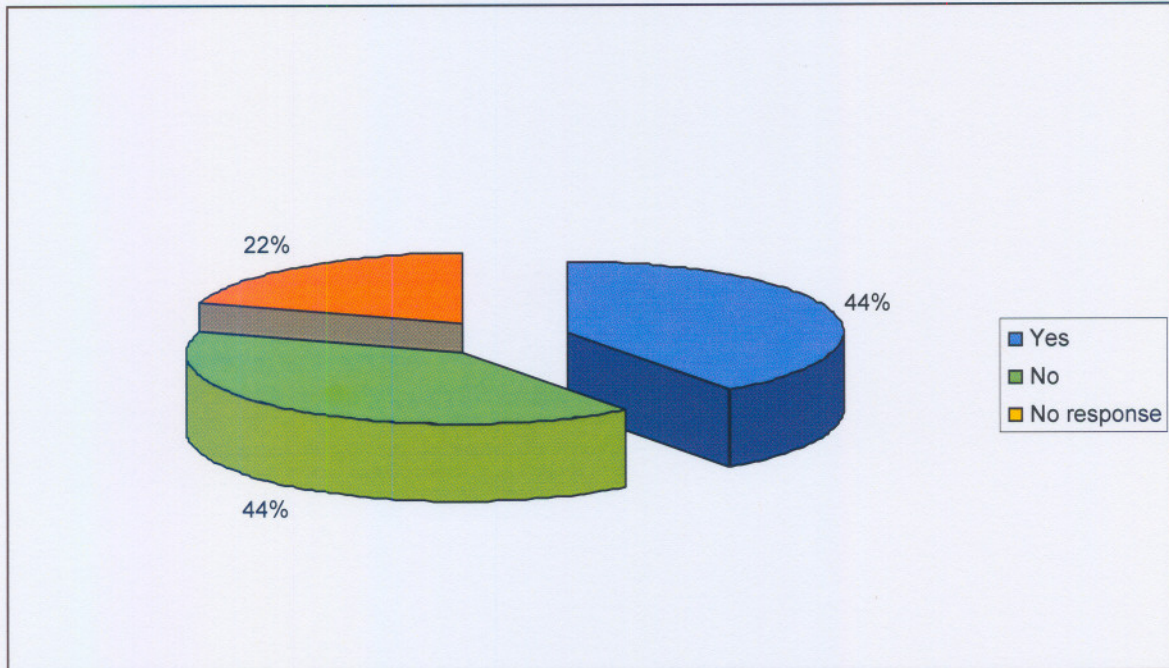
N = 9

Yes = 4

No = 4

No Response = 1

Diagram 7.9 Recognising and measuring of intangible assets



There was no specific indication in any direction. Four respondents (44%) indicated “yes” and four respondents (44%) indicated “no” and one respondent (12%) did not respond. Both banks indicated a “no”. Bank 1 is of the opinion that if it is about risks (liquidity) and rewards (future earnings) it is true but when only looking at rewards, it is a “no”. Bank 2 commented that an accountant is perceived to be prudent, because it is difficult to actually measure intangible assets which then leaves the conservative route not to recognise intangibles.

Question 13 Corporate financial reporting is not objective, and it is intentionally or unintentionally slanted to reflect a company in the best light, for example, the postponement of reporting negative information in the hope that the situation will correct itself.

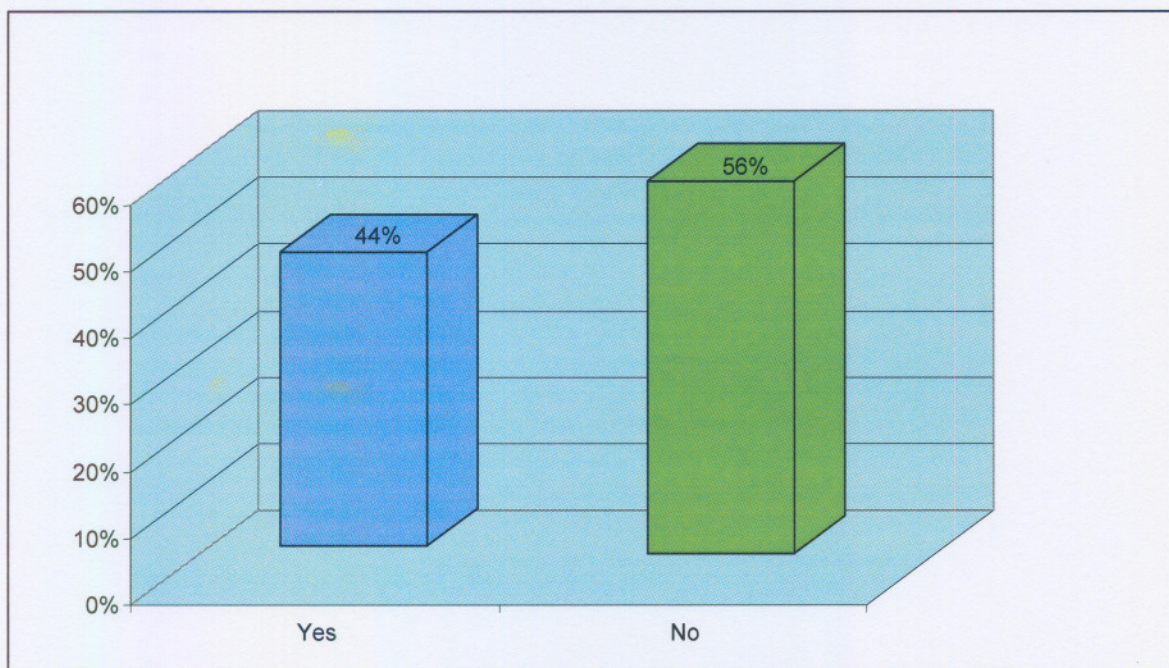
Results

N = 9

Yes = 4

No = 5

Diagram 7.10 **Objectivity of corporate financial reporting**



Five of the nine respondents (56%), as well as the two banks, did not agree with the above statement.

Question 14 Do you agree that the historical cost model is primarily a transaction-based model, and that the reported values are predominantly reliable?

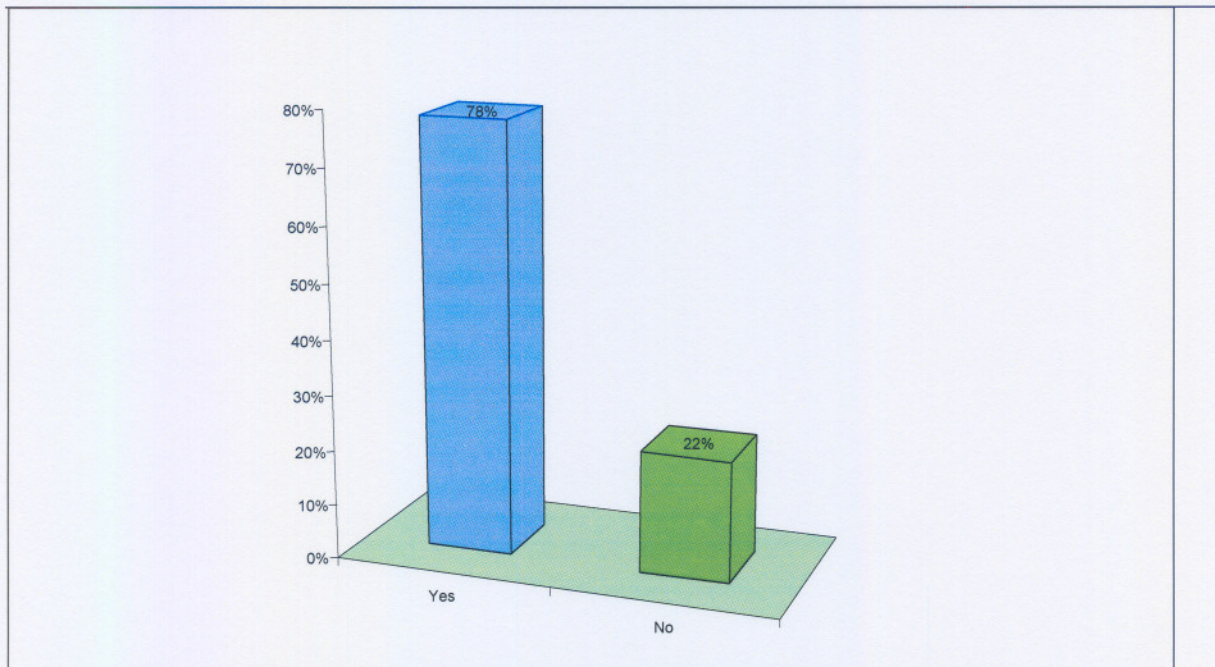
Results

N = 9

Yes = 7

No = 2

Diagram 7.11 Historical cost model



Seven of the nine respondents (78%), as well as the two banks, indicated that they agree with the statement that the historical cost model is a transaction-based model and that the reported values are predominantly reliable. There was no further investigation into the “no” responses, which warrants further research.

Question 15 Do you think that the estimates by management of the reasonable market value of intangible assets are reliable?

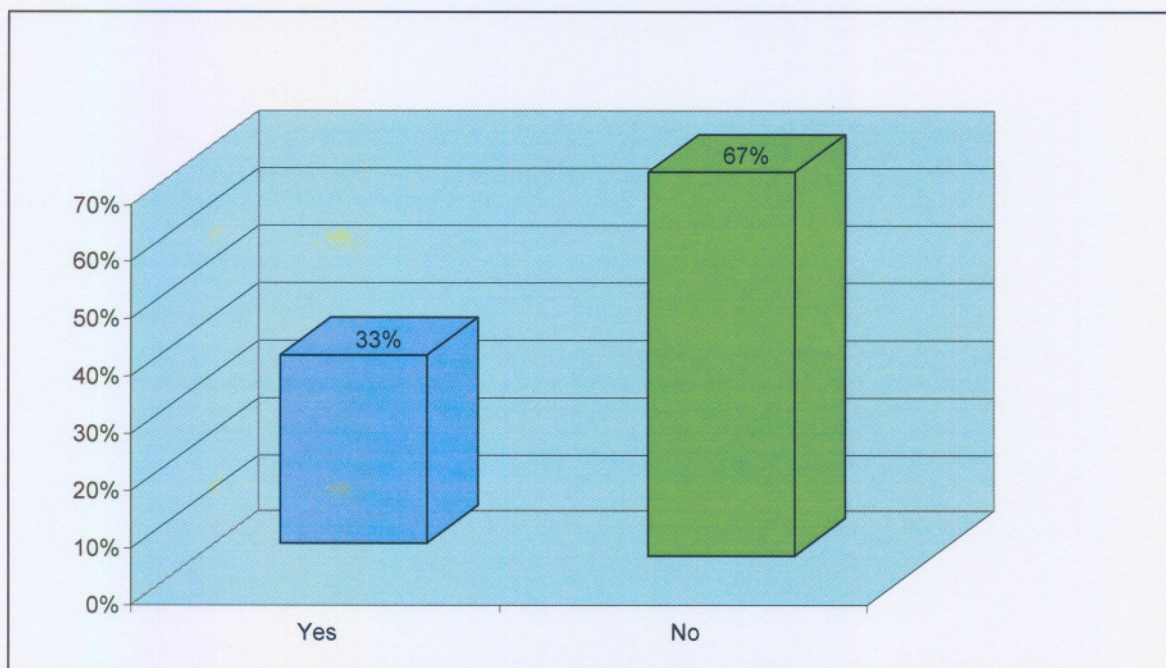
Results

N = 9

Yes = 3

No = 6

Diagram 7.12 Reliability of estimates by management on market values



Six of the nine respondents (67%) indicated that estimates by management were not reliable. Bank 1 did not indicate an answer because, according to them, the disclosure regarding the underlying assumptions (risks, useful life, discount rate) is currently inadequate. Therefore, they are not able to comment on the above question. Bank 2 indicated that estimates by management on the market values of intangible assets are not reliable.

