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A content analysis of defined benefit plans in the financial statements of South African listed companies

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ABSTRACT

Post-employment benefits under IAS 19 include defined benefit plans (DBP’s) and defined contribution plans. The accounting for defined contribution plans is fairly straightforward, since accrual accounting is applied and the employer entity’s legal or constructive obligation is limited to the amount the employer entity agrees to contribute to the defined contribution plan. In contrast, the accounting for DBP’s is complicated and provides a promise/guarantee of future benefits and the investment and actuarial risk of the plan lies with the employer entity.

The literature review indicated that accounting and presentation of DBP’s is complicated because of the long-term nature of the liability/asset that is raised for the plan. There are many uncertainties involved in estimating the liability as this involves looking into the future and making estimates and assumptions about the future. The literature also indicated factors such as the market performance of assets, and inaccurate or unrealistic assumptions and decisions that delay making payments to DBP’s affects the funding status. Actuaries and accountants differ somewhat in the roles they play in determining the amount for DBP’s, with accountants choosing the accrued benefit method.

The problem with DBP’s is that they are of a long-term nature and require estimates and assumptions to be made in calculating the DBP liability/asset. The long-term nature affects the adequacy of the liability/asset recognised for DBP’s and the related disclosure in the financial statements of large listed companies. The objective of the minor dissertation is to perform a content analysis on the presentation and disclosure of DBPs in the financial statements of a sample of Johannesburg Stock Exchange listed companies in South Africa. The research approach applied includes a broad assessment of the current status of DBP’s and defined contribution plans operated by the top 40 Johannesburg Stock Exchange (JSE) listed companies, followed by a quantitative and qualitative assessment on the disclosures provided by these companies’ financial statements.
The content analysis performed indicated that a significant number of the top 40 JSE-listed companies still have DBP’s and reflected net defined benefit liabilities on the Statement of Financial Position. However, the percentage of pension liabilities to total liabilities was small for these companies. The application of IAS 19 requirements before the amendments issued in 2011 did result in varied financial results, in particular the choice offered by IAS 19 for the treatment of actuarial gains and losses.

The quantitative assessment on the existence of disclosure for DBP’s indicated that a high proportion of companies provided the required disclosures. However, a small number of companies in the sample that did not provide the required information, which may have limited a user’s ability to interpret and analyse the DBP information.

The qualitative assessment performed on the accounting policy and the disclosure of principal actuarial assumptions for DBP’s indicated that there was a high quality of disclosure provided by companies in the sample. The information was easy to interpret and consistent with other companies that provided retirement benefit notes to the financial statements.

Key words: Actuarial assumptions, Accounting for defined benefit plans, Actuarial gains and losses, Defined benefit plans, Estimates and assumptions, Funding status.
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1.1 Background

The objective of International Accounting Standard 1 (IAS 1) *Presentation of Financial Statements* (IASB, 2012) is to set out the overall requirements for the presentation of financial statements, guidelines for their structure, and minimum requirements for their content. IAS 1, paragraph 125, requires an employer entity to disclose information about the assumptions it makes in its annual financial statements. These assumptions could include information about the future and other major sources of estimation and uncertainty. In the presentation and disclosure of post-employment benefits (expenses in Statement of Comprehensive Income and liabilities/assets in the Statement of Financial Position), management uses assumptions, as the benefits are of a long-term nature. The use of assumptions are inherent in determining the associated liability/asset of the employer entity for post-employment benefits, and therefore the disclosure of these assumptions is important for users to fully understand and to evaluate the impact on the employer entity’s annual financial statements.

IAS 19 *Employee Benefits* (IASB, 2011a) prescribe the accounting and disclosure of employee benefits. The employee benefits include short-term benefits, post-employment benefits, other long-term benefits, and termination benefits (see IAS 19 paragraph 8, (IASB, 2011a)) for the definitions of the different types of employee benefits). Short-term benefits are fairly simple to calculate, account for, and disclose in the annual financial statements, and follow the accrual concept to account for these benefits (an expense is recognised in the Statement of Financial Performance for services rendered, and either a liability or an asset in the Statement of Financial Position for amounts owing to the employee that are not yet paid, or amounts paid in excess of amounts owing). IAS 19 does not permit discounting in the calculation of short-term employee benefits, and there is no need to utilise actuarial assumptions due to the short-term nature of the benefits. These benefits includes wages, salaries, and short-term compensated absences, which are to be settled within 12 months of the employee rendering the related services and non-monetary benefits payable to current employees.
Post-employment benefits mainly include defined contribution plans (DCPs) and defined benefit plans (DBPs) and comprise benefits such as pensions, lump-sum payments, and medical benefits that are paid to or for employees after the employees have rendered a service. Under DCPs, the employer entity’s legal or constructive obligation is limited to the amount the employer entity agrees to contribute to the fund (the employer entity has no further liability to the members of the fund) (IASB, 2011a: IAS 19 paragraph 28). DBPs provide a promise or guarantee of future benefits and the investment and actuarial risk of the plan lies with the employer (IASB, 2011a: IAS 19 paragraph 30 (b)).

