FINANCIAL STATEMENT ANALYSIS AS A TOOL IN EVALUATING THE PERFORMANCE ON NAMIBIAN SMALL AND MEDIUM-SIZED ENTERPRISES

BY

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DECLARATION

I, Helmut Namwandi (213250640), hereby declare that this treatise is an original piece of work, which is made available for photocopying, and for inter-library loan. This treatise has not been previously submitted for assessment to another University or for another qualification.

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SIGNATURE

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INTRODUCTION AND BACKGROUND TO THE STUDY

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1.1 INTRODUCTION

Financial statements are the primary information that organisations publish about themselves; and investors are the primary users of these financial statements. Organisations seek capital from investors; and they prepare financial statements to help investors decide whether to invest, or not. Investors expect the organisation to add value to their investment – to return more than was invested – and to read financial statements, in order to evaluate the organisation's ability to do so (Penman, 2013: 2).

Myburgh, Fouché and Cloete (2011: 651) state that: "Before the information in a set of financial reports can be used meaningfully, it must be properly analysed and interpreted". Two factors are important in the process of analysis and interpretation, namely (i) the interdependence of the different activities of the organisation, and (ii) trends that develop in the course of time, Myburgh et al (2011). Information shown in the financial statement is condensed; hence, they would not be able to give a true picture of how the organisation has performed without being examined by means of analysis.

Kew and Watson (2010: 545) define financial-statement analysis as a process that extracts the relevant information about an organisation from all the information that is available, and converts it into a more useful format. Information contained in organisation's statements is interpreted, in order to meet a specific need of the user. Myburgh et al. (2011: 651) went further to break down analysis and interpretation as follows: The analysis of financial information entails the additional investigation and processing of that information by a specific decision-maker for a specific purpose.

The interpretation of financial information should include the determination of the cause and implications of the results revealed by the information.

The reason for analysing and interpreting the financial statements of an organisation at a particular period is to measure its profitability, risk, cash flow and growth (Myburgh, 2013). These factors are important in any organisation, because they help different users to make sound decisions. Decisions concerning the organisation can only be made reliably – without guessing or intuition – if these financial statements are properly examined. There are different methods that can be used to analyse the financial statements of an organisation at a particular point. Myburgh et al. (2013: 653) outlined the principal tools for the analysis and interpretation of financial statements as: "Trends and index analysis (horizontal analysis); Common-size analysis (vertical analysis); and Ratio analysis".

These tools are useful in analysing the financial statement of any organisation, including Small and medium-sized enterprises (SMEs).

Small- and medium-sized enterprises (SMEs) are vibrant and growing in most economies around the world. Global economic conditions have spurred the rise in SMEs over the last 10-15 years. This is seen not only in the UK, USA, Australasia and Europe, but also in Africa, Latin America, Korea and Indonesia. Within the Organisation for Economic Co-operation and Development (OECD), 95% of the firms are SMEs employing between 60% and 70% of workers in most countries (Levy & Powell, 2005: 19).

The growth and survival of these SMEs would depend on how the performance of these organisations is monitored from time to time, especially in a developing country. Sound management decisions can only be made if the financial results are analysed and interpreted. This would ensure that the financial symptoms are identified and resolved at an early stage – rather than later.

Analoui and Karami (2003: 229) explained that in the area of financial performance, a simple measure of effectiveness, like the return on investments (ROI) has been widely used. This asks the question: Is this good enough? International Financial Reporting

Standards [IFRS] (2010: B656) highlighted that the financial performance of an organisation is not assessed by reference to a single financial statement or a single measure within a financial statement. There are specific techniques, such as the use of a Z-score model; the three Es approach, and the balanced scorecard that have been developed for measuring the performance of an organisation. Hence, there is a need to incorporate financial-statement analysis as a performance-measurement tool, together with any other tools.

For the organisation to continue its operating activities, it is important that management assess how it has performed. Assessing the performance would enable managers and owners to make decisions in line with the organisation's objectives. Bragg and Burton (2006: 204) emphasise that too often, a company focuses exclusively on its financial results. By doing so, it may be drawing attention away from other key issues that would ultimately have a strong impact on financial performance, and might even enhance that performance in the long run.

1.2 THE PROBLEM STATEMENT

Financial statement analysis is not effectively being used to evaluate the performance of Namibian small and medium-sized enterprises. The purpose of this research is to investigate and establish how managements of Namibian small and medium-sized enterprises can effectively make use of financial statement analysis as a strategic tool of measuring the performance of their organisation and in their decision making.

In order to obtain a solution to the main research problem, the following four investigative steps will be made, namely:
- Access the extent that financial statement analysis is use in Namibian SMEs.
- Ascertain whether financial statement analysis is effective in measuring the overall performance of the SMEs.
- Assess how financial statement analysis is being used among SMEs.

- Access alternative performance-measurement tools (including non-financial tools) that could be used, rather than financial-statement analysis in performance measurement.

1.3 OBJECTIVE OF THE STUDY

Different authors in different parts of the world have documented literature on financial-statement analysis in assessing the performance of organisations at any particular point in time. This study will seek to establish whether financial-statement analysis can effectively be used by management of SMEs, in order to make sound business decisions. Secondly, to determine whether there are any alternative tools which are able to measure the financial performance of SMEs. Thirdly, to provide strategic ways by which management and owners of SMEs could effectively make use of other non-financial performance-measurement tools in order to ensure the growth of their business.

1.4 THE RESEARCH QUESTION

To fulfil the objectives of the research study undertaken, the researcher will address the following research questions, namely:

- Does the management of small-and medium-sized enterprises use financial-statement analysis in evaluating the performance of the business?
- What other performance-measurement tools are available which could be used by management of small-and-medium-sized enterprises?
- Is the analysis of financial statements effective enough to assess the overall performance of small and medium-sized enterprises?
- Are there any non-financial performance-measurement tools, which could be used by SMEs to measure their overall performance?

1.5 SIGNIFICANCE OF THE RESEARCH

Literature on financial statement analysis has been documented by various authors on how the performances of organisations can be measured using financial statement analysis as a tool. Most of the literature focused on what has been written in relating to organisations which are listed on the stock exchange. However, the same principles which are applied in evaluating the performance of large organisations can equally be applied to any organisation; this includes small and medium-sized enterprises operating in Namibia.

Despite the fact that financial statement analysis is an important tool for evaluating the performance of organisations, no previous literature was found pertaining to the evaluation of the performance of Namibian small and medium-sized enterprises using this tool. This research will attempt to identify how management of Namibian small and medium-sized enterprises can effectively make use of financial statement analysis as a tool in evaluating the performance of the organisations in order to make correct strategic decisions that will benefit the SMEs.

1.6 RESEARCH DESIGN AND METHODOLOGY

The theoretical framework for this study will be developed from books, journal articles, and internet. The theoretical framework will be used to provide an understanding of the use of financial statement analysis in organisations. Data from this literature will help to prepare the questionnaire.

The research will attempt to identify how management of Namibian small and medium-sized enterprise can effectively make use of financial statement analysis as a strategic tool of measuring the performance of their organisations and in their decision making.

An empirical study will be conducted for the purpose; this will consist of self-administered questionnaire. The questionnaire will be directed to management of small and medium-sized enterprises operating in Namibia in order to obtain an understating of how this tool is used. The results from the questionnaire is analysed in chapter 5 and compared to the theoretical framework in chapter 2. Significant findings in line with the research objectives and policy recommendations are then discussed in chapter 6.

1.7 DELIMITATION

The theoretical information on financial-statement analysis involves mainly international data obtained from the literature review. The researcher could not find any published information on the topic being researched relating to Namibian organisations. The study is only looking at the use of this tool in small and medium-sized enterprises operating in Namibia.

1.8 DEFINITION OF CONCEPTS

The study is focused on the use of financial-statement analysis as a tool in evaluating the performance of small and medium-sized enterprises in Namibia.

- Financial statements

Financial statements comprise a structural representation of the financial position, and of the financial performance of organisations (IFRS. 2010: A293).

- Financial statement analysis

This is a process that extracts the relevant information on an organisation from all the information that is available, and converts it into a more useful format (Kew & Watson, 2010: 545).

- SMEs

Small and medium-sized enterprises are organisations that:

- Do not have any public accountability; and

- Publish general-purpose financial statements for external users. Examples are: owners, potential creditors, and credit-rating agencies, IFRS for SMEs (2009: 10).

1.9 ASSUMPTIONS

It is assumed that all research relating to the use of financial-statement analysis in any organisations would pertain equally to all small and medium-sized enterprises operating in Namibia.

It is assumed that the populations being selected in the study have a basic understanding of the topic being researched.

1.10 STRUCTURE OF THE RESEARCH

The research has been divided into the following chapters:

Chapter one: Introduction and background to the study.

Chapter two: Understanding the financial-statement analysis concept.

Chapter three: The application of financial statement analysis.

Chapter four: Research design and methodology.

Chapter five: Empirical study and presentation of results.

Chapter six: Summary, conclusions and recommendations.

CHAPTER TWO

UNDERSTANDING THE FINANCIAL-STATEMENT ANALYSIS CONCEPT

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UNDERSTANDING THE FINANCIAL-STATEMENT ANALYSIS CONCEPT

2.1 INTRODUCTION

The objective of this chapter is to review the current literature for the preparation and presentation of financial statements, as well as the use of financial-statement analysis in organisations and their users. Other areas of focus will be the importance of performance-measurement mix, and how this is linked to financial analysis.

2.2 UNDERSTANDING FINANCIAL STATEMENTS

2.2.1 The presentation and preparation of financial statements

The presentation of financial statements is set out in International Accounting Standards (IAS 1), as revised in September 2007, by the International Accounting Standards Board (IASB). It focuses on the structure and content of the general-purpose financial statements of organisation, to ensure compatibility with both the organisation's financial statements of previous periods, and with the financial statements of other organisations (Myburgh, 2011: 436).

The IASB implemented a standard that guides SMEs' management in the preparation and presentation of financial statements. This standard is called: The International Financial Reporting standard for Small and Medium-sized Enterprises (IFRS for SMEs).

According to the IFRS (2010: A293), financial statements could be defined as structured representations of the financial position and financial performance of an organisation. Carmichael, Whittington and Graham (2007: 329) stated that management's primary means of communication with external parties on the financial activities of their organisation is *via* financial statements. The objective of the financial statements issued by organisations is to provide information on the financial position, the financial

performance, and the cash flows of an organisation. This information could be useful for economic decision-making by a broad range of users – who are not in a position to demand reports tailored to meet their particular information needs (International Financial Reporting Standards for Small and Medium-sized Enterprises [IFRS for SMEs] (2009: 12).

Financial statements also show the results of the stewardship of management, as well as the accountability of management for the resources entrusted to them (IFRS for SMEs, 2009: 12).

Carmichael et al. (2007: 329) outline three primary objectives of financial reporting, which are carried out in part through the preparation of financial statements. These are:

- To provide information that is useful to current and potential investors, creditors and other users in making investments, raising credit and other similar decisions;
- To provide information to help current and potential investors and creditors, as well as other users to assess the amounts, timing, and uncertainty of prospective cash receipts from dividends, interest, and the proceeds from sales, redemption, or maturity of securities and loans; and
- To provide information on the economic resources of the enterprise, claims on those resources, and the effects of transactions, events, and circumstances that change resources and make claims on resources.

2.3 SET OF FINANCIAL STATEMENTS

At every financial year-end, managements need to prepare financial statements, in order to show the economic activities of their organisation, and how they have used the resources entrusted to them by the owners. An organisation's set of financial statements comprises the following (Myburgh et al., 2011):

- A statement of comprehensive income;

- A statement of financial position;

- A statement of changes in equity;

- A statement of cash flows; and

- The accounting policies used, and explanatory notes.

2.3.1 Identification of the financial statements

When preparing and presenting financial statements, it should be possible to clearly differentiate between and separately identify the various financial statements. In addition, an organisation should display the following information prominently, and repeat it when necessary, for an understanding of the information presented, (IFRS for SMEs, 2009: 26):

- The name of the reporting entity, and any change in its name, since the end of the preceding reporting period;

- Whether the financial statements cover just the individual entity or a group of entities;

- The date of the end of the reporting period and the period covered by the financial statements;

- The title of the financial statement;

- The presentation currency (example, Rands) in which the statements are reflected; and

- The extent to which the amounts are rounded off, for example, to the nearest million or thousand.

2.3.2 A statement of comprehensive income

A statement of comprehensive income represents an organisation's operating performance over a specific period of time (a fiscal year) through a summary of the organisation's revenues and expenses, showing net earnings (profit or loss; Feldman and Libman (2007: 40). Kieso, Weygandt and Warfield (2012: 160) agreed to state that the statement of comprehensive income measures the success of the organisation's

operations for a given period of time; and it can also be used by the management and investors to determine profitability, investment value, and creditworthiness.

2.3.3 A statement of the financial position

Bragg (2010: 31) explains that a statement of financial position presents information on the assets, liabilities, and owners' equity (depending on the type of reporting enterprise, this is referred to as shareholders' equity, net assets, members' equity, or partners' capital) and their relationships to each other. They reflect an organisation's resources (assets) and its financing structure (liabilities and equity), in conformity with generally accepted accounting principles (GAAP). Bragg (2010) maintained that the statement of financial position is studied, in order to assess the enterprise's liquidity, financial flexibility, ability to pay debts when due, and its ability to distribute cash to its investors, in order to provide an acceptable rate of return.

2.3.3.1 Limitation of statement of financial position

Although a statement of financial position shows an organisation's financial position at a point in time, it does not purport to report the value of the organisation at that date. One limitation of this statement is that many assets and liabilities are reported at historical transaction value (referred to as "historical cost"). These values are used because they are objective and capable of being independently verified. Historical costs, however, would only equal the fair value at the time of the actual transaction; thereafter, the two would almost always differ (Bragg, 2010: 35).

2.3.4 A statement of changes in equity

The statement of changes in equity presents an organisation's profit or loss for a reporting period, items of income and expense recognised in other comprehensive income for the period, the effects of changes in accounting policies, and corrections of errors recognised in the period, and the amount of investments by – as well as

dividends and other distributions to – equity investors during the period (IFRS for SMEs, 2009: 34).

2.3.5 A statement of cash flows

Carmichael et al. (2007: 447) defined a statement of cash flows, as a statement that directly reflects an entity's cash receipts classified by major sources, and its cash payments classified by major users during a period. It provides useful information about an entity's activities in generating cash through operations: to repay debts, to distribute dividends; or to reinvest, in order to maintain or expand operating capacity; about its financing activities, both debt and equity; and about its investment or expenditure of cash.

Kimmel, Weygandt and Kieso (2011: 624) view the statement of cash flows as a report that shows cash receipts and cash payments from operating, investing, and financing activities during a period, in a format that reconciles the beginning and ending of the cash balances.

Sowden-Service (2010: 912) emphasised that the purpose of the statement of cash flows add to the usefulness of the financial statements by classifying the cash inflows and cash outflows for the period into three main areas of business:

- Operating activities – These are the principal revenue-producing activities of the entity, and other activities that are not investing or financing activities.
- Investing activities – These are the acquisition and disposal of long-term assets and other investments not included in cash equivalents.
- Financing activities – These are those activities that result in changes in the size and composition of the contributed equity and borrowing of the entity.

2.3.6 The accounting policies used, and the explanatory notes

IFRS for SMEs (2009: 41) explain that notes contain information, in addition to that presented in the statement of financial position, statement of comprehensive income, statement of changes in equity, and statement of cash flows. This provides narrative descriptions or disaggregation of items presented in those statements and information about items that does not qualify for recognition in those statements. Carmichael et al. (2007: 330) went on to state that notes enhance financial statements by providing explanations and other details outside the body of the statements themselves.