Question 18 Is it the responsibility of the user rather than that of management to calculate value?

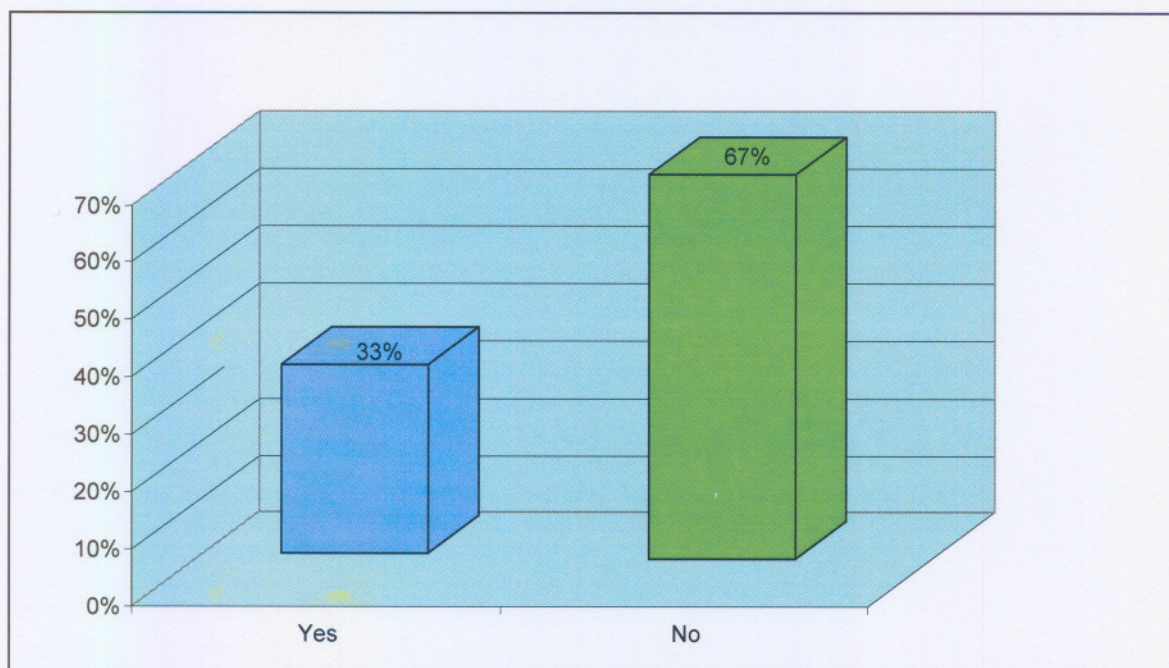
Results

N = 9

Yes = 3

No = 6

Diagram 7.13 **Responsibility to calculate value**



The majority, namely six out of the nine respondents (67%) as well as bank 1, indicated that it was the responsibility of management to calculate value. Bank 2 indicated that it was the responsibility of the user. Bank 1 is of the opinion that it is the users' responsibility to check if they agree with management's calculated value.

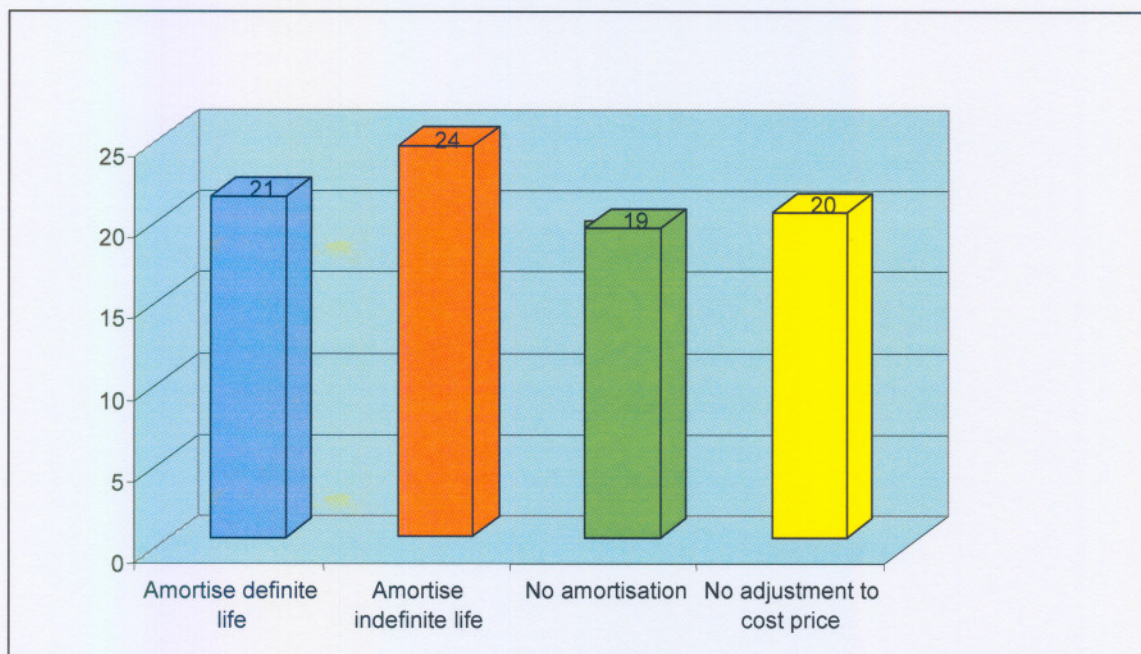
Question 21

If intangible assets are capitalised, what do you prefer? List in order of preference:

- amortised over limited period - not exceeding 5 years.
- amortised over indefinite period.
- no amortisation - just subject to write-downs or revaluations.
- no adjustment to cost price - just disclosure of market value and related information in the notes to the balance sheet.

Results

Diagram 7.14 Subsequent measurement of intangible assets



Here, there was no correlation between the respondents' preferences. The majority (24%) preferred amortisation with no cap on the amortisation period. Both banks indicated that they preferred not to amortise but chose impairment instead of revaluation.

Question 22 The following existing brand valuations are subjective and offer no high degree of reliability:

Price premium method

Earnings valuation method

Royalty payments method

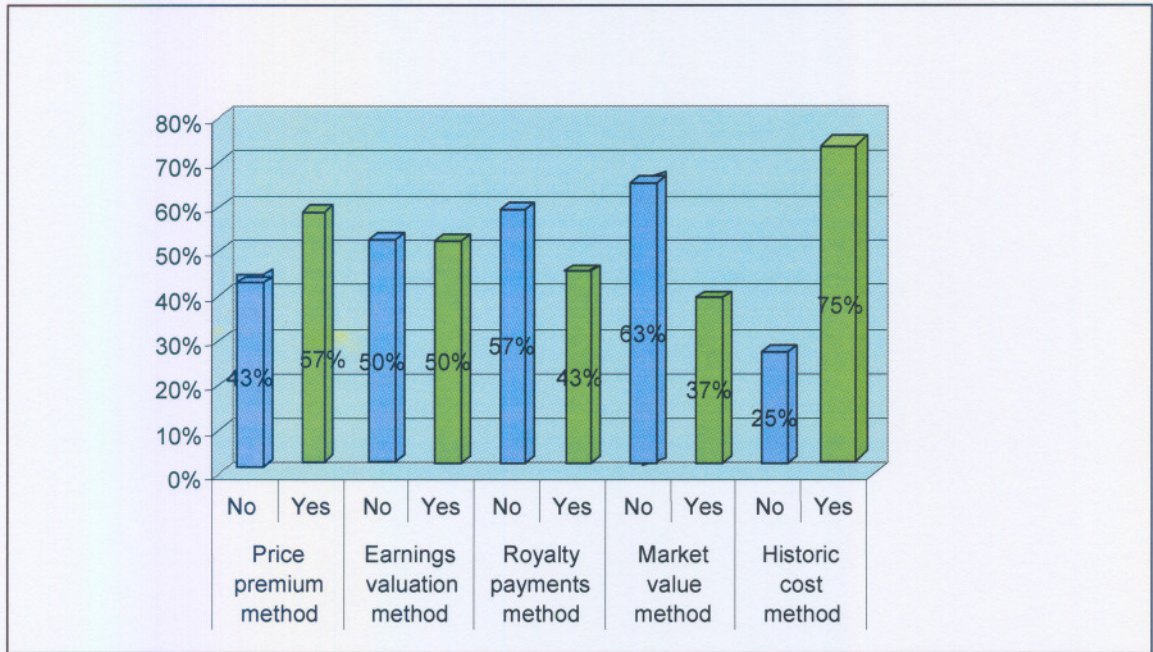
Market value method

Historic cost method

Results

	Price premium method	Earnings valuation method	Royalty payments method	Market value method	Historical cost method
N	7	8	7	8	8
No	3	4	4	5	2
Yes	4	4	3	3	6

Diagram 7.15 Subjectivity and reliability of existing brand valuation methods



The majority of the respondents (75%) indicated that the historical cost method was the most subjective and unreliable, while the market valuation model was identified as the least subjective and unreliable (63%). According to bank 1, the only method that is not subjective is the earnings valuation method.

7.2.3.1 Summary on the measurement of intangible assets

The results obtained from the analysis of this section of the questionnaire with regard to the measurement of intangible assets (questions 6, 7, 9, 10, 12, 13, 14, 15, 18, 21, 22) indicated the following:

- The empirical research determined that it was not a function of the balance sheet to measure net worth in current market value (Diagram 7.6, page 118).
- The respondents agreed that the transactions reported by the historical cost model are reliable (Diagram 7.11, page 126).