According to IAS 19 paragraph 50 (IASB, 2011a) DCPs are fairly straightforward to account for and disclose, since the normal accrual rules are applied and there are no further obligations for the employer entity to provide further benefits to the employees (there is no legal or constructive obligation to provide further benefits). In accounting for DBPs, a plan benefit formula is normally used to determine the amount of the promised benefit and hence, the cost to the employer. Therefore, the amount the employer pays to the fund is irrelevant in determining the cost to the employer. The DBP obligation could also change with reference to changes in the remuneration, life expectancy of employees (actuarial risks), and changes in performance on plan assets where the assets do not perform as expected, and the return is insufficient to cover the obligation (investment risks) (Menzefricke & Smeliauska, 2012; Ezra, 1980; Sandu, 2012).

The amount that is promised to the employee, which is determined using the plan benefit formula, can be a plan benefit asset or a plan benefit liability, depending on the variables in the formula. When the application of the formula results in a DBP asset, there are limitations placed by IAS 19 on the amount of the asset that can be recognised in the annual financial statements of the employer, and consideration is also given to the rules of the fund (where there is the possibility of a reduction in future contributions made by the employer).

Under IAS 19, paragraph 92 and 93 (IASB, 2009), options were available for the treatment of actuarial gains and losses for DBPs. Because of these options, it was not always possible for users of financial statements and analysts to compare results of
entities. Financial information cannot be comparable, even if companies apply the same accounting standards (Morais, 2008). Therefore, improvements were needed in pension fund accounting.

The International Accounting Standards Board (IASB) introduced improvements to IAS 19 in 2011 (IASB, 2011b; IASB, 2011c) as follows:

- The elimination of the option to defer the recognition of actuarial gains and losses, which is known as the corridor method. In the IASB’s view, this should improve the comparability and faithfulness of presentation of information for post-employment benefits
- The change in the presentation of changes in assets and liabilities related to DBPs, which includes remeasurements being presented in Other Comprehensive Income (OCI). This change will separate changes in remeasurements in defined benefits from the changes that arise from the day-to-day operations.
- The enhancement of disclosure requirements, and thereby providing improved information on DBPs and the associated risks to which entities are exposed.

Sir David Tweedie (IASB, 2011b), the chair of the IASB in 2011, commenting on the press release on the improvements of the accounting for post-employment benefits:

Many companies have defined benefit pension commitments entered into long ago that can now represent their largest single financial liability. The amendments to IAS 19 issued today will ensure that investors and other users of financial statements are fully aware of the extent and financial risks associated with those commitments, in particular by requiring the surplus or deficit of a pension fund to be shown in the financial statements. At the same time the amendments help to separate out the background noise of changes in pension liabilities from the underlying financial performance of the core business.

Based on Sir David Tweedie’s comments, the amendments made to IAS 19 are expected to ensure that the users of annual financial statements are aware of the financial risks related to commitments, by requiring the employer entity to disclose surpluses or deficits for pension funds in their reports. The amendment also brings
about a different approach when accounting for DBPs, which requires full recognition of the DBP liability/asset, making comparisons between companies more meaningful. Remeasurement changes in the DBPs liability/asset are recognised in OCI, thereby removing the background noise from the underlying financial performance of the core business.

Severinson (2008) discusses the impact that DBPs has on the financial results of exchange listed companies. Severinson (2008, 2) states

Comprehensive requirements for the reporting of pension obligations exist for exchange-listed companies that sponsor defined benefit pension plans. Pension plan defined benefit obligations can be one of the biggest liabilities that a company has on its balance-sheet, and as such, often receives particular attention from stakeholders, management, analysts and the press. Recent and proposed changes to accounting rules have introduced greater transparency and comparability between companies and countries to pension plan reporting, but also greater volatility to company balance sheets and earnings.