Figure 2.1: Relationship of financial statements and their timing
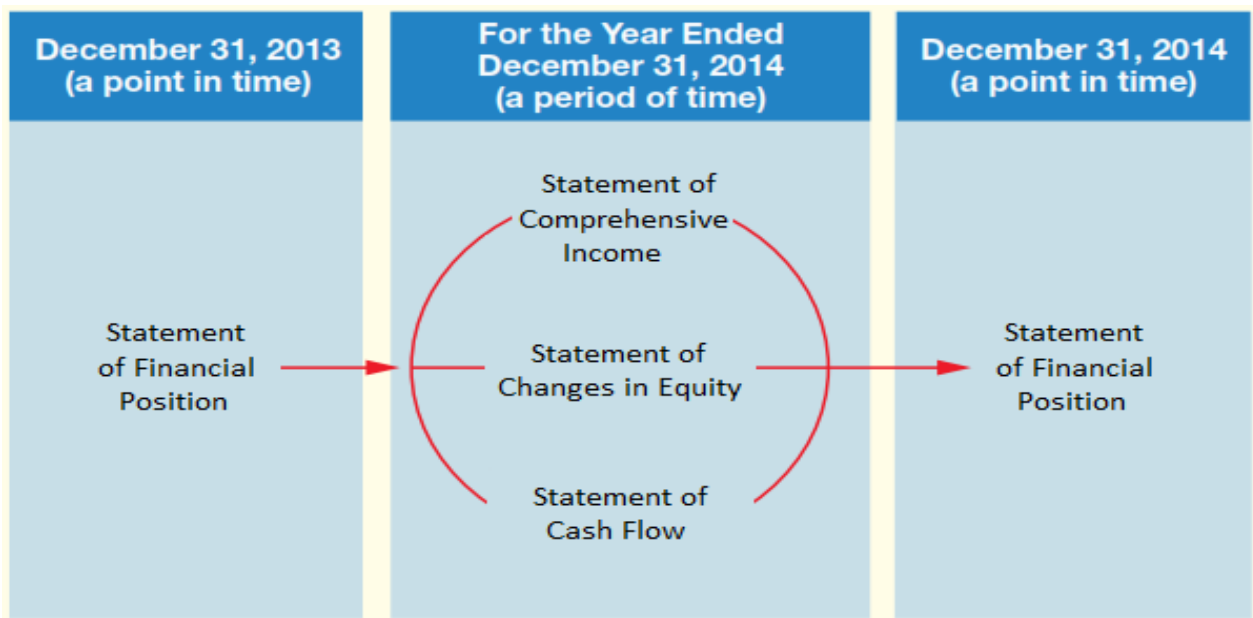
(Source: Horngren, Harrison and Oliver 2012: 662)

2.4 GENERAL FEATURE OF FINANCIAL STATEMENTS

Myburgh et al. (2011) pointed out that the financial statements of an organisation are prepared and presented by taking into account the following general features: Fair

presentation, going concerns, accruals basis, materiality and aggregation, offsetting, reporting date and period, comparative information, and consistency of presentation.

2.4.1 Fair presentation

Financial statements should present fairly the financial position, the financial performance, and the cash flow of an organisation. Fair presentation requires the faithful representation of all the transactions, as well as the recognition criteria for assets, liabilities, income and expenses (IFRS for SMEs, 2009).

2.4.2 Going concerns

When preparing financial statements, it is accepted that the organisation will continue to operate in the foreseeable future. An organisation is a going concern, unless management either intends to liquidate the organisation, or to cease operations; or if it has no realistic alternative, but to do so (IFRS for SMEs, 2009).

2.4.3 Accrual basis

An organisation must prepare its financial statements, except for cash flow information, using the accrual basis of accounting. On the accrual basis, items are recognised as assets, liabilities, equity, income or expenses – only when they satisfy the definitions and recognition criteria for those specific items (IFRS for SMEs, 2009).

2.4.4 Materiality and aggregation

An organisation should present separately each material class of similar items. An organisation should present separately any items of a dissimilar nature or function, unless they are immaterial. Omissions or misstatements of items are material if they could, individually or collectively, influence the economic decisions of the users made on the basis of the financial statements (IFRS for SMEs, 2009).

2.4.5 Offsetting

An organisation must not offset its assets and liabilities, or income and expenses, unless required or permitted to do so by the IFRS (IFRS for SMEs, 2009).

2.4.6 Reporting date and period

An organisation should present a complete set of financial statements (including comparative information) annually (IFRS for SMEs, 2009).

2.4.7 Comparative information

Except when the IFRS for SMEs permit or require otherwise, an entity must disclose any comparative information in respect of the previous comparable period for all amounts presented in the current period's financial statements. An entity must include the comparative information for narrative and descriptive information when it is relevant to an understanding of the current period's financial statements (IFRS for SMEs, 2009).

2.4.8 Consistency of presentation

An organisation must retain the presentation and classification of items in the financial statements from one period to the next unless:

(a) It is apparent, following a significant change in the nature of the entity's operations or a review of its financial statements, that another presentation or classification would be more appropriate, having regard to the criteria for the selection and application of accounting policies; or

(b) If the IFRS requires a change in presentation (IFRS for SMEs, 2009).

2.5 SHORTCOMINGS AND LIMITATIONS OF CONVENTIONAL FINANCIAL STATEMENTS

Myburgh et al. (2011) pointed out that the information contained in financial statements cannot be analysed or interpreted meaningfully unless one has a clear understating of both the usefulness and the reliability of such information in the financial statements. Sowden-Service, (2010:936) also agrees that, despite the wealth of information contained in the financial statement, this is not always able to give one a true picture of the organisation on its own. It should also be noted that financial statements still have inherent weaknesses; and these are: a limited predictive value; the uses of historical figures; a limited amount of qualitative information; certain risks that are not reported; and a limited comparability.

Carmichael et al. (2007: 347) also highlighted some of the limitations of financial statements and agreed that even though financial statements are one of the important means of communication between managements of organisations and external parties, these statements are subject to limitations. These are: stable monetary unit assumption; historical orientation; judgment and estimation; management ability to influence content; unrecorded items, and flexibility versus uniformity.

- Historical figures

The value shown in the financial statements of organisation are often historical figures that are either understated or overstated, because of the effects of inflation. Some organisations minimise this weakness by performing a regular revaluation of their assets, or by providing users with 'inflation-adjusted financial statements' (Sowden-Service, 2010: 950). Carmichael et al. (2007: 348) also agree that financial statements are essentially historical representations of the business activity; they are frequently used to anticipate the future of the organisation; but their historical orientation imposes a limitation on their value.

- Limited predictive value

Sowden-Service (2010) emphasize that financial statements make use of historical figures, which are past events. These past events may have little or no bearing on the future if, for instance, there is a changes in the market trend. Carmichael et al. (2007) viewed it as financial statements being prepared with the underlying assumption of a stable monetary unit; however, monetary units do in fact, change in value over time.

- Limited qualitative information

The accounting system does not attempt to capture all aspects of an organisation's activities that may be important factors in the success of the organisation. Financial statements are limited to those elements that can be measured with reasonable objectivity, and are required by GAAP; they should be viewed as only partial representations, rather than complete representations, of the organisation (Carmichael et al., 2007: 348). Financial statements contain mostly quantitative information, with only limited qualitative information. Some of this qualitative information might not be found directly in the financial statements; but it could nevertheless influence users' decisions (Sowden-Service., 2010).

- Certain risks are not reported

Financial statements do not provide information on risks, or analyse those risks that the organisation may face; and this information is important to investors in assessing whether to invest in a particular organisation or not (Sowden-Service, 2010: 951).

- Limited comparability

Sowden-Service (2010) noted that one organisation may not easily be comparable with another organisation if each of them uses a different accounting policy (For example, one uses First-in-First-out (FIFO) and the other weighted average (WA) method for

inventory valuation). In addition, unusual items make it difficult to compare one organisation with another, as well as making it difficult to compare one year with another year in the same organisation.

As discussed above, it should be noted that users of financial statements cannot use financial statement alone when making business decisions this is because financial statements have inherent weakness. In addition, management should ensure that the financial statements of the organisation are audited by external auditors, in order to ensure that the information provided in the financial statement is reliable. In order to overcome this problem, users of financial statements should incorporate financial statement-analytical tools when evaluating the performance of the organisation.

These tools will be discussed in the next section.

2.6 ANALYSIS AND INTERPRETATION OF FINANCIAL STATEMENTS

2.7 The need for financial-statement analysis

Walton (2000: 6) highlighted the need for financial analysis by pointing out that internal and external users read financial statements for different reasons. These statements are the primary indicators of the performance of the organisation. This raises the question as to how the financial data should be integrated into the decision-making. Accounting of the data is, or should be, only one of the several sources of information about the organisation and its future prospects. It should be concerned with its past performance, but this is not in necessarily a guide to its future performance.

Robinson, van Greuning, Henry and Broihahn (2009: 261) stressed that for a variety of reasons, such as the numerous available techniques, and the often-substantial amount of data, it is important that the analytical approach be tailored to the specific situation. Prior to embarking on any financial analysis, the analyst should clarify the purpose and context, and clearly understand the following:

- What is the purpose of the analysis? What questions will this answer?

- What level of detail will be needed to accomplish this purpose?

- What data are available for the analysis?

- What are the factors or relationships that would influence the analysis?

- What are the analytical limitations, and could these limitations potentially impair the analysis?

2.8 THE FRAMEWORK FOR FINANCIAL-STATEMENT ANALYSIS

Palepu, Healy and Peek (2010: 11) identified four frameworks for financial statement analysis, which could be used to analyse an organisation; and these are: business strategy analysis; accounting analysis; financial analysis; and prospective analysis.

- Business-strategy analysis

  This analysis involves developing an understanding of the business and the competitive strategy of the firm being analysed. Business analysis provides an important foundation for the subsequent analysis. This strategic analysis involves contemporary tools for analysing an organisation's industry, its competitive position and sustainability within an industry, and the organisation's corporate strategy (Palepu et al., 2010: 11).

- Accounting analysis

  Accounting analysis involves examining how accounting rules and conventions represent an organisation's business economics, and the strategy in its financial statements, and if necessary, developing adjusted accounting measures of performance. The approach used for this technique is to analyse the organisation's assets, liabilities, entities, revenue, and its expenses (Palepu et al., 2010: 12).

- Financial analysis

  A financial analysis involves analysing the financial ratio and the cash-flow measures of the operating, financing, and investing performance of an organisation relative to those of the key competitor, and its historical performance (Palepu et al., 2010: 12).

- Prospective analysis

  This technique is involved in developing forecasted financial statements, in order to be able to make an estimate of the organisation's value. The valuation generally includes a traditional discounted cash-flow model (Palepu et al., 2010: 12).

The above frameworks are all equally important in the analytical process, but the extent of their use depends on the user's decision context. As discussed already, this study is focusing mainly on financial analysis and how the management of an organisation could make use of this tool.

2.9 PURPOSE OF THE ANALYSIS AND INTERPRETATION OF FINANCIAL STATEMENTS

Wild, Shaw and Chiappeta (2011: 686) explained that financial-statement analysis applies analytical tools to general-purpose financial statements and the related data for making business decisions. It involves transforming accounting data into more useful information; this helps to reduce the user's reliance on hunches, guesses, and intuition, as well as on any uncertainty in decision-making.

One purpose of financial-statement analysis is to use the past performance of an organisation to predict its future profitability and cash flows; in addition, the analysis of financial statements can be used to evaluate the performance of an organisation with an eye toward identifying any problem areas (Stice, Stice & Skousen, 2010: 1308).

Kew and Watson (2010: 546) viewed the purpose of financial-statement analysis as being an assessment of the overall financial performance and current position of a business, and the use of this information to evaluate the quality of the decisions made by management to determine the expected future earnings, and to understand better the associated risks. Wild et al. (2011) agree that this tool helps to provide strategic information to improve the organisation's efficiency and effectiveness in providing products and services.

Once the purpose of the analysis has been established, the approach usually follows the typical stages illustrated in Figure 2.3, as demonstrated by Flynn (2003: 170).

Figure 2.2: Steps in financial-statement analysis

SELECT	•What is the purpose of the analysis? •What are the appropriate tools to use?
COMPARE	•With other organisations •With previous years •With the industry •With budgets •With ideal targets
EVALUATE	•Is it good or bad? •Was the result expected? •If bad, why? •If good, maintainable? •Who/What is responsible?
PREDICT	•What is likely to happen if no action is taken? •What improving action is possible?
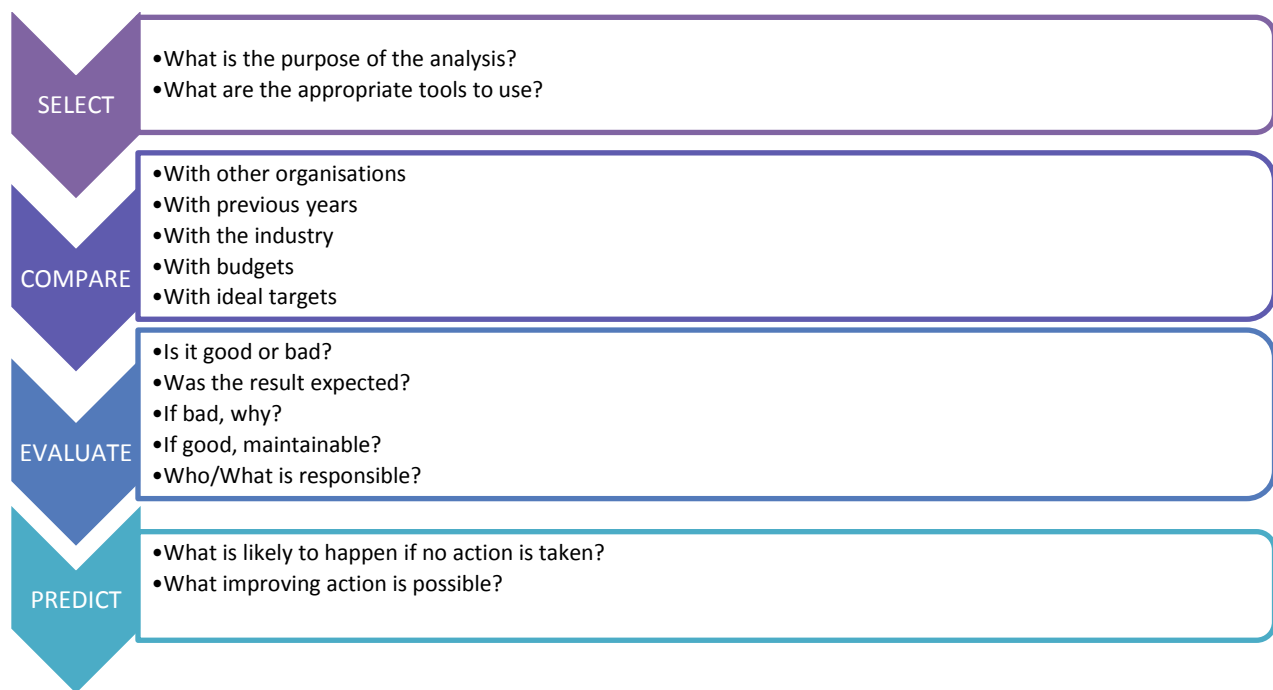
(Source: Flynn 2003: 170)

2.10 IMPORTANT EVALUATION AREAS IN THE ANALYSIS OF FINANCIAL STATEMENTS

Myburgh et al. (2010) pointed out that the four most important aspects, usually evaluated in the analysis and the interpretation of financial statements of an organisation, are: profitability; risk; cash flow; and growth.

Sowden-Service (2010) highlighted the fact that the area of analysis performed depends on the user, the user's specific needs, and the information available to the user. A user, such as a short-term creditor, is primarily interested in liquidity – the ability of the borrower to pay obligations when they fall due. A long-term creditor looks to profitability and solvency measures that indicate the company's ability to survive over a long period of time (Weygandt, Kimmel and Kieso, 2010: 792).

2.11 TECHNIQUES USED IN THE ANALYSIS OF FINANCIAL STATEMENTS

Edmonds, McNair, Olds and Tsay (2012: 320) emphasise that because of the diversity of users, their different levels of knowledge, their varying information needs for particular decisions, and the general nature of financial statements, a variety of analytical techniques have been developed. The analysis of financial statements should focus primarily on isolating the information that is useful for making a particular decision. The information required can take many forms; but it usually involves comparisons, such as comparing the changes in the same items for the same company over a number of years, comparing key relationships within the same year, or comparing the operations of several different organisations in the same industry (Edmonds et al., 2012).

There are many different techniques that may be used in the analysis of a set of financial statements. The most popular tools are (Sowden-Service, 2010: 937):

- Common-sized financial statements (horizontal & vertical analysis);
- Ratio analysis; and
- Statements of cash-flow analysis.