- However, the historical cost basis provides relevant but not reliable information concerning intangible assets (Diagram 7.7, page 119). Bank 1 indicated neither relevant nor reliable information is supplied by the historical cost basis concerning intangible assets.
- The respondents were not in favour of only a current market value basis. They would prefer a combination of both (Diagram 7.8, page 121) because of the nature of certain intangibles which means that intangible assets cannot be reliably measured, and must be shown at cost (results of question 10, page 121).
- There was no conclusive view whether accountants are less prudent or not when recognising and measuring intangible assets (Diagram 7.9, page 124).
- The respondents indicated that corporate financial reporting is objective (Diagram 7.10, page 125) but estimates by management of reasonable values of intangible assets are not reliable (Diagram 7.12, page 127). Bank 1 withheld an opinion.
- The majority of the respondents (6 of the 9), however, indicated that it was the responsibility of management to calculate value while bank 2 indicated that it was the responsibility of the user to calculate value (Diagram 7.13, page 128).
- Regarding the subsequent measurement of intangible assets, there was no clear preference to amortise or not. The majority (24%) preferred amortisation, with no cap on the amortisation period (Diagram 7.14, page 129) while the banks were not in favour of amortisation but preferred impairment instead of revaluation.
- The historical cost model is perceived as the most subjective and unreliable brand valuation method. The preferred model is the market valuation model; however, bank 1 indicated that the earnings valuation method is the least subjective (Diagram 7.15, page 131).

7.2.4 Disclosure requirements and needs on intangible assets

Questions 1, 4, 5, 8, 11, 16, 23, 24, 26, 27 and 28 (Appendix 1, page 167) addressed the disclosure of intangible assets (objective 4, paragraph 1.4.2, page 7).

Question 1 Does analysing a public company's external financial statements provide you with an accurate assessment of the firm's capabilities?

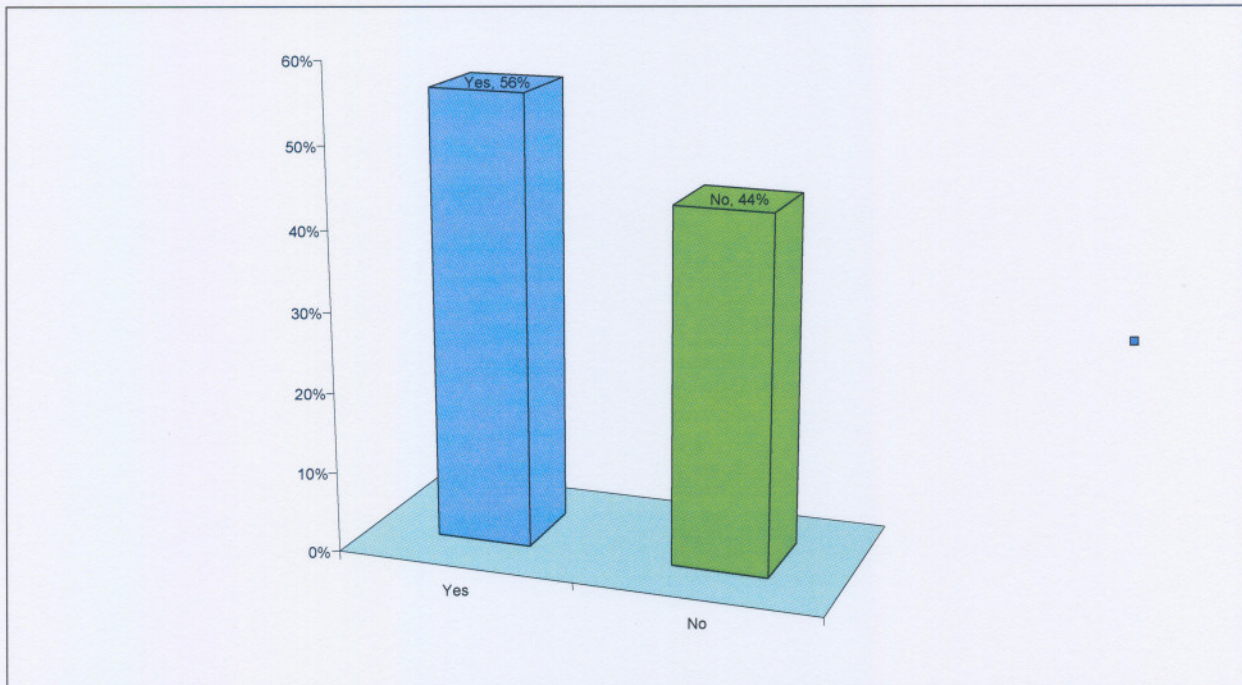
Results

N= 9

Yes = 5

No = 4

Diagram 7.16 Usefulness of financial statements



Five of the respondents (56%) were of the opinion that one does obtain an accurate assessment and four (44%), together with bank 2, were of the opinion that one does not obtain an accurate assessment. Bank 2 indicated that they do not obtain an accurate assessment because the financial statements are historical cost-based and the bank is looking at financial statements from a perspective of future growth and sustainability.

Question 4 Can the following be determined from external financial reports:(Annual financial statements)

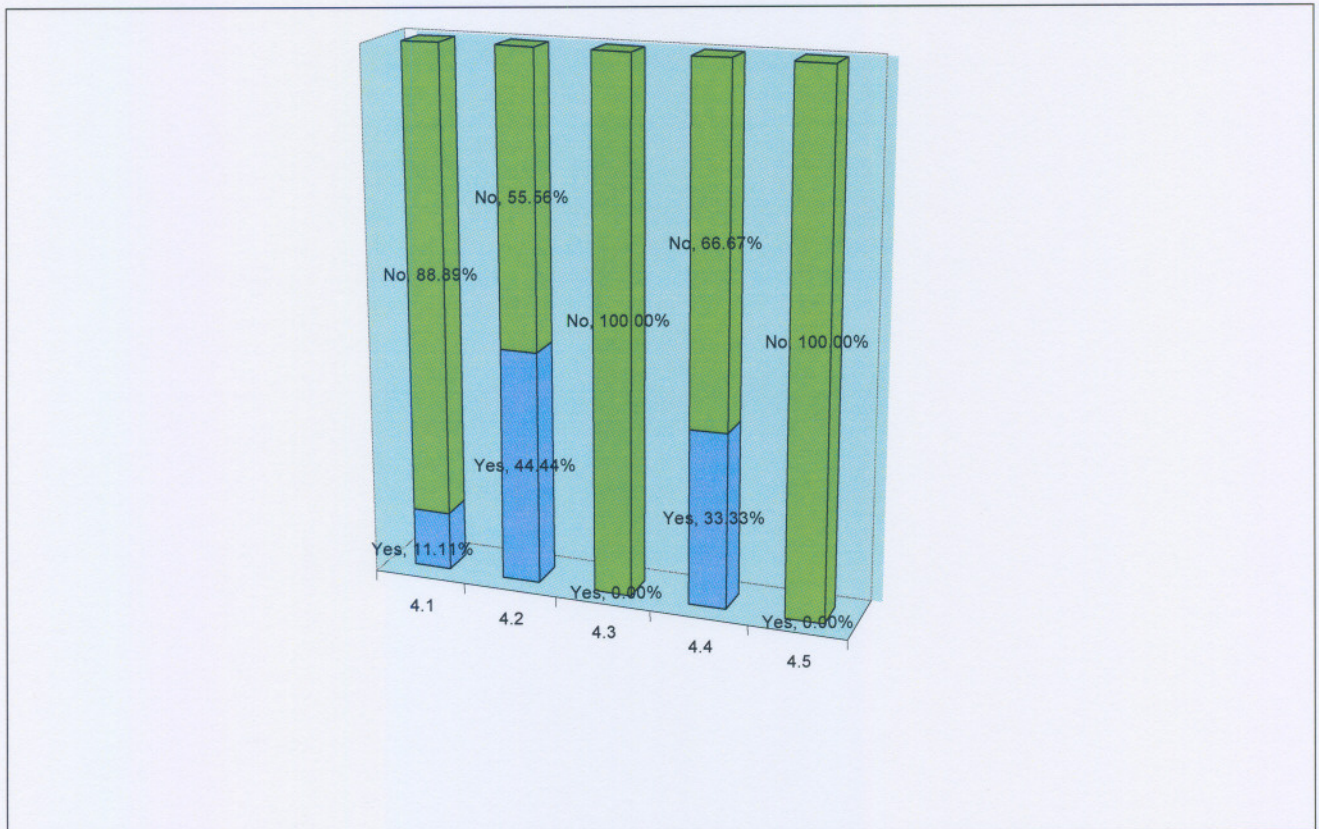
For purpose of clarity the options are numbered.

- 4.1 the rate of return on the investment in intangible assets;
- 4.2 change in the efficiency of the company's investment activity over a period of time;
- 4.3 the changes in the character of intangible investments;
- 4.4 the value of a company's intangible assets and expected economic lifespan;
- 4.5 to what degree do reported research and development costs include non-related research and development costs.

Results

	4.1	4.2	4.3	4.4	4.5
N	9	9	9	9	9
Yes	1	4	0	3	0
No	8	5	9	6	9

Diagram 7.17 Determination of specific intangible asset information



The banks indicated the following:

- 4.1 No, the information to determine ROI is not disclosed on the balance sheet;
- 4.2 Bank 1- yes: in conjunction with information on other financial records, a wide range of aspects are assessed: no - according to bank 2;
- 4.3 No, because disclosure regarding the assumptions (risks, discount rate, time period of economic benefits of intangibles) is inadequate;
- 4.4 No, the disclosure regarding the assumptions (risks, discount rate, time period of economic benefits of intangibles) is inadequate;
- 4.5 No, disclosure is inadequate.

Question 5 Is disclosure of the investment in intangible assets an indication of its future value to the company beyond the acquisition date or investment date?

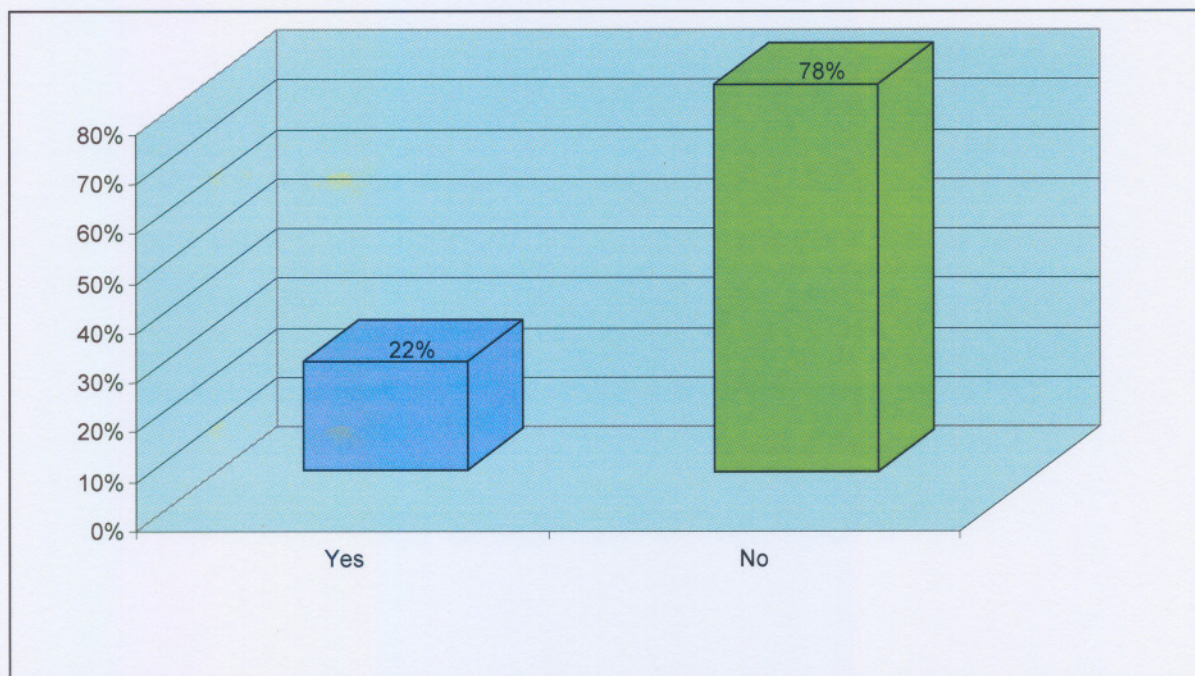
Results

N = 9

Yes = 2

No = 7

Diagram 7.18 Is disclosure of intangible assets an indication of future value?