As noted by other authors (Severinson, 2008; Por & Iannucci, 2006; Menzefricke & Smiejauska, 2012), defined benefit obligations (DBO) or pension liabilities can be one of the biggest liabilities that an employer entity has on its balance sheet and due to the significance of this, users of financial statements place increased focus on this liability. Gains and losses on pension plans may have a substantial and sometimes overwhelming effect on a company’s bottom line (Por & Iannucci, 2006).

1.2 The research problem

This study is based on IAS 19 (IASB, 2009), before the amendments issued in 2011. The amended IAS 19 (IASB, 2011a) is effective for reporting periods beginning on or after 1 January 2013 (earlier application is permitted). The full effect of the amendments cannot be assessed as this information was not available when this study was being done. The amendments issued in 2011 did not change the uncertainty related to the calculation of the DBP liability/asset; this uncertainty still exists in the revised IAS 19 (IASB, 2011a).
In terms of IAS 19 (IASB, 2009), the basic principle is to recognise the expense related to employee benefits when the service is rendered by the employee. In the case of DBPs, the movement in the net DBP liability/asset is recognised as an increase or decrease in the expense (the movements include the service cost for the year, the interest expense on the liability, the return on plan assets, and actuarial gains and losses). The projected unit credit method used in IAS 19 to calculate the DBO is based on service rendered to date. The method to value the obligation for the promised value may result in valuation issues. The problems with DBPs are as follows:

- the uncertainties of estimates and assumptions used in the calculation of employee benefits; and
- the adequacy of the liability/asset recognised for DBPs, and the related disclosure in the financial statements of large listed companies.

**1.3 Aims and objectives of the study**

The objective of the study is to perform a content analysis of the presentation and disclosure of DBPs in the financial statements of a sample of South African listed companies to assess the appropriateness of such presentation and disclosure.

Based on the above objective, the following sub-objectives have been identified:

- to establish the number of companies that operate DBPs and DCPs from the sample of listed companies on the Johannesburg Stock Exchange (JSE);
- to establish the number of sample companies that have positive and negative balances;
- to assess the appropriateness and adequacy of the accounting policies used by companies;
- to assess the appropriateness of the disclosure supporting the amounts recognised in the statement of financial position;
- to assess the appropriateness of the disclosure supporting the income and expenses recognised in the statement of comprehensive income; and
- to assess the appropriateness of the disclosure of the estimate and assumptions used in the calculations.
1.4 Research Methodology

This study is a content analysis of DBPs under IAS 19 (IASB, 2009). A detailed description of the research methodology followed is provided in Chapter 3.

1.5 Motivation to conduct the study

The literature identified that DBPs are significant to most entities, in terms of size of the liability relative to the total liabilities of the employer entity (Severinson, 2008). There is significant focus on this liability by analysts and users of financial statements mainly due to DBPs being long-term in nature, and requiring estimates and assumptions that are used in the calculation of the liability. There have been many academic articles that provide opinions on the issues associated with DBPs (Sandu, 2012; Severinson, 2008; Morais, 2008; Morais, 2010; Easterday & Eaton, 2010; Bloom, 2013; Broadbent, Palumbo & Woodman, 2006; Beechy, 2009; Reid, 2010; Menzefricke & Smiejauska, 2012; Por & Iannucci, 2006; Adams, Frank & Perry, 2011; Whittington & Mcgeachin, 2003; Munnel, Aubry & Muldoon, 2008; Altmann, 2001). The issues indicate that the IASB’s amendments issued to IAS 19 in 2011 attempt to remove some of the inconsistency in presenting and disclosing DBPs (immediate recognition of actuarial gains and losses and consistent recognition for past service cost). The motivation to complete this minor dissertation arises from the issues identified in the literature, which created an interest in linking these issues to the content analysis. Findings from this minor dissertation could add to the existing literature in the area of post-employment benefits.

1.6 Compliance with ethical standards

This research study into employee benefits was conducted in an ethical manner and care was given to maintain ethical standards at all times during the choice of research methodology, the data collection process, interactions and confidentially of information obtained, analysis of data collected, and the writing of the research report.