2.11.1 Common-sized financial statements

This technique is applied by redrafting financial statements, and showing movements in either currency or percentages. There are two different approaches to common-sized financial statements, namely (Sowden-Service, 2010: 938):

- Horizontal analysis, and
- Vertical analysis.

2.11.1.1 Horizontal Analysis

This is the studying of the behaviour of individual financial statements over several accounting periods. These periods may be several quarters within the same fiscal year, or they may be several different years. The analysis of a given item may focus on trends in the absolute rand amount of the item, or trends in percentages. This method is also known as trend analysis (Edmonds et al., 2010).

Sowden-Service (2010) also explains that by using this tool, the changes from one year to the next within each line item in the financial statements can be analysed on either a currency or percentage basis. This is useful when trying to identify, at a glance, any unusual fluctuations. Larger percentage fluctuations could be followed up for corrective action by management (where necessary), or interpreted as best as is possible for the purpose of assessing risk, where the user is, for instance, a potential investor.

2.11.1.2 Vertical Analysis

Sowden-Service (2011) maintained that by using this approach, each line item is analysed as a percentage of a base, where the base depends on the user and the purpose of the analysis. The percentages would then be compared with the previous year's percentages; and any unusual fluctuation would be investigated (by auditors, managers or directors etc.); or alternatively, they could be merely interpreted (by the shareholders or potential investors).

Needles, Powers and Crosson (2011: 718) also agree that vertical analysis shows how the different components of a financial statement relate to a total figure in the statement. The analyst sets the total figure at 100 per cent, and computes each component's percentage of that total.

Sowden-Service (2011) pointed out that vertical analysis is useful in analysing financial statements of organisation – to the extent that it:

- Removes the element of inflation; and
- Enables a comparison of the efficiency of operations of large organisations with small organisations, by reducing all figures to percentage terms.

2.11.2 Ratio Analysis

Weygandt, Kimmel and Kieso (2010: 799) demonstrated that ratio analysis expresses the relationship among selected items of data in a financial statement. A ratio expresses the mathematical relationship between one quantity and another. The relationship is expressed in terms of a percentage, a rate, or a simple proportion. Weygandt et al. (2010: 800) suggested that the ratio could provide clues to the underlying conditions that may not be apparent from the components of an individual financial statement. However, a single ratio by itself is not very meaningful.

Crosson and Needles (2011: 569) also state that the ratio analysis identifies the key relationships between the components of the financial statements. Ratios are useful tools for evaluating a company's financial position and operations; and they may reveal areas that need further investigation. The interpretation of the ratio can only be done correctly if the user has a general understanding of the organisation and its environment, the financial data for several years, or for several organisations, and an understanding of the data underlying the numerator and the denominator.

Atrill and McLaney (2011: 2018) highlighted the issues relating to ratio analysis by stating that although ratios are not difficult to calculate, they can be difficult to interpret. Ratios help to show the financial strengths and weakness of a business, but they cannot, by themselves, explain why those strengths or weakness exist, or why certain changes have occurred. Only a detailed investigation would serve to reveal these underlying reasons. Ratios tend to enable users to know which questions to ask, rather than providing the answers.

2.11.2.3 Categories of ratio analysis

Wild et al. (2011: 687) identified the five most common categories of ratio analysis, these are:

- Liquidity – The ability to meet short-term obligations, as they fall due;
- Efficiency – The ability to efficiently manage assets;
- Solvency – The ability to generate future revenue and meet long-term obligations;
- Profitability – The ability to provide financial rewards sufficient to attract and retain financing;
- Market prospects – The ability to generate market expectations.

2.11.3.4 Liquidity ratios

According to Sowden-Service (2010: 940), liquidity ratios measure the ability of the company to repay its debts in the short-term (one year). Wild et al. (2011: 697) also stated that liquidity measures the availability of resources to meet short-term cash requirements. This is affected by the timing of cash inflows and outflows with regard to the prospects for future performance. Sowden-Service (2010) outlined three types of liquidity ratios; these are: the current ratio; the acid-test ratio; and the defensive-interval ratio.

- The current ratio

  The current ratio expresses the relationship of current assets to current liabilities; this is calculated by dividing the current assets by the current liabilities (Kimmel, Weygandt and Kieso, 2011: 710). Kew and Watson (2010) suggested that the higher the current ratio, the more likely the company would able to pay back its debts on time. So, from the creditors' point of view, a high ratio is good. However, this is not a good point of view for the owners; this is because money is tied up in current assets, which would result in a lower return for the owners. Money tied up in inventory, trade receivables and cash does not provide a good return to the owners.

- The acid-test ratio

  Porter and Norton (2007: 648) pointed out that this ratio (also known as the quick ratio) is a stricter test of an organisation's ability to pay its debts when they are due. This is calculated like the current ratio; only that this time, the current assets exclude the inventories. The inventory amount is taken out of the current assets, in order to assess whether the organisation is able to pay its debts without its inventory. This is because inventories take longer to convert to cash (Kew & Watson, 2010).

- The defensive-interval ratio

  This ratio measures how long the organisation can continue to pay its expenses from its existing liquid assets without receiving any additional cash inflow. A higher defensive-interval ratio indicates greater liquidity. This is calculated by taking cash plus short-term marketable securities plus trade receivables. The sum of these is then divided by the daily cash expenditures (Robinson et al., 2009: 286).

Table 2.1: Liquidity ratio formulas

Liquidity ratios	Numerator	Denominator
Current ratio	Current assets	Current liabilities
Acid-test ratio	Current assets – Inventory	Current liabilities
Defensive-interval ratio	Cash + short-term marketable investments + trade receivables	Daily cash expenditures

(Source: Robinson et al., 2009: 285)

2.11.3.5 Efficiency ratios

Wild et al. (2011) explain that efficiency ratios measure how productive an organisation is in using its assets. This is usually measured relative to how much revenue is generated from a certain level of assets. Atrill and McLaney (2011: 219) also agree that these ratios measure the efficiency with which particular resources have been used in the organisation; these ratios are also referred to as activity ratios. Efficiency ratios have a direct impact on the liquidity of the organisation. Most popular ratios covered by this category are: the average-inventory turnover; the average-settlement period for trade receivables; the average settlement for trade payables, and the total-assets-turnover ratio.

- Average-inventory turnover
  This ratio measures the number of times an organisation is able to convert its inventory into cash during the year. This is calculated by taking the cost of sales divided by the average inventory. Generally, a higher turnover indicates that the inventory is being handled more efficiently (Edmonds et al., 2012: 328).

- Average settlement period for trade receivables

  Atrill and McLaney (2011: 233), pointed out that organisations which sell goods or offer services on credit will encounter difficulty in receiving their money on time. The speed of receiving payments can have a significant effect on the organisation's cash flow. The average settlement period for trade receivables determines how long, on average, credit customers take to pay their accounts. This is calculated by taking the total trade receivables divided by the total credit sales, and then multiplying this by 365 days. The shorter the period, the better the organisation is in collecting cash. This ratio is expressed in days.

- Average settlement period for trade payables

  This ratio measures the time it takes for an organisation to pay its creditors. It is calculated by taking the total trade payables, divided by the total credit purchases and multiplying the answer by 365 days. This ratio is expressed in days; and usually it is better to have this ratio as high as possible, while being within the creditors' settlement period, in order to avoid being charged for interest (Kew & Watson, 2010: 564).

- Total-assets turnover

  Atrill and McLaney (2011) explain that the total-assets turnover ratio measures how efficient the organisation is in using its assets to generate sales' revenue. This ratio is calculated by taking the total-sales revenue divided by the total assets. A higher assets-turnover ratio is preferred to a lower one.

Table 2.2: Efficiency ratio formulas

Efficiency ratios	Numerator	Denominator
Average inventory turnover	Cost of sales	Average inventory
Average settlement period for trade receivables	Trade receivables	Total credit sales
Average settlement period for trade payables	Trade payables	Total credit purchases
Total assets turnover	Total revenue	Total assets

(Source: Robinson et al., 2009: 279)

2.11.3.6 Solvency ratios

According to Robinson et al. (2009: 288), solvency refers to an organisation's ability to fulfil its long-term debt obligations. These ratios provide information on the relative amount of debt in the organisation's capital structure and the adequacy of earnings and cash flow to cover the interest expenses and other fixed charges (such as lease or rental payments) as they fall due. The ratios covered in this section are: debt-to-assets ratio; debt-to-capital ratio; debt-to-equity ratio; financial-leverage ratio; interest coverage, and fixed-charge coverage.

- Debt-to-assets ratio

  This ratio measures the percentage of total assets financed by debt. For example, a debt-to-assets ratio of 0.40 or 40 per cent indicates that 40 per cent of the organisation's assets are financed by incurring debt. Generally, a higher debt means higher financial risks, and thus a weaker solvency. This ratio is calculated by taking the total debt divided by the total assets (Robinson et al., 2009: 289).

- Debt-to-capital ratio

  The debt-to-capital ratio measures the percentage of an organisation's capital (debt plus equity) that is represented by debt. A higher ratio generally means higher financial risks, and thus indicates weaker solvency. This is calculated by taking the total debts divided by the sum of the debt and total shareholders' equity (Robinson et al., 2009).

- Debt-to-equity ratio

  The debt-to-equity ratio measures the amount of debt capital relative to the equity capital. A higher ratio indicates weaker solvency. A ratio of 1.0 would indicate equal amounts of debt and equity, which is equivalent to a debt-to capital ratio of 50 per cent; this is calculated by taking the total debt divided by the total shareholders' equity (Robinson et al., 2009).

- Financial-leverage ratio

  This ratio measures the amount of total assets supported for each single money unit of equity. For example, a value of 3 for this ratio means that each R1 of equity supports R3 of total assets; this is calculated by taking the average total assets divided by the average total equity (Robinson et al, 2009). Gitman and Zutter (2012: 76) build on this concept to state that financial leverage is the magnification of risk and return through the use of fixed-cost financing, such as debt and preference shares. The more fixed-cost debt an organisation uses, the greater would be its expected risk and return.

- Interest-coverage ratio

  This ratio measures the number of times an organisation's earnings – before interest and taxation (EBIT) – could cover its interest payments. A higher interest coverage ratio indicates stronger solvency, offering greater assurance that the company can service its debt from operating earnings; this is calculated by taking EBIT divided by interest payments (Robinson et al., 2009).

- Fixed-charge-coverage ratio

  This ratio relates to the fixed charges, or obligations, to the cash flows generated by the organisation. It measures the number of times an organisation's earnings (EBIT) can cover the organisation's interest-and-lease payments. Generally, a higher fixed-charge-coverage ratio implies stronger solvency. This is calculated by taking EBIT plus lease payments divided by the interest payments plus the lease payments (Robinson et al., 2009).

Table 2.3: Solvency-ratio formulas

Solvency ratios	Numerator	Denominator
Debt-to-assets ratio	Total debt	Total assets
Debt-to-capital ratio	Total debt	Total debt + Total shareholders' equity
Debt-to-equity ratio	Total debt	Total shareholders' equity
Financial leverage ratio	Average total assets	Average total equity
Interest coverage ratio	EBIT	Interest payments
Fixed charge coverage	EBIT + Lease payments	Interest payments + lease payments

(Source: Robinson et al., 2009: 289)

2.11.3.7 Profitability ratios

Profitability ratios measure the income or operating success of an organisation for a given period of time. These ratios are used to assess whether the organisation is generating profit, or not. It can also be used to assess whether management has an effective operation (Kimmel et al., 2011: 715). This category covers the following ratios:

gross-profit margin; operating-profit margin; net-profit margin; return on assets, and return on common equity.

- Gross-profit margin

  The gross-profit margin measures the percentage of each sales rand remaining after the firm has paid for its trading good. The higher the gross profit margin, the better the organisation is in generating profit. This is calculated by taking the gross profit divided by the total sales (Gitman and Zutter, 2012: 79).

- Operating-profit margin

  The operating-profit margin measures the percentage of each sales rand remaining after all costs and expenses – other than interest, taxes, and preference dividends – have been deducted. This represents the "pure profits" earned on each sales rand. This ratio is calculated by taking the operating profits divided by the total sales. A high operating-profit margin is preferred (Gitman & Zutter, 2012).

- Net-profit margin

  The net-profit margin measures the percentage of each sales rand remaining after all cost and expenses, including interest, taxes, and preference dividends have been deducted. The higher the organisation's net-profit margin, the better. This is calculated by taking the earnings available to ordinary shareholders divided by the total sales (Gitman and Zutter, 2012).

- Return on assets (ROA)

  The return on the total assets measures the overall effectiveness of management in generating profits with its available assets. The higher the organisation's return on total assets, the better. This ratio is calculated by taking the earnings available to ordinary shareholders, divided by the total assets. This ratio is also known as the return on investment (ROI) (Gitman and Zutter, 2012).

- Return on common equity

  The return on common equity (ROE) measures the return earned on the ordinary shareholder's investment in the organisation. The owners would be better off if they got a high return. This is calculated by taking the earnings available to ordinary shareholders, divided by the number of ordinary shares issued (Gitman and Zutter, 2012).

Table 2.4: Profitability ratio formulas

Profitability ratios	Numerator	Denominator
Gross profit margin ratio	Gross profits	Total sales
Operating profit margin ratio	Operating profits	Total sales
Net profit margin ratio	Earnings available to ordinary shareholders	Total sales
Return on assets ratio	Earnings available to ordinary shareholders	Total sales
Return on common equity	Earnings available to ordinary shareholders	Number of ordinary shares issued

(Source: Gitman and Zutter, 2012: 79)

2.11.3.8 Market ratios

Gitman and Zutter (2012: 82) stated that market ratios relate to the organisation's market value, as measured by its current share price, to certain accounting values. These ratios give insight into how investors in the marketplace feel the organisation is doing in terms of risk and return. This category of ratios is mainly applicable to organisations that trade their shares on an open market; but, it could equally well be used by any organisation, in order to measure its market value. The most common

ratios covered are: the price-earnings ratio; the market/book-ratio, and the earnings per share.

- Price-earnings ratio

  This ratio is commonly used to assess the owners' appraisal of the share value. The price-earnings ratio measures the amount the investors are willing to pay for each rand of an organisation's earnings. The level of this ratio indicates the degree of confidence that investors have in the organisation's future performance. Generally, a higher price-earnings ratio is preferred. This is calculated by taking the market price per share for ordinary shares (MPS) divided by the earnings per share (EPS) (Gitman & Zutter, 2012).

- Market/Book ratio

  The market/book ratio provides an assessment of how investors view the firm's performance. It relates the market value of the firm's shares to its book-strict accounting value. This is calculated by taking the market price per share of ordinary shares divided by the book value per share of ordinary shares (Gitman & Zutter, 2012).

- Earnings per share (EPS)

  This ratio measures how much each share has generated in earnings per issue during the year. This is calculated by taking the profit available to ordinary shareholders divided by the number of ordinary shares issued (Kew and Watson, 2010: 573).

Table 2.5: Market price-ratio formulas

Market ratios	Numerator	Denominator
Price earnings ratio	Market price per share (ordinary)	Earnings per share (EPS)
Market/book ratio	Market price per share (ordinary)	Book value per share (ordinary)
Earnings per share (EPS)	Earnings available to ordinary shareholders	Number of ordinary shares issued

(Source: Gitman and Zutter, 2012: 82)

2.11.3 Statement of cash-flow analysis

Robinson et al. (2009: 243) mentioned that the analysis of the organisation's cash flows can provide useful information for understanding an organisation's activities and earnings, and for predicting its future cash flows. Palepu et al. (2010: 227) concluded that the analysis of cash flows provides an indication of the quality of the information in the organisation's statement of comprehensive income, and in its statement of financial position. There are various tools and techniques for analysing the statement of cash flows; the ones which will be covered in this section are: common-size analysis; and free-cash flows.

As discussed above, a statement of cash flows is a very important statement, because it provides insight into whether the organisation is generating enough cash from its operating activities. This would be an indicator of whether the organisation would be in operation or not for the foreseeable future. Palepu et al. (2010: 229) suggested that a cash-flow analysis can be used to address a variety of questions on an organisation's cash-flow dynamics:

- How strong is the organisation's internal cash-flow generation? Is the cash flow from operations positive or negative? If it is negative, why is that? Is it because the company is growing? Is it because its operations are unprofitable? Or, is it having difficulty in managing its working capital properly?