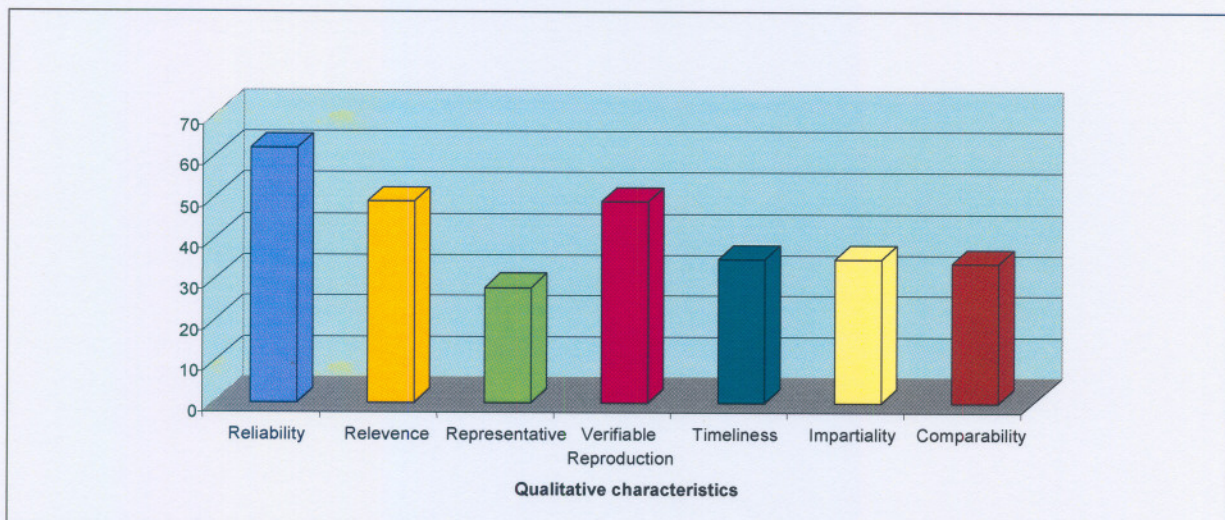
Seven of the nine respondents (78%), as well as bank 1, indicated that it was not an indicator of the future value of intangible assets, because the future value does not incorporate the effect of risks. Bank 2 indicated that it was indeed an indicator of the future value of intangible assets to the company.

Question 8 What qualitative characteristics of accounting are the most important to you?

- reliability
- relevance
- representative
- verifiable reproduction (faithfulness)
- timeliness
- impartiality
- comparability

Results

Diagram 7.19 Qualitative characteristics of accounting information



Reliability featured amongst all the respondents as the most important characteristic, while timeliness, impartiality and comparability were the least important. For bank 1, reliability was the most important and timeliness the least important, whereas for bank 2, relevance was the most important and impartiality the least important.

Question 11 The purpose of financial statements is to provide investors and creditors with reliable information about future earning prospects and cash flows.

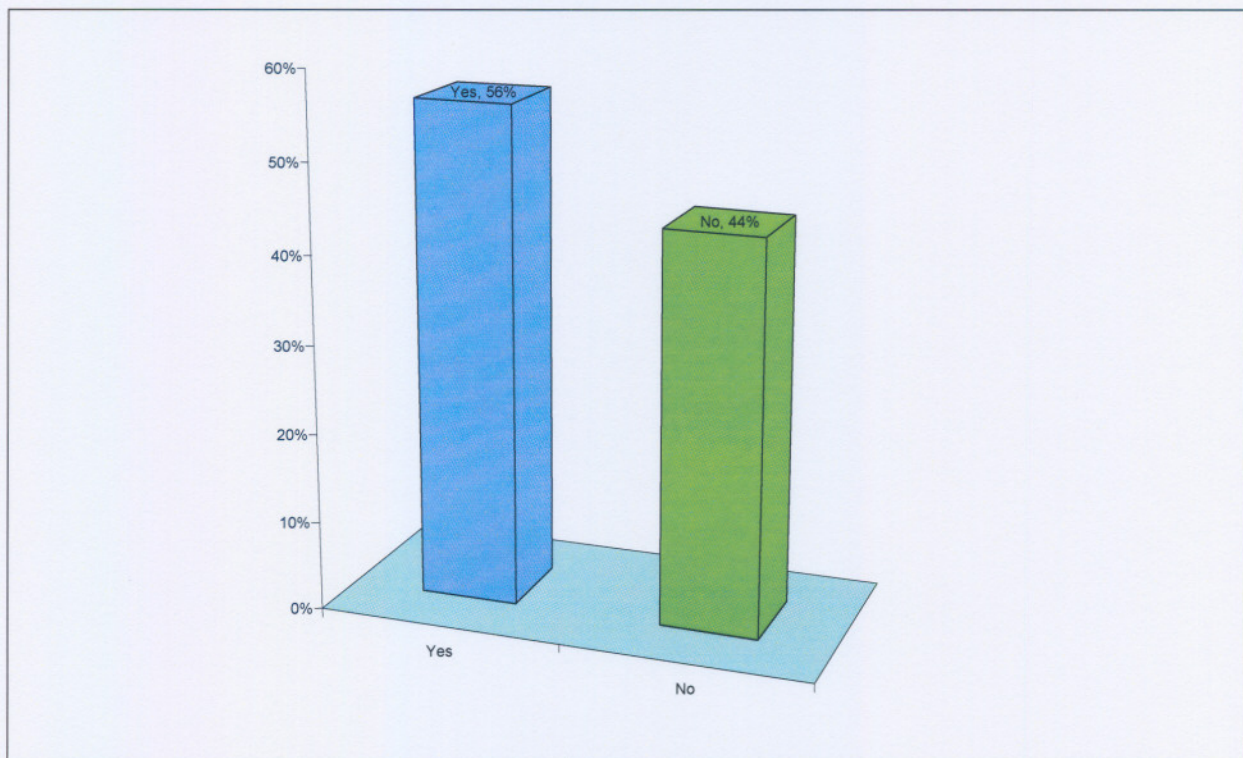
Results

N = 9

Yes = 5

No = 4

Diagram 7.20 Purpose of financial statements



Five respondents (56%), as well as bank 1, indicated that they agreed that the purpose of financial statements was to provide investors and creditors with reliable information regarding future earning prospects and cash flows, and four (44%), including bank 2, indicated that this was not the purpose of financial statements.

Question 16 Do you think that when you have received the financial reports, the information on market value at year end is still relevant?

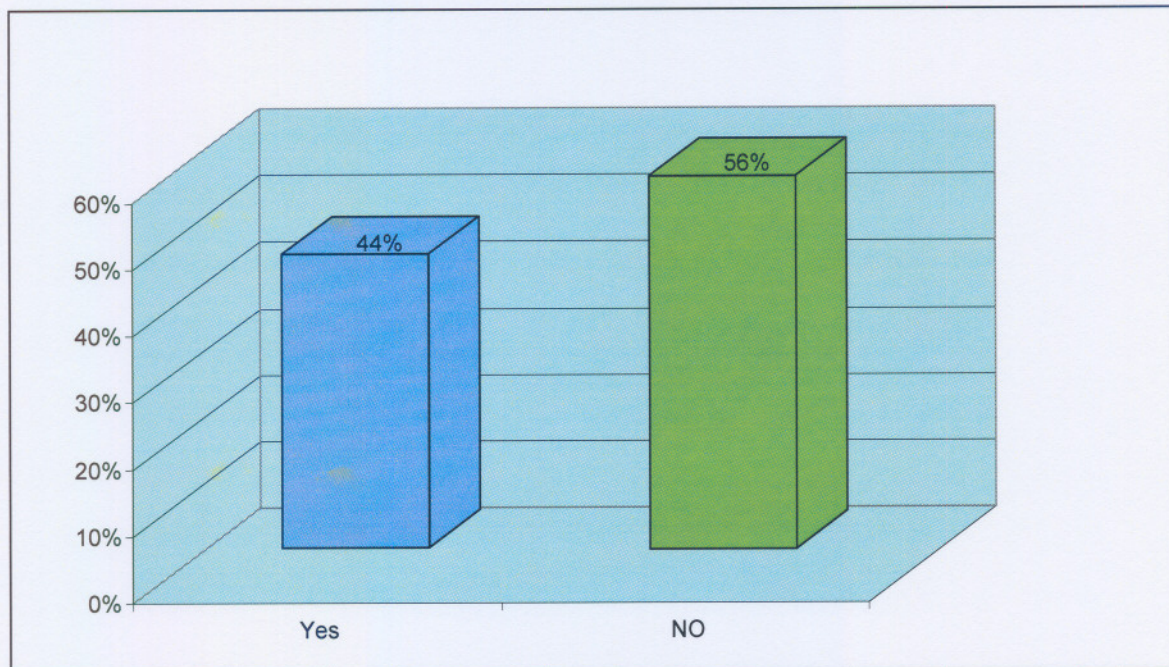
Results

N = 9

Yes = 4

No = 5

Diagram 7.21 Relevance of market information



Five of the nine respondents (56%) indicated that it was not relevant at that time. According to the banks, if the underlying assumptions are disclosed, then it is still relevant.

Question 23 If an intangible asset is capitalised initially at cost and thereafter adjusted

to reflect market value, do you prefer:
a) that these adjustments be taken directly to equity and disclosed on the balance sheet as a separate reserve, only to be put through to the income statement when sold?
or
b) should these adjustments be put directly through to the income statement?