The annual financial statements reviewed for the top 40 companies listed on the JSE were obtained from the company’s websites. These documents are publically available
on the companies' websites, and thus there has been no contravention of confidentiality issues in obtaining the information.

1.7 Structure of this study

Chapter 1: Introduction

This chapter provides an introduction into the post employee benefits, a general overview of the current status of accounting for DBP and DCPs in terms of IAS 19, the differences between post-employment benefits, the identification of the research problem and the research objectives of the study, description of IAS 1 where estimates are used in financial statements, and the structure of the study, with a brief description of the content of each chapter that the study will follow.

Chapter 2: Literature review

A literature review is presented on the theory underpinning the nature of DBPs and the accounting and presentation of pension information in the annual financial statements.

Chapter 3: Research methodology

This chapter provides the research methodology to be applied in answering the research question, reasons to support the methodology chosen, and the appropriateness. This chapter includes more detail on the methodology to be applied in this minor dissertation, the data collection methods, and the basis for selecting the sample of South African listed companies.

Chapter 4: Results chapter

This chapter includes the results of the content analysis performed on the presentation and disclosure of DBPs on the top 40 companies listed on the JSE. The results include a test for the existence of disclosure, and a qualitative assessment of the disclosure using IAS 19 (IASB, 2009).

Chapter 5: Conclusion
This chapter concludes on the work performed in the study and makes recommendations for future research.
Chapter 2: Literature review

2.1 Introduction to the literature review

The objective of this study is to perform a content analysis of the presentation and disclosure of DBPs in the financial statements of a sample of companies listed on the JSE. In order to meet the objective of the study, a review was performed of the existing literature in the area of post employee benefits classified in the following sections:

- The nature of DBP liabilities,
  - the long-term nature of DBPs’ obligation
  - the funding status of DBPs
  - the use of an actuary to value the DBO
  - risk management of DBPs
  - the shift from DBPs to DCPs.
- The pre-2013 treatment of DBPs under IAS 19 (IASB, 2009).
- Amendments to IAS 19 (issued in 2011).

An understanding of the current literature informs the content analysis that is performed in Chapter 4 of this study.

The reporting requirements in IAS 19 are different for DCPs and DBPs. IAS 19, paragraph 27, (IASB, 2011a) classifies post-employment benefits as either DCPs or DBPs, depending on the economic substance of the plan. This literature review focuses primarily on DBPs, since these types of plans are complicated and require estimates and assumptions that are used in the calculation of the liabilities, which looks into the future (Sandu, 2012) and contains much uncertainty. Also, DBPs are quite significant relative to the market capitalisation of an employer entity (Severinson, 2008). Because of the relative size of the DBP liability, it often receives attention from the users of the financial statements, such as stakeholders, analysts, and investors (Severinson, 2008). There was also a variation in options that were previously available under IAS 19 (IASB, 2009), to entities that operated DBPs (in particular the choice in the treatment of actuarial gains or losses). These variations posed challenges to analysts and users of annual financial statements when making meaningful comparisons between entities.
DCPs are easier to estimate and account for, as normal accrual accounting is applied in the calculation of the liability and presentation of the information (IASB, 2011a: IAS 19, paragraph 51).

2.1.1 The distinction between DCPs and DBPs

As a starting point for the literature review, it is important to distinguish between DCPs and DBPs. Each type of plan has characteristics that make the accounting and presentation requirements of IAS 19 different.

According to IAS 19, paragraph 28 (IASB, 2011a), DCPs are plans under which the employer entity’s legal or constructive obligation is limited to the amount the employer entity agrees to contribute to the fund. In DCPs, the employer may provide a matching amount to an employee’s contribution, but beyond this no further promise is made regarding post-retirement payments (Easterday & Eaton, 2010). The employer entity is not responsible to fund for the final balance of the employees retirement, and does not report on the status of the plan in its financial statements, except in reporting the effect of pension expenses when contributions are made (Easterday & Eaton, 2010).

The amount of post-employment benefits payable to the employee is determined by the contributions made to the fund (employer contributions and possibly employee contributions) and investment returns arising from contributions. IAS 19, paragraph 28, (IASB, 2011a) further confirms that the actuarial risk (the risk that benefits will be lesser than expected) and investment risk (the risk that assets invested will be insufficient to meet expected benefits) in substance, falls on the employee. The amount recognised as an expense is the amount payable to a defined contribution fund, and such contribution must be recognised as a liability to the extent that the contribution is still payable, or, as an asset if the amount paid exceeds the amount payable (normal accrual accounting is used) at the end of the reporting period.