- Does the organisation have the ability to meet its short-term financial obligations, such as interest payments, from its operating-cash flow? Can it continue to meet these obligations without reducing its operating flexibility?

- How much cash did the organisation invest in growth? Are these investments consistent with its business strategy? Did the company use an internal cash flow to finance growth, or has it relied on external financing?

- Did the organisation pay dividends from its internal free-cash flow? Or, did it have to rely on external financing? If the organisation had to fund its dividends from external sources, is the organisation's dividend policy sustainable?

- What type of external financing does the organisation rely on? Equity, current debt, or non-current debt? Is the financing consistent with the organisation's overall business risk?

- Does the organisation have any excess cash flow after making capital investments? Is it a long-term trend? What plans does the management have to deploy the free cash flow?

Information reported in the statement of cash flows can be used to answer the above questions directly in the case of some organisations; with other organisations, it might not be easy for two reasons: Firstly, there is a significant variation across organisations in how cash flow data are disclosed, even though there is a standard that provides broad guidelines. Secondly, organisations may choose to include interest expenses and interest income when computing their cash flow from their operating activities. However,

these two items are not strictly related to an organisation's operation. Interest expense is a function of financial leverage; and interest income is derived from financial assets rather than from operating assets (Palepu et al., 2010: 230).

2.11.3.1 Common-size analysis of the statement for Cash Flows

This technique is similar to the analysis of the statement of financial position and statement of comprehensive income. These statements have already been covered. The analysis of statements of cash flow using common-size analysis has two approaches. The first approach is to express each line item of cash inflow (outflow) as a percentage of the total inflows (outflows) of cash; while the second approach is to express each line item as a percentage of the net revenue (Robinson et al., 2009:246).

The common-size format makes it easier to see trends in cash flow rather than just looking at the total amount. These methods are also useful to the analyst in forecasting future cash flows because individual items in the common-size statement are expressed as a percentage of either revenue or cash inflow (outflow) (Robinson et al., 2009).

2.11.3.2 Free-cash flow

Traditionally, investors and creditors have most commonly used ratios based on accrual accounting. Weygandt et al. (2011: 639) expanded on the theory to suggest that cash-based ratios are now being used by analysts. In the statement of cash flows, the cash provided by operating activities is intended to indicate the cash-generating capability of the organisation. However, that cash provided by operating activities fails to take into account that an organisation must invest in new assets, in order to maintain its current level of operations. Organisations also should at least maintain their returns to investors at current levels, in order to satisfy the investors.

In order to see that this is accomplished, the measurement of free-cash flow provides additional insight into an organisation's cash-generating ability. Free-cash flow

describes the cash remaining from operations after adjustment for capital expenditures and dividends. The free-cash flow is calculated by taking cash flows from operating activities minus capital expenditure and cash dividends (Weygandt et al., 2011: 639).

2.12 STANDARDS FOR COMPARISONS

According to Wild et al. (2011: 688), when interpreting the results obtained from financial statement analysis, there is a need to decide whether the measure indicates good, bad, or average performance. In order to make such judgements, a standard (benchmarks) for comparisons are used, these include the following:

- Intercompany – This comparison is used to compare the analysis, based on the organisation's prior performance information and that related to its current performance information.
- Competitor – This involves comparing the organisation's performance indicators with the competitors' performance indicators.
- Industry – This involves comparing the results of the organisation with the average industrial performance, in which the organisation operates.

In addition to the above standards, other standards of comparison can also be used, as identified by Robinson et al. (2009: 278):

- Organisation goals and strategy – actual ratios can be compared with organisational objectives to determine whether these objectives are being attained, and whether the results are consistent with the organisation's strategy.
- Economic conditions – for cyclical organisations, financial ratios tend to improve when the economy is strong, and to weaken during recessions. Therefore, financial ratios should be examined in the light of the current phase of the business cycle.

2.13 LIMITATIONS OF FINANCIAL STATEMENT ANALYSIS

Kew and Watson (2010: 593) highlighted the fact that although financial statement analysis has a number of benefits, there are limitations that have to be kept in mind when drawing conclusions from the analysis. Some of the limitations are inherited from the financial statements, since the analysis is heavily relying on the data provided by these statements.

- Unusual events

  There may be unusual transactions affecting the financial statements of an organisation. This would affect comparisons from one year to the next, and between organisations, because these unusual transactions would distort the trends in the figures (Kew & Watson, 2010).

- Generalisation and summaries

  Some valuable information might not be used in the analysis of financial statements because these statements are summarised (Kew and Watson, 2010).

- Judgements

  Different organisations use different accounting policies and procedures; and they could use subjective judgments and estimations, thereby making comparisons difficult (Kew & Watson, 2010).

- Changing economic environment

  When making comparisons between organisations, users must be alert to changes in general economic trends from year to year. Major changes in the economy, such as an increase in interest rates in recent years makes old rule-of-thumb guidelines for evaluating other factors obsolete (Edmonds et al., 2012: 338).

2.14 USERS OF FINANCIAL STATEMENTS

The data contained in the financial statements of an organisation are usually important to two categories of users: external and internal users.

According to Wild et al (2011: 686), the internal users of accounting information are those involved in strategically managing and operating the organisation. They would include managers, officers, internal auditors, consultants, budget directors and market researchers. The purpose of financial statement analysis for these users is to provide strategic information to improve the organisation's efficiency and effectiveness in providing products and services.

Myburgh et al. (2011: 649) emphasise that there are two categories of external users: Firstly, those persons and institutions that either have an interest in, or are considering the acquisition of, the entity; and secondly, those persons and institutions that, although they have no direct financial interest in the organisation, are nevertheless interested in the financial information about the entity – for various reasons. This is summarised in Figure 2.3 as follow:

Figure 2.3: Who are interested in organisation financial statements?

Potential investor or lenders - should we invest?

Society - is the organisation ethical in its business dealings?

Your work for the organisation, or have been offered a job by them

Curiosity/general research

Existing investor or lender - should we sell our shares or call in the loans?

Who's interested?

Economist - what are the industry trends?

Competitors - compare how well the opposition is doing

We're thinking of ordering from them or selling to them

Tax authority need to know if the organisation is revealing all it should

They are one of your existing suppliers or customers

(Source: Black 2009: 207)

It should be noted that each user of the financial statements will only look at the information in the financial statement of the organization which are of importance in the decision making process. Thus, not all the techniques of financial statement analysis which are outlined in the study will be applicable to all the users of the financial statement.

2.15 RISK

Whenever a business is being evaluated, an important factor that needs to be considered is risk (Kew & Watson, 2010: 546). When measuring the performance of the business, consideration must be made in relation to risks. The Chartered Institute of

Management Accountants [CIMA], (2011: 10) define risk in business as the chance that future events or results may not turn out as they were expected to do. It is useful to understand some of the risks affecting the financial outcome in a business, so that it would be possible for management to view the results of an organisation in relation to the risks associated with it (Kew and Watson, 2010: 546).

The two types of risks that will be explored in this study are business risk and financial risk.

According to the CIMA (2011: 15), business risk is the risk that organisation faces due to the nature of their operation. Kew and Watson (2010: 547) view this risk as the result of the entirely unexpected outcome that could affect the revenue and costs in the organisation. They suggest that an organisation with a high percentage of fixed costs would have a higher business risk. This is because fixed costs do not decrease if the revenue of the organisation decreases.

Kew and Watson (2010) points out that financial risk is faced by organisations as a result of the choice management make on how much debt or equity funding (financing structure) is used. The risk is that the business will not earn enough income from its operations to be able to cover the interest owing on the debt. This risk increases when the earnings decrease, because a decrease in earnings means that it is more likely that the business will not be able to cover the interest payments. Kew and Watson (2010) claim that those organisations that only use equity funding would not be exposed to any financial risk.

2.16 PERFORMANCE MEASURES

According to Hansen, Mowen and Guan (2009: 470), there is a need for the organisation to have a performance balance measured. Balance between lag measures and leads measures: between objective measures and subjective measures, between financial measures and non-financial measures, and between external measures and

internal measures. These measures are important in helping management to achieve and maintain the organisational objectives. The objectives of the organisation can only be achieved if there are critical success factors (CSF) designed around them to assess whether the objectives are being met, or not.

Figure 2.4: Linkages of organisational objectives with CSF and performance measures

(Source: CIMA 2011: 231)

Lag measures are outcome measures, the measures of results from past efforts (Example, customer profitability). Lead measures are factors that drive future performance (Example, hours of employees training). Objective measures are those that can be readily quantified and verified (Example, market shares); whereas subjective measures are less quantifiable and more judgmental in nature (Example, employee capabilities). Financial measures are those expressed in monetary terms, whereas non-financial measures use non-monetary units (Example, the number of dissatisfied customers) (Hansen et al., 2009).

External measures are those that relate to customers and shareholders (Example, customer satisfaction, and returns on investment). Internal measures are those that relate to the processes and capabilities that create value for customers and shareholders (Example, process efficiency and employee satisfaction) (Hansen et al., 2009).

2.16.1 Performance-measurement mix

Performance-measurement mix is a strategy that has been developed to help managements of organisations to measure the overall performance, including the non-financial performance of the organisation. The CIMA (2011: 230) outlines five key performance-measurement mixes that could be used by organisations to measure their performance: benchmarking; balance scorecard; (Fitzgerald & Moon); and financial and non-financial measures.   The author additionally states that organisations need to develop a mix that has the following determinants:

- The ability to identify the objectives of the process, and order them in terms of priorities;
- The ability to identify the critical success factors of the operation;
- The ability to perform a position from which to audit and identify the current situation, and to identify any extra critical success factors;
- A view of the critical success factors needed to develop a pilot-measurement mix, possibly containing a mixture of financial and non-financial elements. This is often referred to as a 'balanced-scorecard' approach;
- The ability to evaluate the mix in terms of culture and change implications;
- The ability to deploy and monitor.

Figure 2.5: The performance measurement-mix components

(Source: CIMA 2011: 230)

2.16.1.1 Financial and non-financial measures

There is a need for management in organisations to focus on factors that actually cause profit to be earned. These factors are required in order to achieve the overall financial target. These are the non-financial measures (CIMA: 2011).

The CIMA (2011: 429) stressed that because financial measures are focus largely on short-term financial performance, there is a need to bring in other performance measures that can look at long-term performance. Financial measures are usually recognised as lagging indicators; they inform us about the performance – only after it has happened. However, on the other hand, non-financial measures (which are quantitative but expressed in non-monetary terms) are leading indicators of

performance. They inform us on what is happening now in the organisation; and they give a good indication of what the likely future financial performance will be.

Crosson and Needles Jr. (2011: 521) state that non-financial performance measures gauge quality and value created through the supply and value chains. They measure a variety of factors within the organisation, such as the quality of the products sold/produced, the quality of the service delivered to customers, and the efficiency of the company's employees.

Using non-financial performance measures does not mean that the financial performance measures may be disregarded. There are ways of translating financial targets and measures into something that is more readily identifiable by a particular employee or group of employees. The non-financial performance measures should cover both quantity and quality (Weetman, 2010: 419).

2.16.1.2 Fitzgerald and Moon

Fitzgerald and Moon adopted a framework for the design and analysis of performance management systems. They based their analysis on three building blocks. These are: Dimensions; standards, and rewards (CIMA, 2011:235).

- Dimensions
  Dimensions are goals for the business; and suitable measures must be developed to measure each performance dimension. There are six dimensions in the building block model; and these are: profit; competitiveness; quality; resource utilisation; flexibility, and innovation. Fitzgerald and Moon suggested that these six dimensions could be used to generate key performance measures that the organisation would need to monitor (CIMA, 2011).

- Standards

  These are the measures used. In order to ensure success, it is vital that employees view standards as achievable and fair, and that they take ownership of them (CIMA, 2011).

- Rewards

  To ensure that employees are motivated to meet standards, targets need to be clear, and to be linked to controllable factors (CIMA, 2011).

Figure 2.6: Fitzgerald and Moon (The building-block model)

(Source: CIMA 2011: 235)

2.16.1.3 The balanced scorecard

According to Horngren, Harrison Jr. and Oliver (2012: 1155), the balanced scorecard (developed by Robert Kaplan and David Norton) recognises that management must consider both financial-performance measures (which tend to measure the results of actions already taken – lag indicators) and operational-performance measures (which tend to drive future performance-led indicators) when judging the performance of an organisation and its sub-units. These measures should be linked with the organisation's

goals and its strategy for achieving those goals. The balanced scorecard represents a major shift in corporate performance measurement, rather than treating financial indicators as the sole measure of performance.

The balanced scorecard illustrated that management cannot rely on financial measures to guide the organisation. Management needs to consider other critical factors, such as customers' satisfaction, operational efficiency, and employee excellence. Management must use key performance indicators, such as customer satisfaction to measure critical factors that affect the success of the company.

There are four key performance indicators developed in the balanced scorecard. These are: the financial perspective; the customer perspective; the internal business perspective; and the learning and growth perspective (Horngren et al., 2012).

- The financial perspective

  The financial perspective establishes the long- and short-term financial performance objectives expected from the organisation's strategy; and it simultaneously describes the economic consequences of actions taken in the other three perspectives. The financial perspective has three strategic themes: revenue growth, cost reduction, and assets utilization (Hansen et al., 2009: 472).

- The customers' perspective

  The customers' perspective defines the customer and market segment in which the organisation unit will compete; and it describes the way that value is created for customers. The customers' perspective is the source of the revenue component for the financial objectives (Hansen et al., 2009).

- Internal-business perspectives

  The internal business process perspective describes the internal process needed to provide value for customers and owners. Processes are the means by which strategies are executed. Thus, the process perspective entails the identification

of the critical processes needed that affect customer and shareholder satisfaction (Hansen et al., 2009).

- Learning and growth perspectives

  The learning and growth perspective defines the capabilities that an organisation needs, in order to create long-term growth and improvement. This perspective is concerned with three major enabling factors: employee capabilities, information systems capabilities, and employee attitude. The learning and growth perspective is the source of the capabilities that enable the accomplishment of the other three perspectives' objectives (Hansen et al., 2009).

Figure 2.7: The balanced scorecard

(Source: CIMA, 2011: 237)

2.16.1.4 Benchmarking schemes

According to CIMA (2011: 241), benchmarking is "the establishment, through data gathering, of targets and comparators, through which the relative levels of performance

(and particularly areas of underperformance) can be identified". Weetman (2010: 418) views benchmarking as a process of measuring the organisation's operations, products and services against those of the competitors recognised as market leaders, in order to establish targets, which would provide a competitive advantage. CIMA (2011) outlines that an organisation can use three types of benchmarking, as identified by Seber: internal benchmarking; competitor benchmarking; and process or activity benchmarking.

I. Internal benchmarking
- This is where another branch or department of the organisation is used as the benchmark;
- This is used where conformity of service is the critical issue – either threshold or core competence;
- It is easily arranged; it is cheaper; and it is culturally relevant;
- But, it can be culturally distorted and unlikely to provide innovative solutions.

II. Competitor benchmarking
- This makes use of a direct competitor with the same or a similar process;
- It essentially aims to render the competition core competence as a threshold;
- It is relevant for the industry and the market;
- But, would the competitor really be keen to hand over their basis for success?

III. Process or activity benchmarking
- The focus is upon a similar process in another company, which is not a direct competitor, for example, an airline or a health service;
- It looks for new, innovative ways to create advantages, as well as solving threshold problems;
- It takes time; and it is expensive;
- But, the resistance to it is likely to be less, and it could provide a new basis for creating an advantage.

In order to ensure that the benchmarking process is implemented, and would produce effective plans in an organisation, the following general stages of benchmarking can be used (Weetman, 2010):

- Decide what area of activity to benchmark (e.g. customer services, business processes in particular departments, quality of employees, or standard of training).

- Select a competitor that is reputedly the best in the area of activity to be benchmarked.

- Decide on the appropriate measurements to be used in defining performance levels.

- Determine the competitor's strengths, and compare these with the organisation's own record.

- Use the information collected as the basis for an action plan. To be effective, this action plan must involve all grades of employee working in the area of activity.