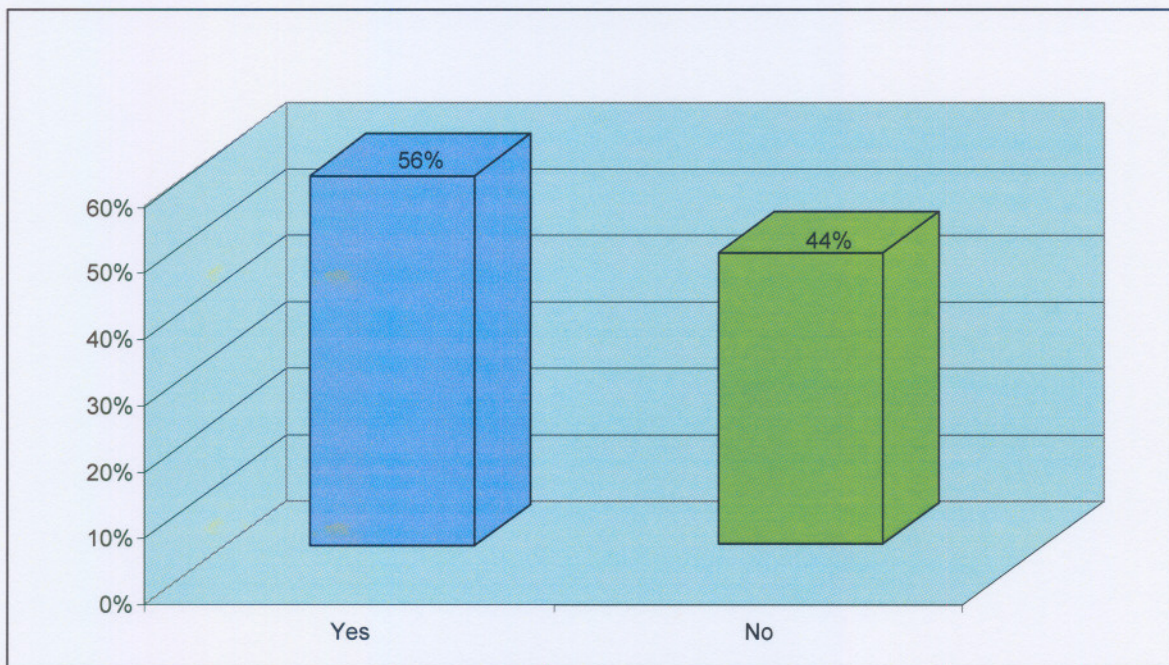
Results

N = 9

a) = 5

b) = 4

Diagram 7.22 Allocation of adjustments to carrying value of intangible assets



Five of the nine respondents (56%) wanted it put through to the statements of changes in equity and four respondents (44%), as well as the banks, wanted it through to the

income statement. There was no specific indication because eventually, the effect on equity is the same. It is the researcher's view that the preferred route would be to put the adjustments through to the statement of changes in equity. This would leave the income statement cleaner and giving a more historical picture of the effects of the business transactions.

Question 24 Is it important to you to know in determining a company's sustainable future growth the extent of that company's research and development costs and internally developed intangible assets?

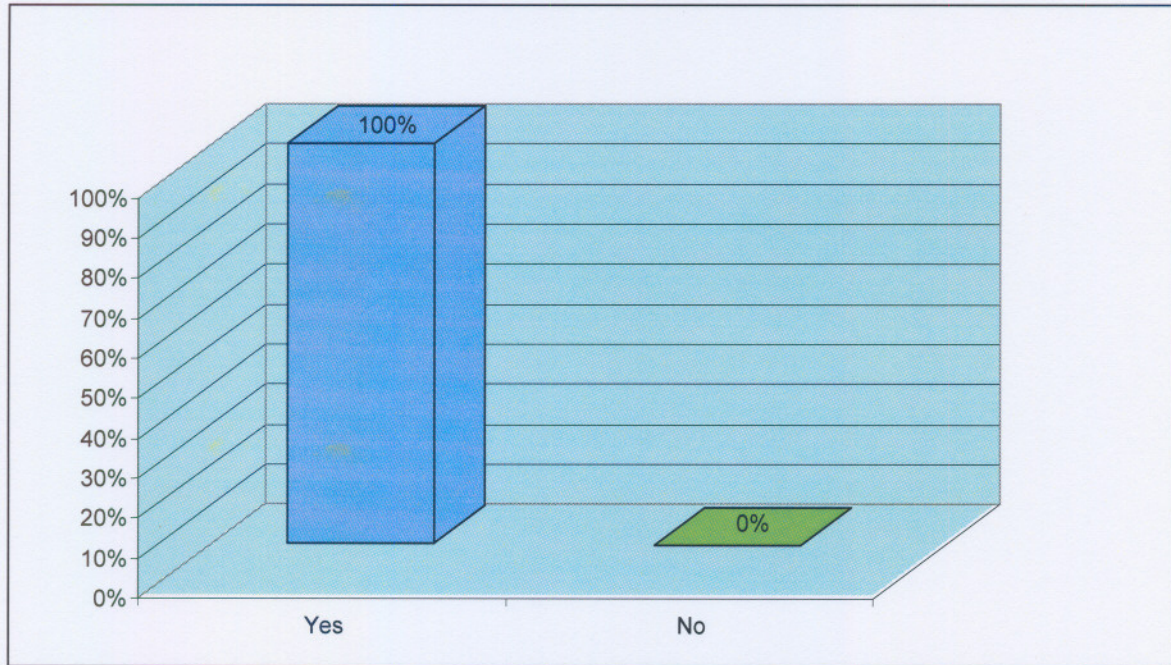
Results

N = 9

Yes = 9

No = 0

Diagram 7.23 Calculation of company's sustainable growth



All nine of the respondents (100%), as well as the banks, indicated that they needed to know the costs regarding R&D and internally developed intangible assets to calculate sustainable future growth.

Question 26 Do you want an annual valuation of internally developed intangibles to be provided in the notes to the financial statements?

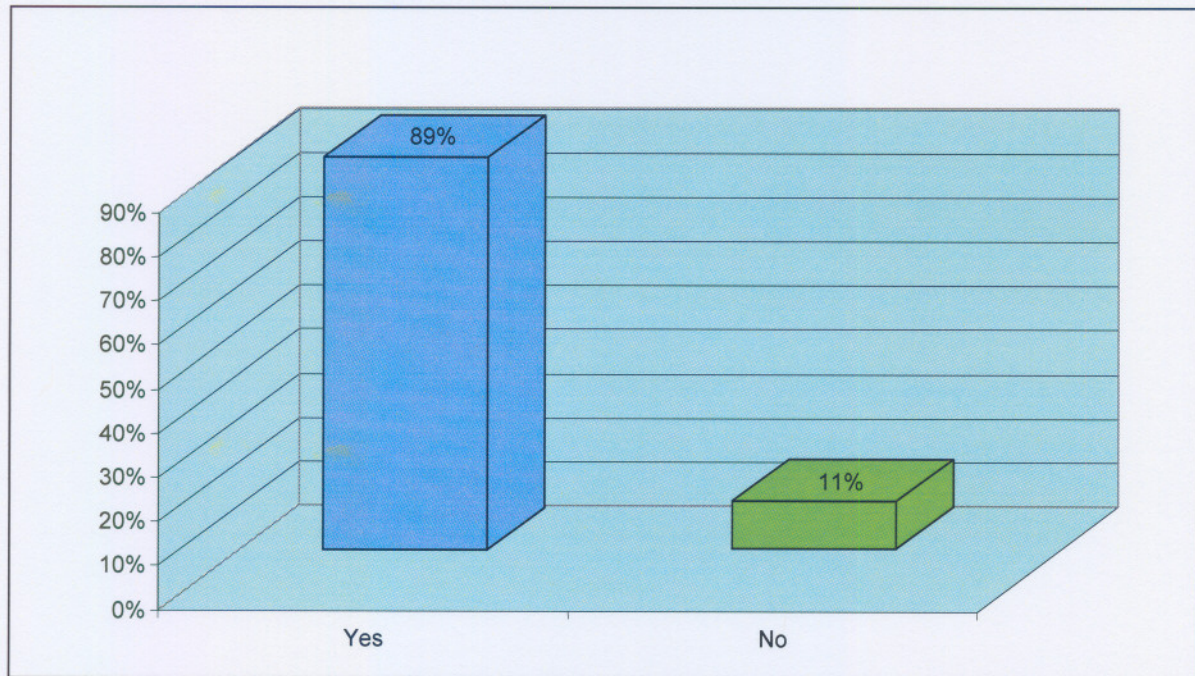
Results

N = 9

Yes = 8

No = 1

Diagram 7.24 Annual valuation of internally developed intangible assets



Eight out of the nine respondents (89%), as well as the two banks, indicated that they would prefer disclosure of an annual valuation of internally developed intangible assets.

Question 27 Would you like to see a current cost statement attached to the financial statements?

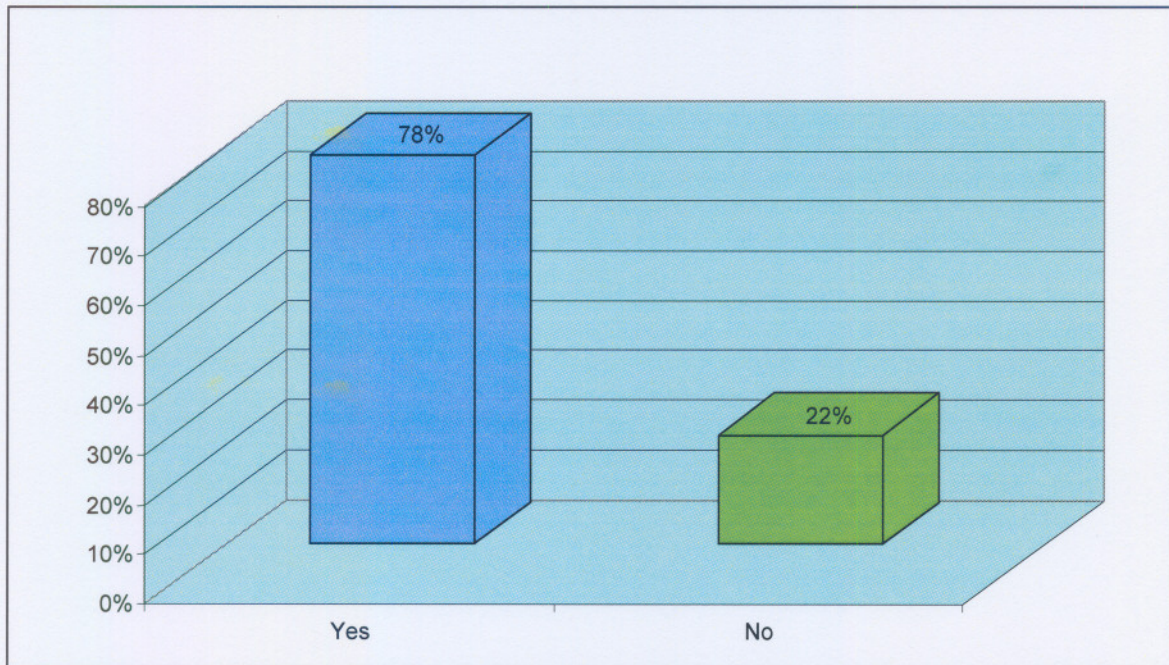
Results

N = 9

Yes = 7

No = 2

Diagram 7.25 Current cost statement



Seven of the nine respondents (78%), as well as bank 1, would like a current cost statement attached to the annual financial statements. Bank 2 would not like a current cost statement attached to financial statements.

Question 28 Do you want more information about the characteristics of intangible assets in the external reports?