Under DBPs (IASB, 2011a: IAS 19, paragraph 30 (a) and (b)), the employer entity is obligated to provide agreed benefits to current and former employees, and the actuarial risk and investment risk falls substantially on the employer (changes in these risks can
affect the employer entity’s obligation for DBPs). DBPs place most of the risk (market risk, longevity risk, etc.) on the employer entity (Sandu, 2012).

The obligation of the employer is based on benefits promised to the employee (Severinson, 2008; Bloom, 2013; Broadbent, Palumbo & Woodman, 2006) and represents a promise of the future (Easterday & Eaton, 2010). The amount promised is commonly based on a formula that is linked to an employee’s salary and term of service to the employer (Broadbent, Palumbo & Woodman, 2006). As the employer’s obligation is not limited to the amount that it agrees to contribute to the benefit fund, there is a legal or constructive obligation on the employer (IAS 19, paragraph 29, IASB (2011a)). In these cases, the plan benefit formula is not solely linked to contributions made by the employer and may require further contributions from the employer if the assets are insufficient to meet the benefits required. An obligation may also arise from guarantees or from informal practices that give rise to a constructive obligation.

2.2 The nature of DBP liabilities

This section of the literature review focuses on the long-term nature of DBPs’ liability/asset (with limited references to DCPs), and the estimates and assumptions that are used in the calculation of the DBP’s liability/asset. The discussion of the nature of DBPs include the funding status of DBPs, the risk management of these plans, and the trends or shifts from DBPs to DCPs.

2.2.1 The long-term nature of DBPs’ obligation

DBP (pension fund) liabilities/assets are of a long-term nature and a large number of long-range estimates must be made (Beechy, 2009; Reid, 2010; IASB, 2011b). The long-term nature of these liabilities/assets poses challenges in calculating and reporting them in the financial statements of entities, more specifically the accounting and reporting of DBPs (Beechy, 2009). The challenge arises because in order to calculate the liability at the reporting date, assumptions and estimates need to be made about the future (Menzefricke & Smiuliauska, 2012; Ezra, 1980). but the future is unknown when the service is being rendered (Easterday & Eaton, 2010). No one knows what the total extent of the liability will be until the last participant has exited (Ezra, 1980). Therefore,
determining the amount payable will involve projecting obligations into the future (Sandu, 2012). Actuaries perform the task of looking into the future and making assumptions about productivity, future wage increases, inflation, and life expectancy (Sandu, 2012). The actuarial assumptions comprise demographic assumptions (mortality rates, turnover, etc.) and financial assumptions (discount rates, future salary, etc.) as included in IAS 19, paragraph 76 (IASB, 2011a). In making estimates and assumptions about the future, there is a risk that the measurement of the liability could be incorrectly reported, as it is impossible to make accurate predictions about the future (Por & Iannucci, 2006).

The result of the use of many estimates about future salary levels, mortality rates, and employee turnover is that the measurement of a benefit obligation is not without significant risk (Sandu, 2012). The ultimate cost of a DBP is uncertain, and this uncertainty is likely to persist over a long period of time (IASB, 2011a; IAS 19, paragraph 66).

The DBP obligation is also highly sensitive to changes in interest rates (Beechy, 2009; Por & Iannucci, 2006). The measurement of the DBP obligation depends crucially on an interrelated set of interest rate assumptions, the discount rate for plan assets, and the interest rate for the present value of DBP obligations (Beechy, 2009). IAS 19 offers guidelines on the discount rate to be used (high quality corporate bonds are to be used (IASB, 2011a; IAS, 19 paragraph 83) but does not indicate exactly what rate to use, allowing flexibility with respect to the rate that should be used (Sandu, 2012). A choice between a high interest rate and a low interest rate affects the expense (Sandu, 2012). Earnings can be managed if a high discount rate is chosen with the purpose of lowering service costs and interest costs (Sandu, 2012; Adams, Frank & Perry, 2011).