It is important for management to see the need for the organisation to have a strategy in place that would ensure that all critical success factors of the organisation are assigned performance measures. They should not only be concentrating on one side (for example: financial performance) but, they should cover all areas. This would help management to achieve the objectives of the organisation.

2.17 SMALL AND MEDIUM SIZED-ENTERPRISES

IFRS for SMEs (2009: 10) defines small and medium-sized enterprises as follows:
Small and medium-sized enterprises are organisations that:

- Do not have any public accountability; and

- Publish general-purpose financial statements for external users. Examples are: owners, potential creditors, and credit-rating agencies.

An organisation has public accountability if:

- Its debt or equity instruments are traded in a public market, or it is in the process of issuing such instruments for trading in a public market (a domestic or foreign

stock exchange or an over-the-counter market, including local and regional markets); or

- It holds assets in a fiduciary capacity for a broad group of outsiders, as one of its primary businesses. This is typically the case for banks, credit unions, insurance organisations, security brokers/dealers, mutual funds and investment banks.

According to Chiware and Dick (2008: 145), the SME sector has an important role to play in the developing economies – not only in economic development, but also in poverty-alleviation and job-creation. The sector faces a number of constraints, especially in accessing finance, markets, training and technology.

Every year new SMEs are established; but only some of these manage to be successful. This is because the proper managing of these organisations is not done. Analoui and Karami (2003) say that the reason for the SMEs' failure is that of the managers: simply because they do not know how to run the business. In other words, they do not have a long-term plan for the business; and they do not think strategically. They make major mistakes in strategic decision-making, where an experienced SME manager would quickly see and easily solve any problems.

A manager's competencies and core capabilities are important factors in the success of an SME; and any lack of managerial experience in the strategic activities of the organisation, such as long-range planning, leads to the inevitable failure of the organisation.

2.18 CONCLUSION

It is important that the management of an organisation prepare and present financial statements of the organisation, according to the standards that govern them. This would enable an enhancement in the analysis of the financial statement. The analysis of financial statements should be able to give the users of financial statements important information that would help them make accurate economic decisions. Management

should evaluate the performance of the organisation, using the performance measurement mix, in order to ensure that all important areas of performance of the organisation are correctly assessed.

CHAPTER THREE

THE APPLICATION OF FINANCIAL STATEMENT ANALYSIS

CHAPTER THREE

THE APPLICATION OF FINANCIAL STATEMENT ANALYSIS

3.1 INTRODUCTION

This chapter explores further the techniques used in the financial statement analysis, which were covered in Chapter 2. It also highlights the importance of the interpretation of the results obtained – after the analysis process has been completed. This was concluded by outlining how an effective analysis should be conducted.

3.2 THE APPLICATION OF COMMON-SIZED FINANCIAL-STATEMENT ANALYSIS

3.2.1 Horizontal analysis

According to Needle et al. (2011: 715), horizontal analysis makes use of comparative financial statements, in order to provide financial information within each line item for the current year and the previous year; and also to gain an insight into any year-to-year changes. Horngren et al. (2012: 723) demonstrated this principle by highlighting the two steps involved in this process, which are:

- Compute the rand amount of the change from the earlier period to the later period; and
- Divide the rand amount of change by the earlier period amount, in order to get the percentage change.

Applying this technique to the statement of financial position, should enable one to provide users with the following insights (Sowden-Service, 2010: 939):

- It highlights the increases and decreases in the sources of finance (equity and liabilities); and
- It highlights the increases and decreases in the assets; thereby indicating how this finance was invested.

For the statement of comprehensive income, it would provide users with the following insights (Sowden-Service, 2010):

- It highlights the increases and decreases in expenditures.(For example, a significant increase could suggest error, fraud, overspending or changes in the spending habits of the organisation); and
- It highlights the increases and decreases in income. (For example, a significant decrease in sales could indicate the need for additional marketing or a change in the sales mix).

3.2.2 Vertical analysis

3.2.2.1 Vertical analysis on the statement of financial position

If the vertical analysis were to be performed on the statement of financial position, each line item of the assets section could be analysed as a percentage of the total assets; and each line item in the equity and liabilities could be analysed as a percentage of the total equity and liabilities (Sowden-Service, 2010).

3.2.2.2 Vertical analysis on the statement of comprehensive income

When applying the vertical analysis technique to the statement of comprehensive income, each line item is analysed as a percentage of the sales figure. Any figure could be used as the base, depending on what objective the user is trying to achieve. If, for example, a user is trying to analyse the expenses with the intention of reducing them in future, the expenses would be calculated as a percentage of the total expenses, in order to highlight the bigger expenses. These percentages would then be compared with the percentages calculated for the previous year; and any unusual trend would be followed up (Sowden-Service, 2010).

3.3. THE APPLICATION OF RATIO ANALYSIS

Robinson et al. (2009: 266) state that there are no authoritative bodies specifying the exact formulas needed for computing the ratios, or for providing a standard and comprehensive list of the ratios. Formulas, and even the names of ratios, often differ from analyst to analyst, or from database to database. The number of ratios that can be created is practically limitless. There are, however, widely accepted ratios that have been found useful. These were covered in Chapter 2.

The analyst should be aware of the different ratios that can be used in practice, and that certain industries have unique ratios tailored to the characteristics of that industry. When faced with an unfamiliar ratio, the analyst can examine the underlying formula, in order to gain an insight into what the ratio is measuring – and then studying the relationship between the denominator and the numerator (Robinson et al., 2009).

Myburgh et al. (2010: 656) stated that by using ratio analysis a user would be able to identify, measure and evaluate the financial relationships, or ratios, of the financial position and the performance of an organisation.

Ratios can be used to bring value to the analysis when evaluating the past performance, and also to assess the current financial position of the organisation, and gain insights useful for projecting the future results. Using ratios as such would not provide any answers; but they could give an indicator of some aspect of the organisation's performance. Ratios provide insights into the organisation area, such as those supplied by Robinson et al. (2009: 268):

- Microeconomic relationships within an organisation that help analysts project earnings and free cash flows;
- An organisation's financial flexibility, or ability to obtain the cash required to grow and meet its obligations, even if unexpected circumstances develop; and
- Management ability.

Robinson et al. (2009: 277) maintain that the interpretation of ratios can only be done in the context of other information, including benchmarks. In general, the ratios of the organisation are compared with those of its major competitors, and with those from the organisation's previous periods. The goal is to understand the underlying causes of divergence between organisation ratios, and those of the industry. Moreover, even ratios that remain consistent require some understanding, because consistency can sometimes indicate accounting policies that were selected to smooth the earnings.

Management and analysts should be aware that ratios would not be able to reveal any fraudulent financial reporting in the organisation. This was revealed in an investigative study conducted by Kaminski, Wetzel and Guan (2004: 26) on whether ratios could be used to detect any fraudulent financial reporting. This provided empirical evidence of the limited ability of ratio analysis to do so. The study found that there was no much difference between the ratios of fraudulent and non-fraudulent organisations.

3.4 THE APPLICATION OF STATEMENT OF CASH-FLOW ANALYSIS

Penman (2013: 345) explained that for cash-flow forecasting, one needs to distinguish clearly between the net cash generated by operations (the free-cash flow) and those flows that involve paying that cash to the organisation's claimants. If operations use cash (and thus have a negative free cash flow), one needs to distinguish that negative free-cash flow from the cash flows that involve claimants paying into the organisation to cover the free-cash flow deficit. This is achieved by reformulating the statement of cash flows, in order to distinguish between the two elements.

Table 3.1: Reformulating of the GAAP statement of cash flow

Normal GAAP Statement of Cash flows
Cash flow from operations
- Cash used in investing activities
+ Cash from financing activities
= Changes in cash and cash equivalents
Reformulated Statement of Cash flows
Cash flow from operations
- Cash investments
= Free cash flow from operating activities
Cash paid to shareholders
+ Cash paid to debt holders and issuers
= Cash paid for financing activities

(Source: Penman, 2013: 346)

3.5 THE USE OF GRAPHS AS AN ANALYTICAL TOOL

Financial statements analysis can be enhanced by the use of graphs to facilitate the comparison of performance and financial structure over time, highlighting any changes in the significant aspects of the business operations. In addition, graphs provide the analyst (and management) with a visual overview of the risk trends in a business. Graphs may also be used effectively to communicate the analyst's conclusions on the financial condition and the risk-management aspects (Robinson et al., 2009: 275).

Choosing the appropriate graph to communicate the most significant conclusions of a financial analysis is a skill. In general, pie graphs are most useful for communicating the composition of the total value (For example, the assets over a limited amount of time, say one or two periods). Line graphs are useful when the focus is on the change in amount for a limited number of items over a relatively longer time period, (Robinson et al., 2009).

3.6 RED FLAGS IN FINANCIAL STATEMENT ANALYSIS

When conducting an analysis on the organisation's financial statements, the analyst and the management should not only be focusing on how the organisation has performed; but, they should also look at the red flags that may indicate financial trouble. Horngren et al. (2012: 744) identified certain conditions that would reveal that the organisation is in financial trouble; these are:

- Movement of sales, Inventory, and Receivables – Sales, inventory, and receivables generally move together. Increased sales lead to higher receivables, and may require more inventory (or higher inventory turnover) to meet demand. Unexpected or inconsistent movements among sales, inventory, and receivables make the financial statements look suspicious.

- Earnings problems: Has the net income decreased significantly for several years in a row? Did the organisation report the net income in previous years, but is now reporting a net loss? Most organisations cannot survive consecutive losses year after year.

- Decrease Cash Flow: Cash flow validates net income – Is the cash flow from operations consistently lower than the net income? If so, the organisation is in trouble. Are the sales of non-current assets a major source of cash? If so, the organisation may be facing a cash shortage.

- Too Much Debt: How does the organisation's debt ratio compare with that of a major competitor? If the debt ratio is too high, the organisation may be unable to pay its debts.

- Inability to Collect Receivables: Are the days' sales in receivables growing faster than those of the competitors? If so, a cash shortage may be looming.

- Building of Inventories: Is the inventory turnover too slow? If so, the organisation may be unable to sell goods; or it may be overstating its inventory.

3.7 THE IMPORTANCE OF THE CORRECT INTERPRETATION OF THE ANALYSED RESULTS

Robinson et al. (2009: 261) highlighted the importance of the interpretation of the data, by stating that, in order for an analysis to be effective, it should include both computations and interpretations. A well-reasoned analysis differs from a mere compilation, computations, tables and graphs by integrating the data collected into a cohesive whole. Furthermore, if an analysis is of past performance, it should not only address what happened, but also why it happened, and whether it advanced the organisation's strategy.

In interpreting financial results, it is necessary to make assessments of how an organisation has behaved in relation to how it would have been expected to behave. In order to have a framework of expectations, it follows that one must have theories about how an organisation should behave. This is important, because an assessment of the organisation's performance cannot be done without an expectation of how it is expected to perform (Walton, 2000: 139).

3.8 EFFECTIVE APPLICATION OF THE FINANCIAL STATEMENT ANALYSIS

For an effective use of the financial statement of an analysis, management and analysts should ensure that their analysis includes all the phases outlined as a general framework for analysing financial statements. This is illustrated in table 3.2 on the next page.

Table 3.2: A financial statement analysis framework

Phase	Sources of Information	Output
1. Articulate the purpose and context of the analysis	The nature of the analyst's function, such as evaluating an equity or debt investment or issuing a credit rating. Communication with client or superior on needs and concerns. Institutional guidelines related to developing specific work product.	Statement of the purpose or objective of analysis. A list (written or unwritten) of specific questions to be answered by the analysis. Nature and content of report to be provided. Timetable and budgeted resources for completion.
2. Collect input data	Financial statements, other financial data, questionnaires, and industry economic data. Discussions with management, suppliers, customers, and competitors. Organisation site visits (Example, to production facilities or retail stores).	Organized financial statements. Financial data tables. Completed questionnaires, if applicable.
3. Process data	Data from the previous phase.	Adjusted financial statements. Common-size statements. Ratios and Graphs. Forecasts.
4. Analyse/ interpret the processed data	Input data as well as processed data.	Analytical results.
5. Develop and communicate conclusions and recommendations (Example, with an analysis report)	Analytical results and previous reports. Institutional guidelines for published reports.	Analytical report answering questions posed in Phase 1. Recommendation regarding the purpose of the analysis, such as whether to make an investment or grant credit.
6. Follow up	Information gathered by periodically repeating above steps as necessary to determine whether changes to holdings or recommendations are necessary.	Updated reports and recommendations.

(Source: Robinson et al., 2009: 262)

3.9 CONCLUSION

For an effective financial analysis to be conducted, the analyst would have to ensure that the general framework for analysing a financial statement is implemented in the organisation. Each technique which is used in the financial statement analysis should be able to give users major focus points on how the elements in the financial statement has resulted in. This means that users should choose a technique that would best serve the purpose of the analysis. It is important that the results are interpreted correctly in order to make good strategic decisions about the organisation.

The next chapter will discuss the methodology that was used, in order to collect the data needed for the study.

CHAPTER FOUR

RESEARCH DESIGN AND METHODOLOGY

CHAPTER FOUR

RESEARCH DESIGN AND METHODOLOGY

4.1 INTRODUCTION

This chapter discusses the research design and methods that were used in the research study. In addition, the sources explored in the collection of the data, the sampling technique, and the data analysis will be discussed in more detail.

4.2 RESEARCH DESIGN

4.2.1 Understanding research

According to Welman, Kruger and Mitchell (2005: 2), research is a process that involves obtaining scientific knowledge by means of various objective methods and procedures. The objective methods used in the research indicate that these methods and procedures do not rely on personal feelings or opinion. Robbins (2009: 1) viewed research as a process of information gathering through a variety of methods to describe a concept, and then to explore or explain any relationships between the concepts.

Kumar (2011: 8) also agrees that research is a process for collecting, analysing and interpreting information to answer questions. However, for this process to be classified as research, it must have the following characteristics:

- Controlled – This concept implies that, in exploring causality in relation to two variables, one must set up the study in a way that minimises the effects of other factors possibility affecting the relationship.
- Rigorous – One must be scrupulous in ensuring that the procedures followed to find answers to the questions are relevant, appropriate and justified.
- Systematic – This implies that the procedures adopted to undertake an investigation must follow a certain logical sequence.

- Valid and verifiable – This concept implies that whatever one concludes on the basis of the findings is correct, and can be verified by any possible others.

- Empirical – This means that any conclusions drawn are based on hard evidence gathered from the information collected from real-life experiences or observations.

- Critical – Critical scrutiny of the procedures used and the methods employed is crucial to a research inquiry. The process of investigation must be fool-proof and free from any drawbacks. The process adopted and the procedures used must be able to withstand critical scrutiny.

4.2.2 Understanding the research design

Msweli (2011: 58) defines the research design as a plan for how to go about addressing the research questions. Kumar (2011: 94) views the research design as "a plan, structure and strategy of investigation, so conceived as to obtain answers to the research questions or problems". The plan is the complete scheme or programme of the research. It includes an outline of what the investigator will do when examining the hypotheses, and their operations, in relation to the final analysis of the data.

Research design has two main functions. The first relates to the identification and/or the development of procedures and the logistical steps required to undertake a study. The second emphasises the importance of quality in these procedures to ensure their validity, objectivity and accuracy (Kumar, 2011: 94). Hence, through a research design one:

- Conceptualises an operational plan to undertake the various procedures and tasks required to complete the study; and one must

- Ensure that these procedures are adequate to obtain valid, objective and accurate answers to the research questions (Kumar, 2011: 94).

Kothari (2004: 33) emphasises that a good research design is often characterised by adjectives like flexible, appropriate, efficient, and economical. Generally, the design which minimises bias and maximises the reliability of the data collected and analysed is considered to be a good design.

4.3 THE RESEARCH APPROACH

A research approach is a perspective to research held by a community of researchers. This is based on a set of shared assumptions, concepts, values, and practices. There are three major educational research approaches that a researcher could make use of; these are: The quantitative research, the qualitative research, and a mixed research approach (Johnson & Christensen, 2010: 31).

4.3.1 Quantitative research

Johnson and Christensen (2010: 33) explained that quantitative research relies on the collection of quantitative data (Example, numerical data). In addition, this approach primarily follows the confirmatory scientific method, because its focus is on hypothesis-testing and theory-testing. Quantitative researchers consider this approach as being of primary importance – to state one's hypotheses, and then test those hypotheses by way of the empirical data – to see if they are supported.