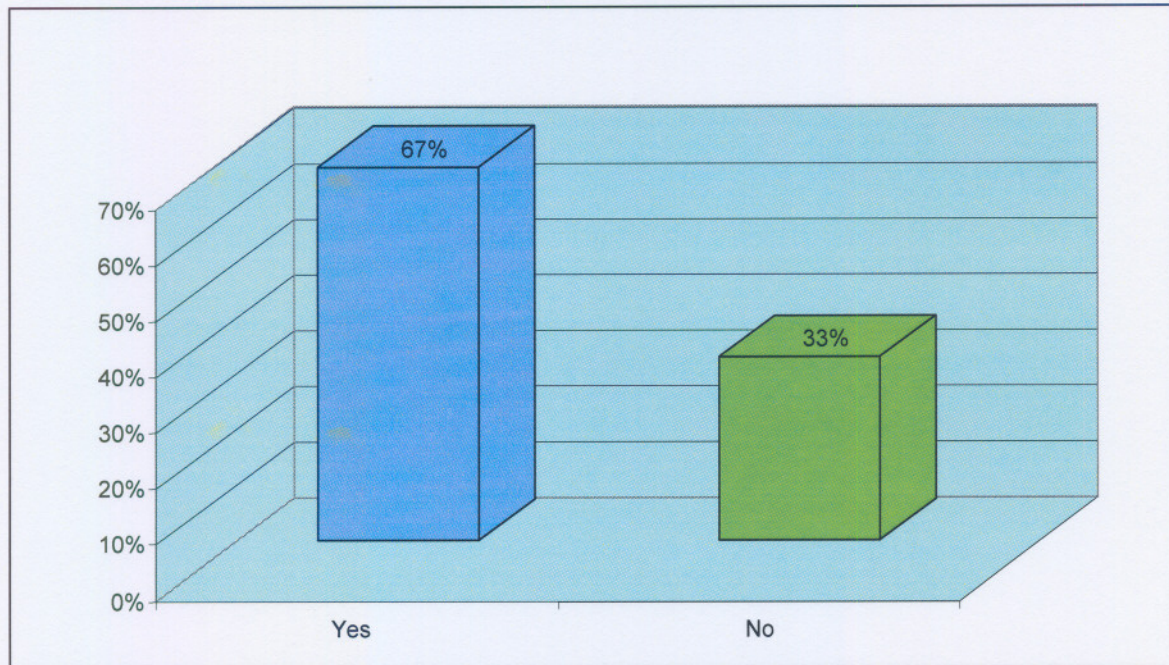
Results

N = 9

Yes = 6

No = 3

Diagram 7.26 Information regarding the characteristics of intangible assets



Six of the nine respondents (67%), as well as the two banks, indicated that they wanted more information disclosed in the external reports. Information that they wanted includes the following items:

- the underlying assumptions used in determining the risk, discount rate, useful life and period of economic benefits;
- the historical cost of the intangible assets (disclosed separately);
- the revaluation/impairment disclosed separately each year;
- method of impairment – “net selling” or “value in use”;
- if “value in use” is used, the bases of calculating the future economic benefits and discounted rate of return;
- detailed descriptions of recognition criteria and valuation method;
- estimated economic lifespan and effect on future profits;
- the names of each major brand or project;
- investment in each brand or project;

- turnover/gross margin per brand;
- expected time to market and completion cost for the development project;
- the source of funding if future development costs are expected to be significant; and
- expected market size for development project.

7.2.4.1 Summary of disclosure and information needs of users

The results obtained from the analysis of this section of the questionnaire with regard to the disclosure on intangible assets (question 1, 4, 5, 8, 11, 16, 23, 24, 26, 27, 28) indicated the following:

- The majority of the respondents indicated that the financial statements do not give an accurate picture of a company's capabilities (Diagram 7.16, page 133) due to:
 - a) the inability to calculate the return on intangible investment (Diagram 7.17, page 135);
 - b) the inability to determine the changes in the efficiency and character of intangible assets (Diagram 7.17, page 135); however, the banks, in collaboration with other financial information, are able to determine this;
 - c) the inability to assess the nature of intangible R&D costs (Diagram 7.17, page 135);
 - d) the inability to determine the value of a company's intangible assets (Diagram 7.17, page 135);
 - e) the inability to determine non-related research and development costs in R&D (Diagram 7.17, page 135).
- The disclosure of the investment in intangible assets was not an indication of its future value beyond the acquisition date (Diagram 7.18, page 136). However, bank 2 indicated that indeed it was.
- Reliability and relevance of financial statements were the most important qualitative characteristics of accounting to the users (Diagram 7.19, page 137).

- The purpose of financial statements is to provide investors and creditors with reliable information regarding future cash flows and earnings prospective (Diagram 7.20, page 138). Bank 2 indicated that it was not.
- The majority of the respondents indicated that market information was not relevant by the time the financial statements were released to the public (Diagram 7.21, page 139). The banks, however, were of the opinion that if the underlying assumptions are disclosed, then it is still relevant.
- The majority of the respondents preferred adjustments to the carrying value of intangible assets to go through the statement of changes in equity (Diagram 7.22, page 140).
- To calculate the sustainable growth of a company, users need to know the company's R&D costs as well as the intangible assets that were internally generated (Diagram 7.23, page 142).
- The respondents would like the disclosure of an annual valuation on internally developed intangible assets (Diagram 7.24, page 143), a current cost statement attached to the financial statements (except bank 2) (Diagram 7.25, page 144) and the disclosing of the information mentioned in question 28 (question 28, page 144).

7.3 CONCLUSION

In this chapter the secondary objectives were empirically investigated among the South African users of financial statements. The views and opinions of the majority as well as the minority were investigated as the study sample is not representative of all the South African users of financial statements. The two banks supplied and clarified answers to those questions that needed further clarification. There are a few questions outstanding because the normal sample strictly stayed with the questions on the questionnaire and both banks did not give or could not give any further answers to prompting questions. On the whole however, a workable picture of the present perception of the financial treatment of intangibles in South Africa came to the fore, and that is that there is not a common approach for the treatment of intangible assets.

CHAPTER 8

CONCLUSIONS AND RECOMMENDATIONS

8.1 INTRODUCTION

The final specific research objective (Chapter 1, paragraph 1.4.2, objective 5, page 8) was to formulate recommendations regarding the accounting treatment of intangible assets and the disclosure of intangible assets. In this concluding chapter, the findings of the research, as they relate to the research question, will be discussed briefly. Furthermore, the limitations are highlighted and recommendations will be made. Finally, further research topics will be suggested.

The researcher agrees with García-Ayuso (2003b:597) that any revision of current accounting principles and standards would only be justified if it resulted in an improvement of the usefulness of accounting information and would lead to the solution of important problems facing companies and their stakeholders.

The literature study and empirical research were based on the primary objective (Chapter 1, paragraph 1.4.1 page 7). To support the primary objective, secondary objectives (Chapter 1, paragraph 1.4.2, page 7) were identified. Chapters 2, 3, 4 and 5 set out the literature study undertaken and the empirical research is set out in Chapter 7, and is done so under the same headings as the literature chapters. In complying with the primary research objective these will be discussed under the four headings of the secondary objectives. The researcher will give a brief overview with regard to each secondary objective, and will thereafter give an overview of the opinions of selected South African users, on how they perceive the current issues in South Africa.

The chapter closes with a final conclusion on this research by giving an indication of the aspects of accounting where further research is required.

8.2 CONCLUSIONS

8.2.1 Conclusions regarding the specific theoretical and empirical objectives

The results obtained from the literature study in reaching objectives 1 - 5 (Chapter 1, paragraph 1.4.2, page 7) are discussed below:

8.2.1.1 The nature and relevance of intangible assets in an economic environment

The nature and relevance of intangible assets (objective 1, paragraph 1.4.2, page 7) were researched in chapter 2.

To understand the underlying concepts of this debate it was deemed necessary to determine how the users of financial statements define intangible assets.

In determining how the users define intangible assets, it was assessed that the generic term "intangible asset" comprises a wide range of various descriptions. The following are all perceived as intangible assets:

- Organisational resources
- Corporate assets
- Claim for future benefit
- Intangible resources

Definitions by the various accounting regulatory bodies except the IASC, Ireland, the UK and USA were found to be conceptually weak and a lack of overall homogeneity regarding the definition on intangible assets was evident. This could be seen in the list-style approach to the classification of intangible assets and applied to the above definitions, would exclude almost all of them. However, the definition of intangible assets, as set out in the revised IAS38/AC129, has a conceptual framework as background, and is therefore a very sound definition, and when applied to the above, accommodates all of the above descriptions. The only problem may be the establishing of control over these assets.

Due to the world-wide harmonisation process of adopting and complying with all the accounting standards of the IASB, the weaker definitions by the other accounting regulatory bodies are not an issue any more, because they will eventually all comply with the accounting standards of the IASB.

Intangible assets became relevant, as they are perceived as the profit-generators of the economy, and therefore the value of a business lurks in its intangible assets. From the literature it was perceived that the users want reliable and relevant information on intangible assets, but cannot obtain this information from the financial statements of a company.

The nature of intangible assets was not empirically investigated but relevance was. It is perceived from the results (questions 3, 19) that intangible assets comprise a larger component of an entity's corporate value than ten years ago, especially for entities in the service and IT industries. The respondents indicated that they believed that the true value of an entity is reflected by both the tangible and intangible assets.

The above empirical results correspond with the literature review on relevance and supports the view that intangible assets are also perceived as relevant in South Africa.

8.2.1.2 Recognition of intangible assets

The recognition of intangible assets (objective 2, paragraph 1.4.2, page 7) in financial statements addresses the issue of the inability of accounting to provide complete information on intangible assets. Based on the literature (Chapter 3), the perception is that not all intangible assets are recognised in the financial statements, therefore, accounting does not provide complete information with regard to intangible assets.

The accounting criteria for recognition can all be accommodated except for one. This criteria that may contribute to this incomplete recognising of intangible assets, is the

criteria for the reliable measurement of the cost of the intangible asset. Reliable measurement may be the obstacle for not recognising certain intangible assets. This could be deduced from the fact that purchased intangible assets are recognised (cost price is reliably measured) but R&D and internally developed intangible assets are not automatically recognised due to the uncertainty regarding their measurement.

The inability of accounting to provide comprehensive information on intangible assets, primarily relates to R&D costs and internally developed intangible assets since these assets may not pass the recognition criteria of reliable measurement.

From the results of the empirical study it was concluded that the users of financial statements in South Africa perceive internally generated intangible assets as important, and indicated that they want R&D costs to be capitalised but due to the difficulty to measure it, recognition cannot take place. This perceived South African view supports the literature findings.

8.2.1.3 Measurement of intangible assets

The literature study on the measurement of intangible assets (objective 3, paragraph 1.4.2, page 7) revealed the inability of accounting to provide accurate financial information on intangible assets. Inaccurate measurement can be attributed to various aspects, one being the measurement basis, and differentiate the preferences for a measurement basis between:

- a) amortising and, in general, the period of amortisation, with or without limits; and
- b) not to amortise at all, but to revalue.

This debate about the measurement basis is, however, no longer relevant, as the revised IAS38/AC129 accommodate both the above preferences, by allowing a choice between a cost model or a revaluation model.

The main contentious issue concerning inaccurate measurement relates to the measurement basis of revaluation. The accounting regulations determine, that to

comply with reliable measurement when revaluating intangible assets, there must be referred to an active market. However, one of the inherent characteristics of intangible assets are that they are not freely exchangeable (see Chapter 3, paragraph 3.3) and this has led to the use of various valuation methods to determine a value in the absence of an active market. The literature study determined that the valuation methods in use (and especially the methods that try to measure the IC aspect of intangible assets) are criticised for being unreliable.

The opinions from the respondents in the empirical study were that it was not a function of the balance sheet to measure net worth in current market values. The preferred reporting model as indicated from the empirical results was a combination of the historical cost model and the market value model. The historical cost model provides reliable measurement of transactions in general, but not reliable information with regard to intangible assets. This result amplifies the problem regarding appropriate measurement of intangible assets.

It was the view of the respondents that it is the responsibility of management to calculate value; however, estimates (measuring) of intangible assets by managers are perceived as not reliable, and that accountants are less prudent when recognising intangible assets. As shown in the literature study the preferences regarding the measurement basis for intangible assets varied among the respondents, with no clear preference for any chosen model. The preferred valuation model in terms of reliability was the market valuation model.

8.2.1.4 Disclosure requirements and needs of users

The literature study attempted to identify the disclosure requirements for intangible assets (objective 4, paragraph 1.4.2, page 7) by users of financial statements (Chapter 5).

It was determined that the following additional disclosures are required:

- annual valuations of R&D;
- guidelines to standardise the content and presentation of annual reports;
- information regarding research and development costs;
- current cost-adjusted sheets;
- information regarding the characteristics of intangible assets and R&D;
- assets earmarked for sale, redemption.

The following disclosure requirements, additional to the literature study, were determined by the empirical study. The additional requirements are in regard to measurement, research and development cost and brand or project information.

Information wanted includes the following items:

Measurement

- the historical cost of the intangible assets (disclosed separately);
- the revaluation/impairment disclosed separately each year;
- method of impairment – “net selling” or “value in use”;
- if “value in use” is used, the bases of calculating the future economic benefits and discounted rate of return;
- detailed description of recognition criteria and valuation method;
- estimated economic lifespan and effect on future profits;

Research and development cost

- expected time to market and completion cost for the development project;
- the source of funding if future development costs are expected to be significant;
- expected market size for development project;

Brand or project information

- the names of each major brand or project;
- investment in each brand or project;
- turnover/gross margin per brand;

8.3 FINAL SUMMARY OF CONCLUSIONS

The primary objective (objective 5, paragraph 1.4.2, page 8) being to identify the key issues in the debate about the inability of accounting to provide complete and accurate information on intangible assets and to determine the validity of these arguments are resolved as follows:

The key issues in this debate in regard to intangible assets are control over the intangible asset and reliable measurement. It is the researcher's opinion that it is not the inability of accounting that is creating this problem, it is the nature of these intangible assets that confronts accounting. The financial statements must adhere to the accounting standards, because the accounting standards are there to ensure that the financial statements are useful and reliable.

If accounting does not provide complete and accurate information on intangible assets it may be attributed to a) difficulty in establishing control, or b) reliable measurement is not possible.

Users clearly indicated from the literature and empirical research that financial statements must be reliable – they do not want to compromise reliability for relevancy. Therefore, for intangible assets there will be a trade-off between relevance and reliability.

The researcher is of the opinion that accounting matters regarding recognition and measurement of intangible assets will stay a contentious issue in accounting until further research is done in regard to the aspects of control and reliable measurement.

8.4 RECOMMENDATIONS

The following recommendations are developed based on the findings in the literature and empirical research.

The recognition criteria discriminate between purchased and internally developed intangibles. All of the descriptions of intangible assets mentioned in Chapter 2 will fall into the category of internally generated intangible assets. However, not all of these descriptions of intangible assets will meet the recognition criteria as the recognition criteria will classify these descriptions as internally generated intangible assets (see Chapter 3 paragraph 3.10, page 51).

The researcher is of the opinion that the classification and recognition criteria must be revisited. The researcher is also of the opinion that to purchase intangible assets, these intangible assets must somewhere have been internally generated. Thus all intangible assets are internally generated.

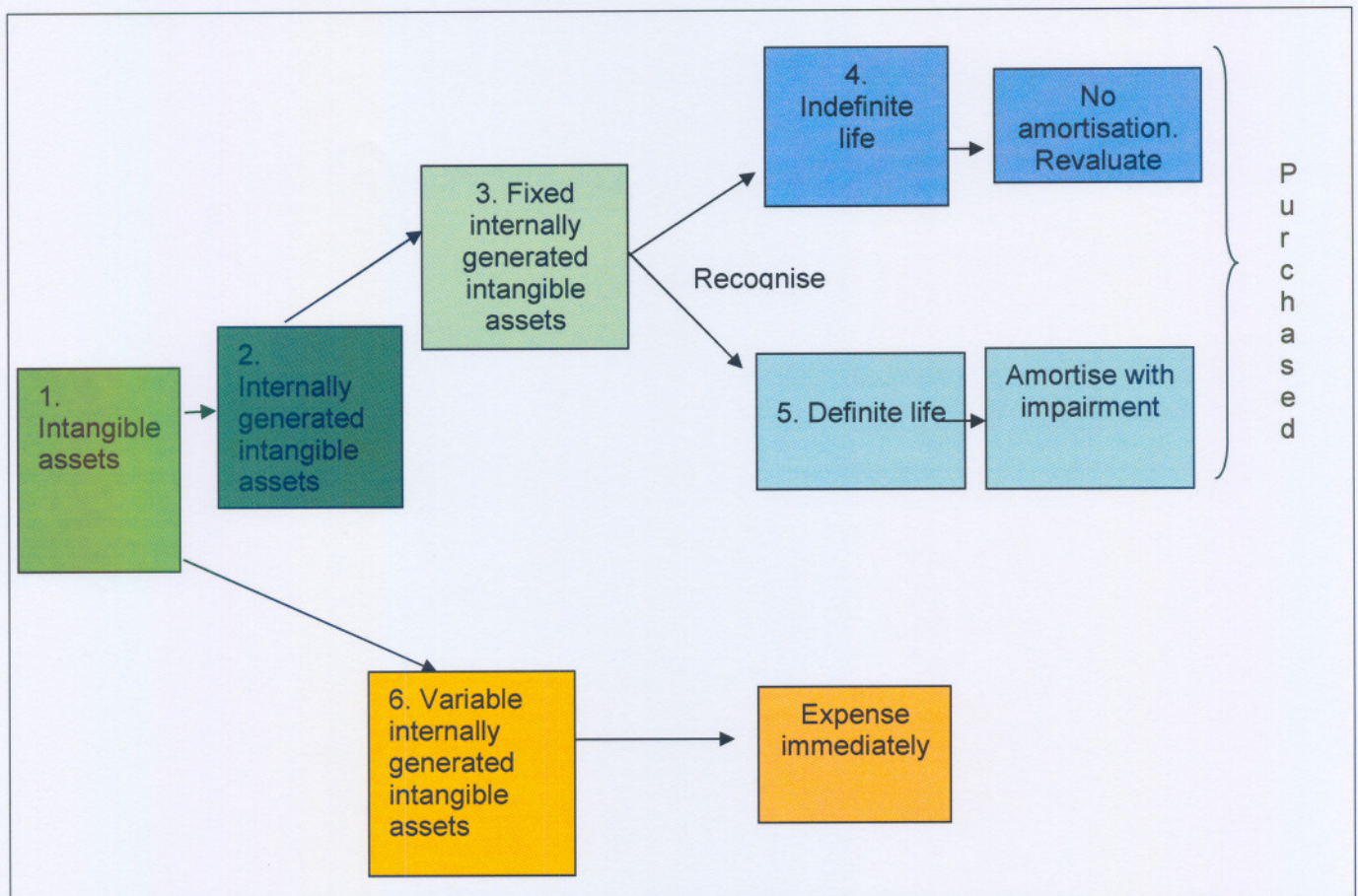
Therefore the researcher grouped the definitions on intangible assets into two groups (see Chapter 2, paragraph 2.6, page 33) based on the concept of control by the entity.

The researcher would suggest a new method of classification on the recognition criteria as follows:

1. All intangible assets are internally generated.
2. Internally generated intangible assets can be divided between fixed (control can be established) and variable (difficult to establish control). See Chapter 3 paragraph 3.10, page 51.
3. Fixed intangible assets can be divided into those that have an indefinite life (no connection to technology or innovation) and those that have a definite life (there is a connection to technology and innovation), see Chapter 4, paragraph 4.3.7.1, page 64.
4. The fixed intangible assets that have a indefinite life are not to be amortised but revalued - see Chapter 4 paragraph 4.3.7.1, page 64 .
5. The fixed intangible assets that have a definite life are to be amortised over the best estimate of their useful life - see Chapter, paragraph 4.3.7.1, page 64.

6. The variable intangible assets do not comply with the recognition criteria so they must immediately be expensed through the income statement - see Chapter 4, paragraph 4.3.7.2, page 65.

Figure 8.1 Classification and accounting treatment of intangible assets



8.5 CONCLUSION

Figure 8.1 is a good basis and departure point for future research. As illustrated from the research there are still many important aspects that need to be researched in order to provide meaningful answers and solutions to this debate regarding the accounting of intangible assets.

There will always be a part of intangible assets that will not be recognised by accounting due to the measuring problems. However, accounting does account for unrecognised intangible assets by recognising the earnings, generated from this unrecognised intangible assets, in the income statement. These unrecognised intangible assets are discounted by the users in the market value of an entity.

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APPENDIX 1: STRUCTURED INTERVIEW QUESTIONNAIRE

M. COM QUESTIONNAIRE

Dear Sir/Madam

I'm currently an M Com accounting student at the North-West University – Potchefstroom campus.

The research is about the accounting and disclosure of intangible assets - especially the problems that the users of the financial statements have with the current reporting and disclosure of intangible assets and financial statements in general.

I therefore urgently need your assistance by completing this questionnaire - as you are one of 40 targeted users in the investment sector.

All information will be confidential. If you want the results of this research, just indicate so at the end of this questionnaire and I will e – mail it to you.

A. PURPOSE OF FINANCIAL STATEMENTS

1. Does analysing a public company's external financial statements provide you with an accurate assessment of the firm's capabilities? Yes No

2. In valuating a company's full value/potential, do you consider internally generated intangible assets such as research & development cost, brands and employee talents as important for the economic growth of the companies? Yes No

3. What do you think represents the true value of an entity? Physical/financial assets or Intangible assets

4. Can the following be determined from external financial reports:(Annual financial statements)

• the rate of return on the investment in intangible assets? Yes No

• change in the efficiency of the company's investment activity over a period of time? Yes No

• an evaluation of the changes in the character of intangible investments, example from long-term (basic) research to short-term development? Yes No

• the value of the company's intangible assets and expected economic life-span? Yes No

• to what degree reported research and development costs include non-related research and development costs, such as

maintenance, engineering and quality control expenses?