Basit (2010: 17) viewed this approach as one in which the investigator primarily uses post-positivist claims for developing knowledge (Example, cause-and effect-thinking, reduction to specific variables and hypotheses and questions, the use of measurement and observation, and the test of theories). These approaches all employ strategies of inquiry, such as: experiments and surveys, and the collection of the data by means of predetermined instruments that will yield statistical data.

4.3.2 Qualitative research

Qualitative research relies on the collection of qualitative data (Example, non-numerical data, such as words and pictures). This method primarily follows the exploratory scientific method; and it is used when little is known about a topic or phenomenon, and when one wants to discover or learn more about a topic. It is commonly used to understand people's experiences, and to express their perspectives (Johnson and Christensen 2010: 33).

Basit (2010: 16) defines qualitative research as any type of research that produces findings not arrived at by means of statistical procedures, or other means of quantification. This approach is based on the premise that the social world is very different from the natural world; and what we see is not necessarily the truth.

4.3.3 Mixed research

Mixed research involves the mixing of quantitative and qualitative research approaches (Johnson and Christensen 2010: 33). Basit (2010: 17) went on to state that, in a mixed research, the researcher tends to base any knowledge claims on pragmatic grounds (For example, consequence-oriented, problem-centred and pluralistic). It employs strategies of inquiry that involve collecting the data: either simultaneously or subsequently to best understand the research problems. The data collection also involves gathering both numeric information, as well as text information.

Johnson and Christensen (2010: 17) suggested that the exact mixture that is considered appropriate would depend on the research questions, and the situational and practical issues facing a researcher. Similarly, Basit (2010: 17) concluded that this approach is increasingly being favoured by educational researchers. However, it does not suit every research problem.

4.4 THE APPROPRIATE RESEARCH APPROACH

The objective of this study is to establish how the management of Namibian small and medium-sized enterprises could effectively use financial-statement analysis as a tool for measuring the performance of their organisations. In order to understand and obtain answers to the research study, the researcher adopted the mixed-research approach in finding solutions to the research problem. The researcher believes that this approach is the best in answering the research questions, and in giving robust interpretation of the results.

4.5 QUESTIONNAIRE DESIGN

According to Kumar (2011: 126), a questionnaire is a written list of questions, the answers to which are recoded by the respondents. In a questionnaire, the respondents read the questions, interpret what is expected, and then write down the answers. Panneerselvam (2004: 23) went on to state that a questionnaire consists of well-formulated questions to probe and obtain responses from the respondents.

The primary research tool used in this study to gather the primary data is the use of a self-administered questionnaire. As explained above, the use of a questionnaire enables the researcher to ask structured questions of the respondent, in order for the interpretation of the data to be conducted.

The questions in the questionnaire were extracted from the literature review and the application of financial statement analysis concept, which were discussed in Chapter 2 and Chapter 3. The questionnaire consisted mainly of questions relating to the use of financial statement analysis; and these questions where structured, according to the Likert format.

Kothari (2004: 100) points out the following advantages and disadvantages of using a questionnaire in a research study.

Advantages:

- There is low cost, even when the universe is large; and it is widely spread geographically;
- It is free from the bias of the interviewer; the answers are in the respondents' own words;
- The respondents have adequate time to give well-thought-out answers;
- The respondents, who are not easily approachable, can also be reached conveniently; and
- Large samples can be made utilised; and thus, the results can be seen as more dependable and reliable.

Disadvantages:

- The low rate of return of the filled-in questionnaires; the bias due to non-response is often indeterminate;
- It can be used only when the respondents are educated, and are co-operating with the researcher;
- The control over the questionnaire may be lost once it has been sent;
- There is a built-in inflexibility because of the difficulty of amending the approach, once the questionnaires have been despatched to the respondents;
- There is also the possibility of ambiguous replies, or the omission of replies altogether, to certain questions; thus the interpretation of these omissions becomes difficult;
- It is difficult to know whether the willing respondents are truly representative; and
- This method is slow.

4.6 SELECTION OF THE SAMPLE

The population for this study consisted of finance managers and accounting officers who work for Namibian small and medium-sized enterprises. These are individuals who are responsible for keeping accounting records for their organisations. Based on the nature of the topic, the study population was selected on a random basis from fifty-five various small and medium-sized enterprises operating in Namibia. The members of the entire population all had an equal chance of being selected.

4.7 ADMINISTERING THE QUESTIONNAIRE

The population of this study was approached by individually going to organisations' premises, in order for the researcher to introduce himself, and to obtain permission to send the questionnaire to the respondents. At first, the individuals were asked to provide their email addresses to the researcher. Then, once the questionnaire was approved, it was sent to the respondents via email. The email consisted of the covering letter that explains the purpose of the research and the questionnaire.

4.8 DATA ANALYSIS AND INTERPRETATION

The analysis and interpretation was performed on the data gathered from the questionnaires, in order to get an understanding of the current use of financial statement analysis in organisations. The data collected for this study were statistically analysed, and interpreted, by using graphs, charts and percentages.

4.9 CONCLUSION

This section has identified the different research approaches that can be used by the researcher. A mixed-research approach was found to be the most suitable approach for this study, because it would help the researcher to obtain the appropriate solution to the

research problem. The primary research tool that was used to gather the data for this study was the questionnaire. This was to enable the data to be statistically analysed.

The next chapter addresses the empirical findings of the research study.

CHAPTER FIVE

EMPIRICAL STUDY AND PRESENTATION OF RESULTS

CHAPTER FIVE

EMPIRICAL STUDY AND PRESENTATION OF RESULTS

5.1 INTRODUCTION

This chapter provides an in-depth discussion of the quantitative and qualitative empirical results that was collected for this research. It begins with a discussion of the biographical information of the respondents and the detailed information on the descriptive statistics of the study.

5.2 DISTRIBUTION OF THE SAMPLE FOR THE STUDY

Data for this research was collected by means of a self-administered questionnaire. The questionnaire was divided into two sections. Section A focused on the biographical details of the respondents, such as job title, years of experience in financial industries, academic as well as the professional qualifications that the respondents hold. Section B on the other hand addressed the research problem on how owners and management of Namibian small- and medium-sized enterprises can effectively use financial-statement analysis for evaluating the performance of their organisations.

A sample of 70 questionnaires was distributed to finance officers, managers and owners of small- and medium-sized organisation in various regions across Namibia. Only 37 questionnaires were returned; this represents a mere 53% of the sample.

5.3 BIOGRAPHICAL DETAILS OF THE RESPONDENTS

5.3.1 Job titles
The respondents hold the following titles, amongst others:

- Accountant;
- Finance manager;

- General manager;
- Assistant accountant; and
- Investment manager.

A total of 78.7% of the respondents are exclusively linked to managing the finances of their organisations where they are employed. The remaining 21.3% of the respondents are involved in both managing the finances and the general operations of their organisations.

5.3.2 Total years of financial experience

Figure 5.1 below shows the number of years of financial experience of the respondents. The bar graph illustrates that 38% of the respondents have 5 – 10 years of experience; whilst 8% have less than one year of experience. The majority of the respondents obtained financial experience in the private sector in contrast to the minority of the respondents whose experience came from the public sector, or from other areas.

Figure 5.1: Years of financial experience
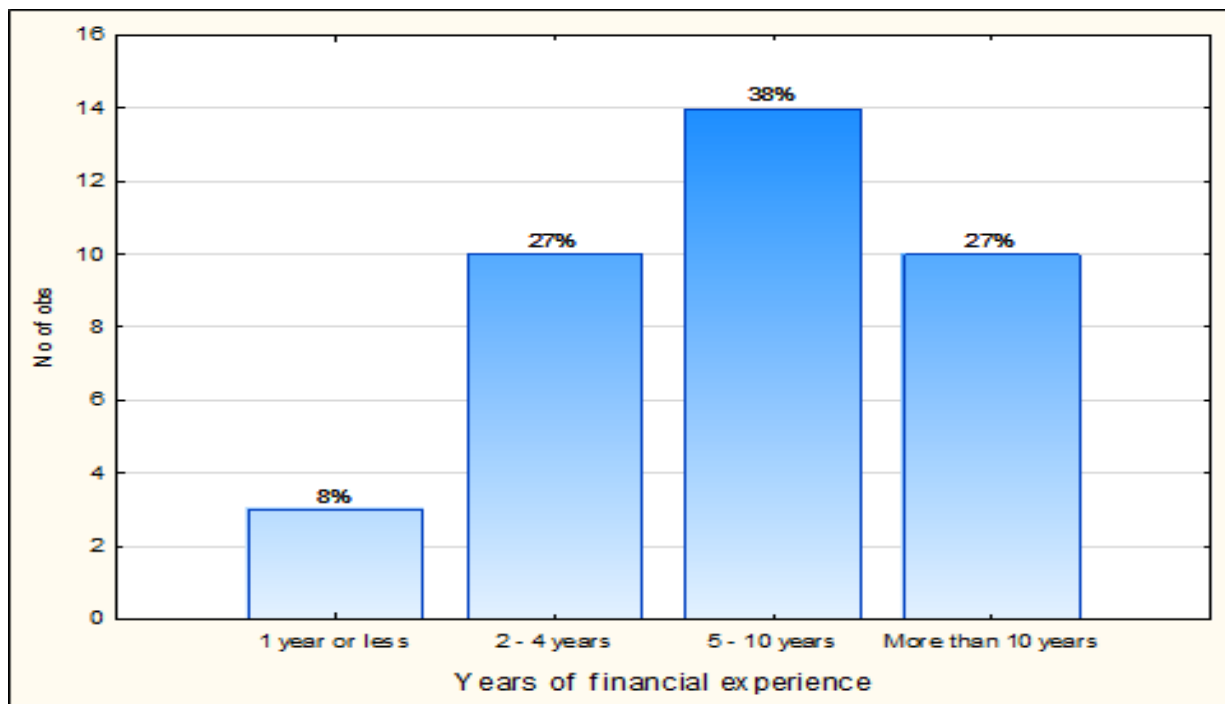
5.2.3 Highest academic and professional qualification

Figure 5.2 below shows the academic qualifications that the respondents hold. First degree holders represent the majority (49%) of the respondents that participated in the study; whilst the minority of 8% hold a diploma in finance, or in a related field. Master's degree holders and postgraduate diploma holders each represented 11% of the sample. Furthermore, the respondents verbalized that their qualifications were obtained from recognised institutions of higher learning within Southern African Developing Countries (SADC).

Figure 5.2: Highest academic qualification
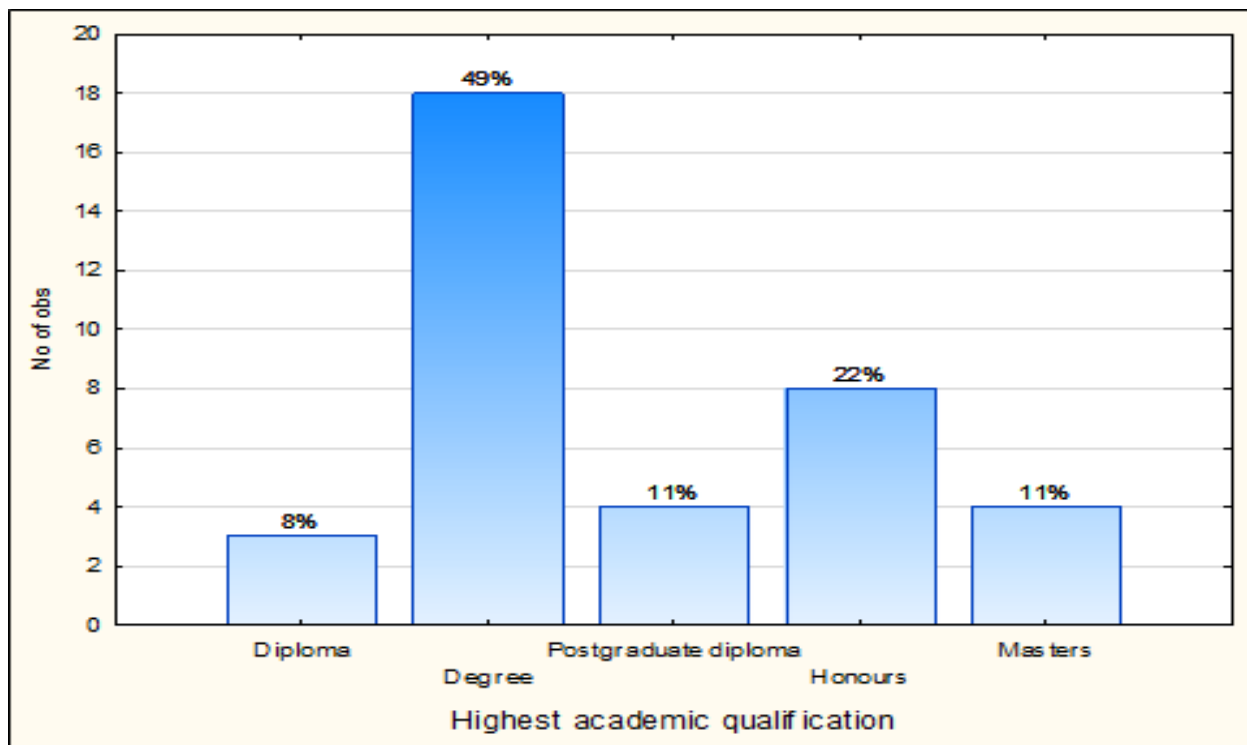
Figure 5.3 below summarizes the professional qualifications held by the respondents. The majority of the respondents, comprising 61%, are in possession of other professional qualifications from professional bodies such as: the Association of Certified Chartered Accountants (ACCA), Certified Internal Auditors (CIA) and Certified

Professional Accountants (CPA). Chartered Management Accountants (CMA) represented the minority of the respondent with a 6%. Chartered Accountants (CAs) and Certified Financial Analysts (CFAs) were represented equally by a percentage of 17%.

Figure 5.3: Professional qualifications
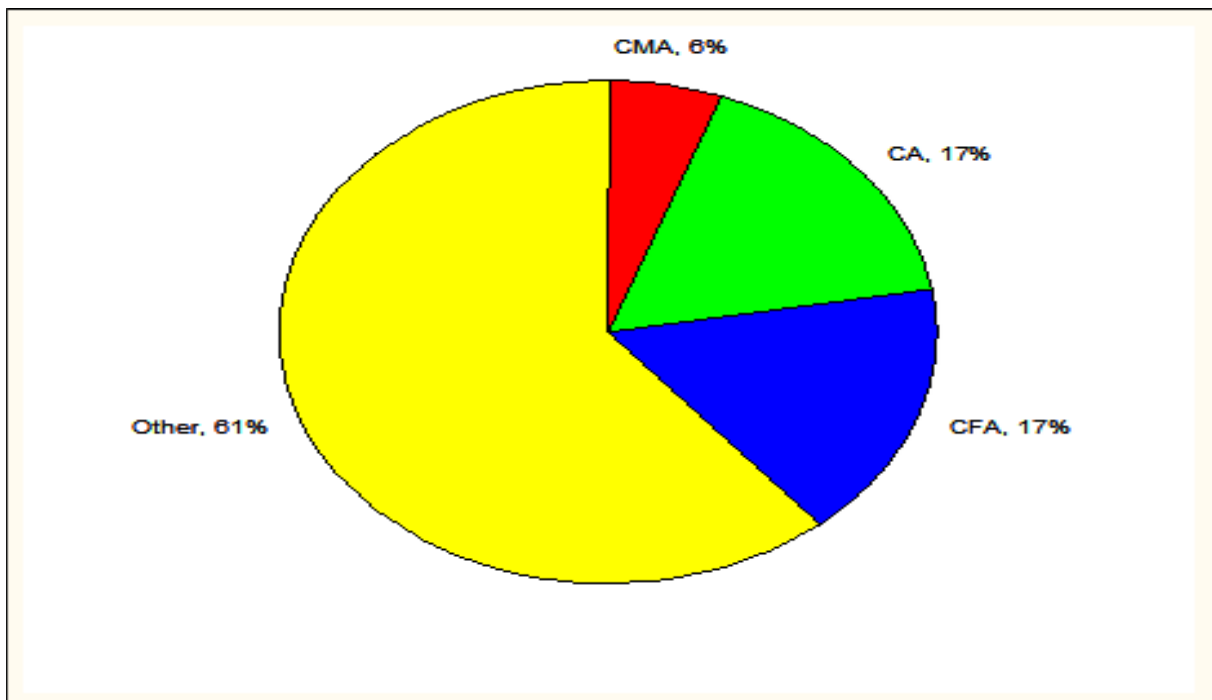
5.4 DESCRIPTIVE STATISTICS

The descriptive statistics will be discussed in the following section.

Table 5.1: Use of financial statement analysis in organisation

B: 2.1		
	Frequency	**Percent**
Yes	32	86.5
No	5	13.5
Total	37	100

Table 5.2: Duration of experience using financial statement analysis

B: 2.1.1		
	Frequency	**Percent**
1 year or less	1	3.1
2 - 4 years	10	31.3
5 - 10 years	8	25.0
More than 10 years	13	40.6
Total	32	100

It is clear from Table 5.1 above that 86.5% of the respondents indicated that they make use of financial statement analysis in order to evaluate the performance of their organisations. The same (32 respondents) 86.5% is detailed in Table 5.2 reflecting only the respondents who indicated "Yes" to using financial statement analysis for less than 1 year, and more than 10 years. It may be noted that only five of the respondents indicated that they do not make use of financial statement analysis; however this does not mean that they do not measure their organisations' financial performance. Methods of measuring organisation performance such as budget analysis and revenue reports were indicated by these respondents.

From the observations it can be concluded that financial statement analysis is the preferred way of measuring organisations' performance.

Table 5.3: Financial statement analysis compared to financial statements

B:2.13		
	Frequency	Percent
Using financial statements only is much better than using financial statement analysis	2	5.4
Using financial statements only is slightly better than financial statement analysis	3	8.1
No difference	6	16.2
Using financial statement analysis is slightly better than using financial statements only	5	13.5
Using financial statement analysis is much better than using financial statements only	21	56.8
Total	37	100

Adding to the discussion above in Table 5.3 affirms the presiding findings on the usage of financial statement analysis and financial statements. Hence, 26 respondents indicated that using financial statement analysis is much better, or slightly better, than using financial statements only. A total of five respondents indicated that financial statements are much better, or slightly better, than financial statement analysis.

The remaining respondents indicated that there is no difference between using financial statements, or using financial statement analysis only. This implies that these respondents feel that if they use financial statements or financials statement analysis, the results, or benefits from the process would be much the same.

Table 5.4: Use of financial statement analysis in the future

B: 2.1.3		
	Frequency	Percent
Undecided	2	40.0
Maybe yes	1	20.0
Definitely yes	2	40.0
Total	5	100

The respondents in table 5.4 above are those who do not use financial statement analysis. They stated amongst other reasons that some of their organisations are still small hence management do not see the need for using this tool.

Alternatively, about 76% of the respondents consider financial statement analysis to be a very important process for both small and medium-sized businesses, as highlighted by Table 5.5 below.

Table 5.5: The importance of using financial statement analysis

B:2.4		
	Frequency	Percent
Not important	1	2.7
Somewhat important	1	2.7
Important	7	18.9
Very important	28	75.7
Total	37	100

Only 2.7% of the respondents in Table 5.5 indicate that it is not important to use financial statement analysis. However, in Table 5.4 above shows that none of the respondents indicated that they would not use financial statement analysis in the future; although they admitted equally that they were undecided, or would definitely make use of financial statement analysis at a later stage. This is therefore an indication that there is a possibility that those organisations that do not make use of this tool would be likely to adopt it in the future hence the results slant more towards definitely yes than definitely no. It may thus be assumed that there is no relationship between the organisations that are currently not using financial statement analysis and the importance thereof; because all five of the respondents that indicated that they do not use the tool, would have indicated that financial statement analysis is not important.

Table 5.6: Other tools to monitor the performance of organisations

B:2.1.4		
	Frequency	Percent
Yes	11	29.7
No	26	70.3
Total	37	100

Table 5.6 above informs that most of the respondents (70.3%) do not have other tools to use for evaluating the performance of their organisations. This is a clear indication that financial statement analysis is the most commonly available tool used. The rest of the respondents stated that they make use of other evaluation tools. In the open ended question respondents clarified that these other tools differ in the way that they measure specific areas of organisations' finances according to the need of the organisation – compared to financial statement analysis. The stability of the organisation is one other way of measuring the performance of the organisation. The researcher noted that those other tools have some characteristics which are similar to financial statement analysis for evaluating the organisation's performance, as explained by the respondents.

Table 5.7: Value-addition to an organisation's decision-making

B: 2.2		
	Frequency	Percent
Neutral	2	5.4
Agree	6	16.2
Strongly agree	29	78.4
Total	37	100

It is clear from Table 5.7 above that most of the respondents (94.6%) agreed or strongly agreed that financial statement analysis would add value to an organisation's decision-making ability. Only two of the respondents (5.4%) were neutral with regard to value-addition by financial statement analysis.

Table 5.8: Reliability of the results

B: 2.3		
	Frequency	Percent
Unreliable	1	2.7
Neutral	2	5.4
Reliable	15	40.5
Very reliable	19	51.4
Total	37	100

Table 5.8 echoes similar sentiments as Table 5.7 with respect to respondents' neutrality of the reliability of the results. Only two respondents (5.4%) were neutral about the reliability of the results in comparison to 34 respondents (91.9%) who felt that the results were either reliable or very reliable. This is thus yields similar findings presented in Table 5.7 above. This means that there is a relationship between the value added by financial statement analysis in decision-making and the reliability of the results.

Referring to Table 5.5, the researcher is of the opinion that the respondents who indicated that financial statement analysis is not important were the same respondents who had indicated that financial analysis would yield unreliable results.

Table 5.9: Preparation of financial statements complying with International Financial Reporting Standards (IFRS)

B:2.5		
	Frequency	Percent
Yes	34	91.9
No	3	8.1
Total	37	100

Table 5.10: Use of audited financial statements

B:2.6		
	Frequency	Percent
Never	4	10.8
Sometimes	15	40.5
Always	18	48.6
Total	37	100

Table 5.11: Party that audit financial statements

B:2.7		
	Frequency	Percent
Internal party	2	5.4
External party	25	67.6
Both parties	10	27.0
Total	37	100

The majority (91.9%) of the respondents indicated that they prepare financial statements that comply with IFRS. The numbers of organisation that comply with IFRS (34) were almost the same as the number of organisation (33) who sometimes and/or always uses the audited financial statements. Respondents revealed that audited financial statements are mostly prepared by external parties. However, almost 30% of the financial statements are prepared by both parties. It is expected that the respondents who indicated that they do not comply with IFRS (3) are amongst those who never use audited financial statements.

Table 5.12: Techniques used in analysing financial statements

B:2.9		
	Responses	
	N	Percent
Common-sized analysis	16	24.6
Ratio analysis	27	41.5
Cash-flow analysis	22	33.8
Total	65	100

All 37 respondents in Table 5.12 were given the option to indicate all the techniques out of the 3 that they make use of in financial statement analysis. It can be noted that the majority of the respondents indicated that they make use of ratio analysis. However, common-sized analysis proved to be the least popular with 16 responses.

The primary reason organisations use financial statement analysis is because they measure the liquidity, profitability and the overall value of the organisation through conducting a ratio analysis. In Table 5.12 above is in support of this notion because it is clear that ratio analysis is the most preferred tool of measuring financial performance.

Table 5.13: Techniques that could be used to analyse financial statements in the future

B:2.9.1 Frequencies		
	Responses	
	N	Percent
Ratio analysis	2	40.0
Cash-flow analysis	3	60.0
Common sized analysis	0	0
Total	5	100

It is clear from Table 5.13 that the respondents who are not currently using financial statement analysis indicate that cash-flow analysis is the preferred technique with 60%. This could be because the majority of the respondents are small and medium sized businesses focusing primarily on cash generation of the business. The researcher extrapolated the results based on the sample that indicated the specific outcome. Interestingly, common-size analysis is the least-preferred technique to those who are using and to those who are not using Financial Statement Analysis (FSA), hence it scored 0% to those who are not using FSA and 24.6% to those businesses that are currently using FSA.

The discussion of the tables below will be conducted piece-meal; and referrals will be done to questions, in order to give meaning to the information gathered on specific questions.

The discussion below will comprise of those between 2.10 and 2.19, with the exception of 2.15 and 2.16.

Table 5.14: Performance of financial statement analysis techniques

B 2.10				
Items	**Mean**	**Minimum**	**Maximum**	**Std.Dev.**
Common-size analysis	3.86	2	5	0.82
Ratio analysis	4.16	2	5	0.87
Cash-flow analysis	4.19	3	5	0.74

Cash-flow analysis was indicated to be the best technique in determining how well an organisation has performed over time – with a mean of 4.19. This is substantiated by the fact that cash-flow analysis also has the lowest standard deviation of 0.74 in comparison to the other techniques with standard deviation score of 0.82 and 0.87.

Wegner (2007) ascertains that if the standard deviation is small compared to the mean, the variability is low and the confidence interval is small, making the estimation more precise. It is also evident that cash-flow analysis has a higher minimum of 3 compared to common-sized analysis and ratio analysis with minimum values of 2 each. This indicates that none of the respondents chose poor or very poor ratings for the cash-flow analysis technique.

Table 5.15: Evaluation elements of financial statement analysis

B 2.11				
Items	**Mean**	**Minimum**	**Maximum**	**Std.Dev.**
Profitability	4.30	1	5	0.91
Risks	4.16	1	5	0.99
Growth	4.14	1	5	0.86
Cash flows	4.35	3	5	0.79

The elements of evaluation support the discussion in Table 5.14 that cash-flow analysis is indeed the preferred technique; this is because it also has a mean score of 4.35, followed by growth with a mean score of 4.14. Furthermore, the variation in terms of the standard deviation shows that cash flows had the most precise estimation (0.79) compared to the other techniques with a standard deviation of 0.86, or more. A minimum of 3 was also recorded for the cash-flow analysis which highlights that the two lowest items on the Likert scale (Very little extent and little extent) were not selected for the cash-flow analysis technique. Risk, however, obtained a minimum of 1, with the highest standard deviation of 0.99. This is evidence to indicate that risk is the least-preferred evaluation element because it does not have precise estimation. This may however not be sufficient support that the phenomenon will always be true.

Table 5.16: Limitations of financial statement

B 2.12				
Items	Mean	Minimum	Maximum	Std.Dev.
Use of Past / Historical values	3.14	1	5	1.46
Limited predictive value	3.73	1	5	1.02
Limited qualitative information	3.54	1	5	1.22
Certain risks are not reported	3.73	1	5	1.33
Limited comparability	3.27	2	5	1.07
Stable-currency assumption	3.38	1	5	1.36
Unrecorded items	4.05	1	5	1.08
Judgment and estimation	3.78	2	5	0.92

From Table 5.16 above it can be seen that the respondents agreed with all the limitations of financial statements. Unrecorded items had the highest mean value of 4.05 while the Use of Past/Historical values had the smallest mean of 3.14. Use of Past/ Historical Data also recorded the highest standard deviation – meaning that there was a lot of variability in comparison to the other items. Only two items (Limited Comparability and Judgement and Estimation) did not select strongly disagree with limitations for financial statements although their standard deviations were fairly low compared to the other limiting factors (0.92 and 1.07), respectively.

Table 5.17: Comparison of results

Items	Mean	Minimum	Maximum	Std.Dev.
(2.14)				
Never(1) to Always (5)	3.84	1	5	1.40
Very bad (1) to very good (5)	4.14	3	5	0.63

The standards of comparison in Table 5.17 used by the respondents yielded results of Average to Very good, based on the minimum and the maximum recordings of between 3 and 5. A mean of 4.14 was, however, recorded – meaning that a minority of the respondents indicated average for the standard that was used for the purposes of comparison.

Adding to the discussion in Table 5.16, respondents agreed with a score of 3.14 or more that financial statement has limitations. This is supported by the fact that respondents regularly compare financial statement results with other results, or information with a mean score of 3.84, in order to make the results more meaningful and credible as indicated in Table 5.17.

Table 5.18: Limitation of financial statement analysis

Items	Mean	Minimum	Maximum	Std.Dev.
(2.17)				
Unusual transaction/ events	3.84	2	5	0.93
Generalization and summaries of information	3.73	1	5	0.96
Judgments	3.89	2	5	0.74
Changes in the economic environment	3.89	1	5	1.05

The two limitations with the lowest standard deviations also show a higher minimum of 2, meaning that they did not strongly disagree that unusual transactions/ events and judgements are a limitation of financial statement analysis. Judgements also had the lowest standard deviation of 0.74, and recorded a mean of 3.89.

Table 5.19: Stages of financial statement analysis

Items	Mean	Minimum	Maximum	Std.Dev.
(2.18)				
Purpose and context of the analysis	2.54	1	5	0.93
Collection of data	2.78	1	5	0.95
Processing of data	2.38	1	5	0.98
Analyze/interpret the processed data	3.32	1	5	1.00
Communicate results and give recommendations	3.19	1	5	1.20
Follow-up	3.00	1	5	1.29

Table 5.20: Non-financial factors (Organisational goals)

Items	Mean	Minimum	Maximum	Std.Dev.
(2.19)				
Learning and growth	3.70	1	5	1.05
Customer Satisfaction	3.92	1	5	1.19
Internal-Business process	3.46	1	5	1.17

The majority of the stages of financial statement analysis presented either a moderate challenge, or less. Only two stages presented a more than moderate challenge, namely analyse/interpret the processed data (3.32), and communicate results and give recommendations (3.19). However, a high standard deviation was recorded for all the stages of financial statement analysis – meaning that the variability was high and the results were therefore consistent with the fluctuations in the mean.

Organisational goals were mostly used to compare the results when assessing the significance of financial results. Similarly, non-financial factors recorded high means of more than 3.46 – highlighting the fact that SMEs focus largely on non-financial factors to generate income. However, the standard deviations recorded for the non-financial factors were very high – meaning that the variability was high – rendering these responses reliable.

5.5 CONCLUSION

The results show that financial statement analysis is a valuable tool for evaluating an organisation's performance. In addition, there was no relationship that could be established between the importance of using financial statement analysis and organisations that do not use this tool. Finally, the high level of reliability of the results obtained in analysing financial statement yields more value addition to an organisation's decision-making potential.

The results from the fieldwork for this study have been presented and discussed in this chapter. The findings, recommendations, limitations and suggestions for future research will be discussed in the next chapter.

CHAPTER SIX

CONCLUSION, LIMITATIONS AND RECOMMENDATIONS

CHAPTER SIX

CONCLUSION, LIMITATIONS AND RECOMMENDATIONS

6.1 INTRODUCTION

It's important to the management of organisations to know how their organisation's has performed financially. This is done by using financial statements because they are the primary source of financial information. However, using financial statements alone to evaluate an organisation's performance is not sufficient and will not provide one with extensive information regarding its performance. To overcome this problem, management may use financial statement analysis which is used as a tool to measure the performance of an organisation. The correct usage of this tool will result in getting in-depth results on how an organisation has performed which will allow management to make better decisions for their organisation.

Management of Namibian small and medium-sized enterprises are faced by a challenge of not using financial statement analysis effectively. Hence, this initiated this research study. The purpose of this study has been to establish as to how financial statement analysis as a tool can be effectively used to evaluate the performance of Namibian small and medium-sized enterprises. In addition, the study aimed at achieving the following objectives: how financial statement analysis can effectively be used by management of Namibian SMEs; determining whether there are alternative tools which are able to measure the financial performance of Namibian SMEs; and finding ways by which management and owners of Namibian SMEs could effectively make use of other non-financial performance-measurement tools in order to ensure the growth of their organisations.

The current chapter gives the conclusion of the study. It begins by discussing the summary, followed by the findings which are addressing the objectives of the study.

Policy recommendation in light of the study objectives, limitation and recommendation for future research are also addressed.

6.2 SUMMARY OF THE STUDY

The main aim of the study involved analysing how the management of Namibian Small and Medium-sized Enterprises can effectively use financial statement analysis as a tool in evaluating the financial performance of their organisation.