5. Is the disclosure of the investment in intangible assets an indication of its future value to the company beyond the acquisition date or investment date? Yes No

6. Are you of the opinion that it is a function of the balance sheet based on the historical cost to measure net worth in current market values without compromising its measurement base? Yes No

7. Do balance sheets on the historical cost basis in regards to intangible assets provide:
relevant information? Yes No

reliable information? Yes No

8. What qualitative characteristics of accounting are the most important to you? List in order of importance (1 - 7)

- | | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|--|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| • reliability | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| • relevance | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| • representative | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| • verifiable reproduction (faithfulness) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| • timeliness | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| • impartiality | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| • comparability | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

9. Which of the following do you prefer as a basis for financial reporting?
Historical cost basis? Yes No

or

Current market value basis?

Yes No

or

A combination of these two bases?

Yes No

10. a. If you prefer the historic cost basis, explain why.

b. If you prefer current market value as a reporting basis, explain why.

c. If you prefer a combination of the two basis, explain why?

11. The purpose of financial statements is to provide investors and creditors with reliable information about future earning prospects and cash flows.

Yes No

12. Do you think that accountants when recognising and measuring intangible assets, are less prudent? Why?

Yes No

13. Corporate financial reporting is not objective, and it is intentionally or unintentionally slanted to reflect the company in the best light, for example, the postponement of reporting negative information in

Yes No

the hope that the situation will correct itself.			
14. Do you agree that the historic costs model is primarily a transaction-based model, and that the reported values are predominantly reliable?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	
15. Do you think that the estimates by management of the reasonable market value of intangible assets are reliable?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	
16. Do you think that when you have received the financial reports, the information on market value on year end is still relevant?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	
17. In cases where market values are not available, do you think the costs attached to reasonable values can justifiably be based on the benefits?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	
18. Is it the responsibility of the user rather than that of management to calculate value?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	
19. Do intangible assets comprise a larger component of corporate value than 10 years ago?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	
20. In your opinion, should intangibles be capitalised as investments?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	
21. If intangible assets are capitalised, what do you prefer? List in order of preference:			
• amortised over limited period not exceeding 5 years.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• amortised over indefinite period.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• no amortisation, just subject to write-downs or revaluations.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• no adjustment to cost price - just disclosure of market value and related information in the notes to the balance sheet.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

22. The following existing brand valuations are subjective and offer no high degree of reliability.

Example Price premium method

Yes No

Earnings valuation method

Yes No

Royalty payments method

Yes No

Market value method

Yes No

Historic cost method

Yes No

23. If an intangible asset is capitalised initially at cost and thereafter adjusted to reflect market value, do you prefer a) that these adjustments be taken directly to equity and disclose on the balance sheet as a separate reserve only to be put through to the Income statement when sold?

or

Should these adjustments be put directly through the income statement?

Statement of Income equity Statement

24. Is it important to you to know in determining a company's sustainable future growth the extent of that company's research and development costs and internally developed intangible assets?

Yes No

25. Would you prefer that internally-generated intangible assets, after meeting certain recognition criteria, be capitalised?

Yes No

26. Do you want an annual valuation of internally developed intangibles to be provided in the notes to the financial statements?

Yes No

27. Would you like to see a current cost statement attached to the financial statement?

Yes No

28. Do you want more information about the characteristics of intangible assets in the external reports? List below under the appropriate headings. Yes No

Financial:

- Balance sheet
-
-

- Notes
-
-

Non-financial information:

APPENDIX 2 DISCLOSURE REQUIREMENTS FOR INTANGIBLE ASSETS

IAS38/AC129

Disclosure

General

118. *An entity shall disclose the following for each class of intangible assets, distinguishing between internally generated intangible assets and other intangible assets:*

- (a) whether the useful lives are indefinite or finite and, if finite, the useful lives or the amortisation rates used;*
- (b) the amortisation methods used for intangible assets with finite useful lives;*
- (c) the gross carrying amount and any accumulated amortisation (aggregate; with accumulated impairment losses) at the beginning and end of the period;*
- (d) the line item(s) of the income statement in which any amortisation of intangible assets is included;*
- (e) a reconciliation of the carrying amount at the beginning and end of the period showing:
 - (i) additions, indicating separately those from internal development, those acquired separately, and those acquired through business combinations;*
 - (ii) assets classified as held for sale or included in a disposal group classified as held for sale in accordance with IFRS 5 and other disposals;*
 - (iii) increases or decreases during the period resulting from revaluations under paragraphs 75, 85 and 86 and from impairment losses recognised or reversed directly in equity in accordance with IAS 36 Impairment of Assets (if any);*
 - (iv) impairment losses recognised in profit or loss during the period in accordance with IAS 36 (if any);*
 - (v) impairment losses reversed in profit or loss during the period in accordance with IAS 36 (if any);*
 - (vi) any amortisation recognised during the period;*
 - (vii) net exchange differences arising on the translation of the financial**

statements into the presentation currency, and on the translation of a foreign operation into the presentation currency of the entity; and

(viii) other changes in the carrying amount during the period.

119. A class of intangible assets is a grouping of assets of a similar nature and use in an entity's operations. Examples of separate classes may include:

- (a) brand names;
- (b) mastheads and publishing titles;
- (c) computer software;
- (d) licences and franchises;
- (e) copyrights, patents and other industrial property rights, service and operating

rights;

- (f) recipes, formulae, models, designs and prototypes; and
- (g) intangible assets under development.

The classes mentioned above are disaggregated (aggregated) into smaller (larger) classes if this results in more relevant information for the users of the financial statements.

120. An entity discloses information on impaired intangible assets in accordance with IAS 36 in addition to the information required by paragraph 118(e)(iii)-(v).

121. IAS 8 requires an entity to disclose the nature and amount of a change in an accounting estimate that has a material effect in the current period or is expected to have a material effect in subsequent periods. Such disclosure may arise from changes in:

- (a) the assessment of an intangible asset's useful life;
- (b) the amortisation method; or
- (c) residual values.

122. *An entity shall also disclose:*

- (a) for an intangible asset assessed as having an indefinite useful life, the carrying amount of that asset and the reasons supporting the assessment of an indefinite useful life. In giving these reasons, the entity shall describe the*

factor(s) that played a significant role in determining that the asset has an indefinite useful life.

- (b) a description, the carrying amount and remaining amortisation period of any individual intangible asset that is material to the entity's financial statements.*
- (c) for intangible assets acquired by way of a government grant and initially recognised at fair value (see paragraph 44):*
 - (i) the fair value initially recognised for these assets;*
 - (ii) their carrying amount; and*
 - (iii) whether they are measured after recognition under the cost model or the revaluation model.*
- (d) the existence and carrying amounts of intangible assets whose title is restricted and the carrying amounts of intangible assets pledged as security for liabilities.*
- (e) the amount of contractual commitments for the acquisition of intangible assets.*

123. When an entity describes the factor(s) that played a significant role in determining that the useful life of an intangible asset is indefinite, the entity considers the list of factors in paragraph 90.

Intangible Assets Measured after Recognition using the Revaluation Model

124. *If intangible assets are accounted for at revalued amounts, an entity shall disclose the following:*

- (a) by class of intangible assets:*
 - (i) the effective date of the revaluation;*
 - (ii) the carrying amount of revalued intangible assets; and*
 - (iii) the carrying amount that would have been recognised had the revalued class of intangible assets been measured after recognition using the cost model in paragraph 74;*
- (b) the amount of the revaluation surplus that relates to intangible assets at the beginning and end of the period, indicating the changes during the period and any restrictions on the distribution of the balance to shareholders; and*
- (c) the methods and significant assumptions applied in estimating the assets' fair*

values.

125. It may be necessary to aggregate the classes of revalued assets into larger classes for disclosure purposes. However, classes are not aggregated if this would result in the combination of a class of intangible assets that includes amounts measured under both the cost and revaluation models.

Research and Development Expenditure

126. *An entity shall disclose the aggregate amount of research and development expenditure recognised as an expense during the period.*
127. Research and development expenditure comprises all expenditure that is directly attributable to research or development activities (see paragraphs 66 and 67 for guidance on the type of expenditure to be included for the purpose of the disclosure requirement in paragraph 126).

Other Information

128. An entity is encouraged, but not required, to disclose the following information:
- (a) a description of any fully amortised intangible asset that is still in use; and
 - (b) a brief description of significant intangible assets controlled by the entity but not recognised as assets because they did not meet the recognition criteria in this Standard or because they were acquired or generated before the version of IAS 38 *Intangible Assets* issued in 1998 was effective.

APPENDIX 3 EXPLANATION OF TERMINOLOGY

Definitions of terminology used in this research are from IAS38/AC129 as revised on 31 March 2004 and are as follows.

- **Active market**

An active market is a market in which all the following conditions exist.

- (a) The items traded in the market are homogeneous.
- (b) Willing buyers and sellers can normally be found at any time.
- (c) Prices are available to the public.

- **Amortisation**

Amortisation is the systematic allocation of the depreciable amount of an intangible asset over its useful life.

- **Asset**

An asset is a resource:

- (a) controlled by an entity as a result of past events, AND
- (b) from which future economic benefits are expected to flow to the entity.

- **Carrying amount**

Carrying amount is the amount at which an asset is recognised in the balance sheet after deducting any accumulated amortisation and accumulated impairment losses thereon.

- **Cost**

Cost is the amount of cash or cash equivalents paid, or the fair value of other consideration given to acquire an asset at the time of its acquisition or construction, or, when applicable, the amount attributed to that asset when initially recognised in accordance with the specific requirements of other standards, e.g. IFRS2.

- **Depreciable amount**

Depreciable amount is the cost of an asset, or other amount substituted for cost, less its residual value.

- **Development**

Development is the application of research findings or other knowledge to a plan or design for the production of new or substantially improved materials, devices, products, processes, systems or services before the start of commercial production or use.

- **Entity-specific value**

Entity-specific value is the present value of the cash flows an entity expects to arise from the continuing use of an asset and from its disposal at the end of its useful life, or expects to incur when settling a liability.

- **Fair value**

The fair value of an asset is the amount for which that asset could be exchanged between knowledgeable, willing parties in an arm's length transaction.

- **Impairment loss**

An impairment loss is the amount by which the carrying amount of an asset exceeds its recoverable amount.

- **Intangible asset**

An intangible asset is an identifiable non-monetary asset without physical substance.

- **Research**

Research is original and planned investigation undertaken with the prospect of gaining new scientific or technical knowledge and understanding.

- **Residual value**

The residual value of an intangible asset is the estimated amount that an entity would currently obtain from disposal of the asset, after deducting the estimated costs of disposal, if the asset were already of the age and in the condition expected at the end of its useful life.

- **Useful life**

Useful life is:

- (a) the period over which an asset is expected to be available for use by an entity, OR
- (b) the number of production or similar units expected to be obtained from the asset by an entity.