The literature in chapter two focused on understanding what financial statements are, and why they cannot be used alone to analyse how an organisation has performed. Lastly, the chapter also looked at the techniques that can be used to analyse an organisation's performance.

The application of various techniques used in financial statement analysis such as: horizontal, vertical, ratio and cash flows analysis were addressed in chapter three. This chapter was then concluded with a framework of how one should carry out an effective analysis of an organisation's performance.

Chapter four discussed the research approach used in the study. A mixed approach was found to be suitable. Furthermore, the chapter highlighted the methodology that was used in collecting data and how the data will be analysed in order to give recommendations for the findings obtained.

Chapter five discussed and analysed the results obtained from the questionnaire. The results were statistically analysed using graphs and tables. The questionnaire was divided into two sections namely, section A and B. Section A analysed biographical details of the respondents and section B analysed the use of financial statement analysis amongst Namibian SME's.

6.3 SIGNIFICANT FINDINGS IN RESPECT OF THE RESEARCH OBJECTIVES

A summary of the findings are discussed in the light of the objectives of the study, these were indicated in Chapter one as follows:

1. This study will seek to establish whether financial-statement analysis can effectively be used by management of SMEs, in order to make sound business decisions.
2. Secondly, to determine whether there are any alternative tools which are able to measure the financial performance of SMEs.
3. Thirdly, to provide strategic ways by which management and owners of SMEs can effectively make use of other non-financial performance-measurement tools to ensure business growth.

6.3.1 Findings: Research objective 1

Literature suggests that Financial-Statement Analysis is the most commonly used tool by management for evaluating organisational performance. This was supported in the empirical research; where it was revealed that 86.5% of the respondents indicated that they make use of this tool. The study further reveals that the majority of the respondents who use financial-statement analysis have been using it for more than 10 years.

The researcher, therefore, concludes that this tool is the most reliable amongst other tools used to evaluate an organisation performance.

There is a strong link between the literature and the empirical findings in terms of the elements of evaluation. All four elements were deemed equally important as it appears in the literature. However, the data collected revealed that cash flow is better than the other three elements – because, according to the researcher, SMEs focus primarily on cash to ensure that there is continuity in their enterprise.

The most commonly used technique for analysing financial statements according to the field research is Ratio Analysis. Academic authors agree with this; and they include Cash-flow analysis as a secondary technique in financial-statement analysis. Common-sized analysis is the least-favoured technique; because this technique provides a trend on figures, rather than a detailed analysis of financial statements. Interestingly, those respondents who are currently not using financial-statement analysis would prefer to use cash-flow analysis in the future. The researcher believes that the reason why cash-flow analysis is preferred by respondents – who are not currently using financial analysis as a tool – is because cash is the back-bone of the business; and the management of these organisations is interested to see how their organisations are growing in terms of cash generation.

Most of the respondents prefer to compare the analysed results with the organisational goals. This is because management wants to see whether their organisational goals are being met or not.

The literature clearly shows that audited financial statements may be used when conducting financial-statement analysis. Table 5.9 indicates that most of the respondents prepare financial statements that comply with IFRS – a requirement that has to be met by the organisation. This is an indication that the majority of Namibian SME managers want reliable results from their financial statements. Interestingly, 10.8% of the respondents indicated that they do not use audited financial statements.

Furthermore, the study discovered that there is a relationship between the value added by financial-statement analysis and the reliability of the results. The researcher is of the opinion that those SMEs that do not use audited financial statements are primarily concerned with the cost implications that result from auditing financial statements. Moreover, another reason is that the Companies' ACT does not compel SMEs to have audited financial statements at the end of their financial period.

Analysing and interpreting the processed data and follow-up were found to be the most challenging stages of financial statement analysis in the literature. However, the empirical findings have shown that Communication and Recommendation also proved to be an additional challenge. Therefore, the researcher is of the opinion that the last three stages (analyse/interpret the processed data, communicate the results and give recommendations and follow up) of Financial-Statement Analysis are more challenging than the first three stages (purpose of the analysis, collection of data and processing of data) – primarily because these stages require expert knowledge in order to assimilate and communicate the results.

6.3.2 Findings: Research objective 2

The study indicated that most of the respondents do not have alternative tools to use for evaluating the performance of their organisations; and they are largely dependent on financial-statement analysis. However, some of the respondents indicated that they make use of alternative tools to evaluate their organisation's performance. Amongst the tools noted by respondents are: Budget analysis and Revenue reports. The researcher noted that these tools are similar to financial-statement analysis because they have similar characteristics like those of financial-statement analysis.

6.3.3 Findings: Research objective 3

In the literature, the researcher did not find a performance-measurement tool that was superior to financial-statement analysis. The majority of the respondents indicated that they do focus on non-financial performance-measurement tools.

However, in the literature, it was indicated that there should be a balance between financial and non-financial performance-measurement tools; because these tools both have an important role to play.

Financial-measurement tools provide symptoms of what is happening to the organisation's finances. Non-financial measurement tools provide evidence on what influences any financial fluctuations. It is, therefore, clear that SMEs in Namibia have a balanced view on financial and non-financial measurement tools; because all the aspects of the balanced score card (financial-statement analysis, learning and growth, customer satisfaction, the internal business process) are critical to the survival of the SMEs – simply because the market is flooded with business options – all of which are providing the same or similar services.

6.4 POLICY RECOMMENDATIONS ON THE RESEARCH FINDINGS

6.4.1 Recommendation: Research objective 1

The primary purpose of starting a business is to make profit. However, if cash flow is regarded as the only means of measuring performance, then it would be contrary to basic business principles. Businesses that have been in operation for many years are expected to have been profit-driven; and there needs to be an equal balance between the other focal areas of measuring performance: including risk, growth and cash flows.

There are various risks involved when SMEs fail to use audited financial statements. Much scepticism and doubt can arise when the annual results are presented to internal and external stake holders. Management can make wrong decisions when they consider unaudited financial statements in their decision-making. This may result in a decreased funding by investors and suppliers may not be willing to do business with those specific SMEs.

Therefore, the researcher suggests that in order for accurate financial-statement analysis to be conducted, all financial statements should be audited by an independent registered auditor.

It is important that those responsible for conducting financial-statement analysis have expert knowledge of the entire process. In order for the results to be accurate, a detailed analysis has to be done on every step of the process. The respondents indicated that the last three stages of financial-statement analysis prove to be quite challenging; hence, the researcher suggests that SMEs should appoint trained professionals to assist during the last three stages of financial-statement analysis.

The researcher also suggests that SMEs should outsource the entire financial-statement analysis; since this is not a process that is being done on a daily basis.

6.4.2 Recommendation: Research objective 2

Alternative tools that are used amongst some SME's focus only on specific financial areas, compared to financial-statement analysis that covers most of the financial-performance areas. In the literature, the researcher did not find any performance-measurement tool that is superior to financial-statement analysis. The researcher, therefore, suggests that organisations that use other tools to measure the performance of their organisations should try to incorporate financial-statement analysis as a tool when analysing the performance of their organisation.

6.4.3 Recommendation: Research objective 3

Organisations that are using financial-statement analysis can strengthen their performance evaluation by including the use of alternative methods which are Non-financial factors. Non-financial factors should be considered as important when measuring performance; since they provide financial personnel with practical evidence of what may have caused any change in their financial statements. The literature supports the above by indicating that there is a need for an organisation to have a balanced measurement between financial factors and non-financial factors.

6.5 LIMITATIONS OF THE STUDY

The researcher could not source any published information related to Namibian organisation on the topic being researched. Hence, there were limitations in supplying practical best practices on the topic, in a local context. When assessing relevant literature on practices in other countries, most authors focused exclusively only on four techniques that were used to analyse financial statements; while ignoring other techniques. This resulted in the study done being limited to the four techniques

6.6 RECOMMENDATIONS FOR FUTURE RESEARCH

Future researchers could look at how the effective use of financial-statement analysis is implemented amongst larger organisations in Namibia. This would result in the researcher getting more samples and more insight into other complex techniques of financial-statement analysis which were not covered under this research.

6.7 CONCLUSION

Financial statement analysis was found to be the common tool used in measuring the performance of the Namibian SME's. Organisations that use financial statement analysis prefer to use ratio analysis compared to other techniques such as: cash flows and common-sized analysis. Interestingly, cash flow analysis was found to be the better method of analysing the performance of Namibian SME's. The study also revealed that majority of management of Namibian SME does prefer to use audited financial statement when analysing their organisation's performance. The study also established that the last three stages of financial statement analysis (analyse/interpret the processed data, communicate the results and give recommendations and follow up) were found to be the most challenging. This was due to the fact that those stages need an expert in interpreting and giving recommendations that will help management to see were they need to improve.

The study also indicated that there are other alternative methods that are used amongst Namibian SME's to measure performance. These methods include: Budget analysis and Revenue reports. These tools were found to have the same characteristics as financial statement analysis. The study also established that there should be a balance in using financial and non-financial performance measurement tools because they are all deemed important. These findings are significant because they will add valuable contribution to the literature on financial statement analysis.

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Nelson Mandela Metropolitan University

for tomorrow

14 October 2013

Dear Sir/Madam,

Your view on the use of: Financial statement analysis among Namibian small and medium-sized enterprises

I am currently conducting a research project on the financial statement analysis of Namibian small and medium-sized enterprises. The research is being conducted in partial fulfilment of a Master's degree in Cost and Management accounting at the Nelson Mandela Metropolitan University.

The purpose of this research is to identify how the management of Namibian small and medium-sized enterprises can effectively use financial statement analysis in evaluating the performance of their organisations. In this research, financial statement analysis is defined as: A tool that examines the financial data of an organisation, and then converts those data into more useful information, in order to measure the performance of the organisation.

Your involvement in the survey would be highly appreciated; this will require you to complete a short questionnaire. Your response is very important, in order to determine how management of Namibian small and medium-sized enterprises can effectively make use of this tool. The names of the respondents will not be revealed; and all information will be treated with confidentiality.

Thank you for your assistance and willingness to make a valuable contribution to this research. Your completed questionnaire can be emailed back to me to the following address (see below).

Yours faithfully,

Helmut Namwandi

Cell: +2778 310 9963

E-mail: s213250640@nmmu.ac.za

STRICTLY CONFIDENTIAL

QUESTIONNAIRE

A SURVEY ON THE USE OF FINANCIAL-STATEMENT ANALYSIS IN EVALUATING THE PERFORMANCE ON NAMIBIAN SMALL AND MEDIUM-SIZED ENTERPRISES

Researcher: Helmut Namwandi

Supervisor: Professor P.J.W. Pelle

SECTION A

<u>BIOGRAPHICAL INFORMATION</u>

1.1	What is your job title?	

1.2	How many years of financial experience do you have?	
	1 year or less	2 – 4 years
	5 – 10 years	More than 10 years

1.3	What is the highest academic qualification do you hold?					
	Diploma	Degree	Post graduate diploma	Degree (Honours)	Master's	PHD

1.4	What professional qualification do you hold?			
	CMA	CA	CFA	Others

SECTION B

<u>INFORMATION ON FINANCIAL STATEMENT ANALYSIS</u>

2.1	Financial statement analysis is a tool that examines the financial data of an organisation, and then converts those data into more useful information, in order to measure the financial performance of the organisation. Does your organisation use financial statement analysis?	
	Yes	No
2.1.1	If yes, how long has your organisation been using this tool?	
	1 year or less	2 – 4 years
	5 – 10 years	More than 10 years

2.1.2	If no to 2.1 above, explain why your organisation does not use this tool?

2.1.3	If your organisation does not use this tool, would you like to use financial statement analysis in the future?				
	Definitely not	Maybe not	Undecided	Maybe yes	Definitely yes
2.1.4	Does your organisation use any other tool, apart from financial statement analysis in evaluating its performance?				
	Yes			No	
	If yes, please state how this tool is different from financial statement analysis and what is it called?				

2.2 To what extent do you agree or disagree that financial statement analysis will add value to an organisation decision making.

Strongly disagree	Disagree	Neutral	Agree	Strongly agree

2.3 How reliable do you think the results are which one obtains from the financial statement analysis in making decisions for the organisation?

Very unreliable	Unreliable	Neutral	Reliable	Very reliable

2.4 As a financial officer, how important do you see the use of financial statement analysis in evaluating the performance of organisations?

Not important	Somewhat important	Important	Very important

2.5	Does your organisation prepare financial statements, which comply with International Financial Reporting Standards (IFRS)?	
	Yes	No

2.6	When analysing the financial statements of your organisation do you use audited financial statements?		
	Never	Sometimes	Always
2.7	Who is responsible for auditing your organisation's financial statements?		
	Internal party	External party	Both parties

2.8	Do you consider financial statement analysis effective enough in measuring the performance of organisations?				
	Very ineffective	Ineffective	Average	effective	Very effective

2.9	There are different techniques used in financial statement analysis. Please indicate which technique or techniques you use. [Choose as many as are applicable to you]	
	Common-size analysis [Horizontal & Vertical]	Ratio analysis
	Cash-flow analysis	Others, Please state:
2.9.1	If you do not currently use any of the techniques, which one would you consider using? [Choose as many]		
	Common-size analysis [Horizontal & Vertical]	Ratio analysis	Cash-flow analysis

2.10 For each of the three techniques. How good do you think are they in providing information on how an organisation has performed?

		Very poor	Poor	Average	Good	Very good
1.	Common-size analysis [Horizontal & Vertical]					
2.	Ratio analysis					
3.	Cash-flow analysis					

2.11 One reason why financial statement analysis is performed is to evaluate critical financial aspects of the organisation. To what extent do you focus on each of the following elements when performing financial statement analysis?

		Very little extent	Little extent	Average extent	Large extent	Very large extent
1.	Profitability					
2.	Risks					
3.	Growth					
4.	Cash flows					

2.12 The following are limitations of financial statements in giving a true reflection of the organisation's performance. To what extent do you agree/ disagree that each of the following limitations hinders true reflection of an organisation's performance?

		Strongly disagree	Disagree	Neutral	Agree	Strongly agree
1.	Use of past / Historical values					
2.	Limited predictive value					
3.	Limited qualitative information					
4.	Certain risks are not reported					
5.	Limited comparability					
6.	Stable currency assumption					
7.	Unrecorded items					
8.	Judgement and estimation					

2.13 As a finance officer, do you think there is a difference in evaluating the performance of organisations using financial statements **only**? Compared to using financial statement analysis? Tick the statement below that you agree with.

Using financial statement only is <u>much better</u> than using financial statement analysis.	
Using financial statement only is <u>slightly better</u> than using financial statement analysis.	
No difference	
Using financial statement analysis is <u>slightly better</u> than using financial statement only.	
Using financial statement analysis is <u>much better</u> than using financial statement only.	

2.14 The financial results obtained from analysing financial statements need to be compared with other financial results, in order to see if these results are good, bad or average. Do you compare the result with other results or information?

Never	Rarely	Sometimes	Regularly	Always

2.15 Indicate which standards of comparison you would use when assessing whether the financial results obtained are as expected.

Intercompany data	Competitor data	Industry data
Organisation goals	Economic condition	Others, please state:

2.16 How would you rate the standard in 2.15 that you have chosen?

Very bad	Bad	Average	Good	Very good

2.17 The following are the limitations of using financial statement analysis. To what extent do you agree/ disagree that you are (negatively) affected by these factors?

		Strongly disagree	Disagree	Neutral	agree	Strongly agree
1.	Unusual transaction / events					
2.	Generalisation and summaries of information					
3.	Judgements					
4.	Changing in economic environment					

2.18 Analysing financial statements generally involve the following stages as listed. Please indicate how big challenge each of the following stages are when analysing financial statements?

		No challenge	Little challenge	Moderate challenge	Big challenge	Very big challenge
1.	Purpose and context of the analysis					
2.	Collection of data					
3.	Processing of data					
4.	Analyse / interpret the processed data					
5.	Communicate the results and give recommendations					
6.	Follow up					

2.19 Non-financial factors focus on factors that cause revenue to be generated in the organisation. Does your organisation focus on any of the factors listed below?

	Not at all	Slightly	Moderately	Largely	Extensively
Learning & growth					
Customer's satisfaction					
Internal business process					

2.20 Any comment?

Thank you for your valued input and time.