The uncertainty in DBP accounting is often ignored through the use of averages (Menzefricke & Smeliauska, 2012). In their paper, the authors provide a method to model the uncertainty that relates to the risks associated with the funding status of DBPs. This method involves obtaining the probability distribution of the market value of the additional assets needed to cover the future benefit payments attributable to past service.
2.2.2 The funding status of DBPs

The funded status of a DBP is defined by Menzefricke and Smieliauska (2012) as the difference between the market value of the assets set aside to discharge the plan’s future actuarial obligations based on the present value of the obligations. The accounting for DBPs follows a similar approach in that the surplus or shortage in the fund is the difference between the plan’s assets and the DBO.

DBO is the term given by IAS to a company’s liability due to pension promises that have been accrued by current and past employees (Severinson, 2008). Plan assets comprise investments in stocks and bonds that bring dividends, interest, and appreciation in value, which forms the return on plan assets (Sandu, 2012). An overfunded DBP is when plan assets exceed the plan obligation, and an underfunded plan is when plan assets are less than plan obligations (Severinson, 2008).

Managing, accounting, and determining the funding status of DBPs can be extremely challenging (Easterday & Eaton, 2010). All accounting standards require the overfunded or underfunded pension amount to be reported on the face of the balance sheet or notes, but the basis used by actuaries to determine the funding status may differ from the accounting treatment (Beechy, 2009).

Beechy (2009) notes that accountants (IAS 19) have chosen the accrued benefit method (with salary projection) to achieve intercompany comparability. However, companies may choose any method for funding. For a user to know the funding status of a pension plan, the user must know the methodology and estimates used for both funding and accounting aspects (Beechy, 2009). He states that all actuarial methods are equally valid, and provides for the full funding of the pension obligation with only the pattern of contributions differing, not the final result.

Beechy (2009) discusses the three methods of actuarial valuations. The first method is the accumulated benefit method in which the benefit is based on current information (there is no future projection of salaries). The second method is the accrued benefit method where the cost of the benefit is based on estimated future salaries (salary projection—also used by IAS 19 to value DBPs). The principle in IAS 19 involves
projecting current salaries in order to calculate a future obligation, and using a discount rate to present value back to the reporting date. The third method is the level contribution method, which involves allocating the total projected cost as an annuity to achieve a uniform cost over the employee’s service.

There are three primary sources of pension plan funding problems: unexpected market performance for invested plan assets; inaccurate or unrealistic assumptions for interest rates or actuarial factors; and the decision to delay making cash payments to fund the plan adequately (Easterday & Eaton, 2010).

Regarding unexpected market performance, DBPs may become underfunded due to declining stock markets, declining interest rates (which increases the fund liability by reducing the discount rate), and increased life expectancy (Whittington & Mcgeachin, 2003). The probability of pension plans running out of assets before they run out of liabilities are high, because pension obligations are the largest obligations for most organisations (employer entities) (Menzefricke & Smieliauska, 2012). If a pension plan is underfunded, the employer entity may be asked to allocate money to restore the funding to an acceptable level (Sandu, 2012; Por & Iannucci, 2006).

Before the stock market plunge of 2000 to 2002, plans were well-funded, and by the end of 1999, the average plan was overfunded by 20% to 30% (Por & Iannucci, 2006). Between 2000 and 2002, both equity markets and interest rates fell, and with stocks comprising 60% to 70% of portfolio assets, the funded status of plans also fell, resulting in the employer entities making contributions to plans and reporting a plan expense (Por & Iannucci, 2006). After 2002 there was an improvement in the stock market until 2007. Previous studies (Severinson, 2008; Easterday & Eaton, 2010) looked at the funded status of sponsored DBPs and found that there was an improvement in the status in the years preceding 2007, and then there was a decline in 2008 due to the United States financial meltdown (Easterday & Eaton, 2010; Munnel, Aubry & Muldoon, 2008). The major reason for the improvement in the funded status can be attributed to strong market performance (Severinson, 2008).
Munnel, Aubry, and Muldoon (2008) looked at the effect of the financial crisis on the employer entity and the participants (employees). The authors conclude that if DBPs are to survive, their employer entities need to be able to accumulate excess reserves in good time, to serve as a buffer when trouble emerges.

Easterday and Eaton (2010) conducted a study on the funding status of private sector and public sector DBPs based on US companies. The authors noted that unless the US economy recovers quickly, allowing invested plan assets to grow significantly in a short space of time, many of the DBPs will be at risk of being unable to meet pension (DBP) obligations. Although this is referenced to the US economy, the principle of the effect of the economy on the funding status of DBPs is illustrated in their study.

In principle, participants (employees) in DBPs are sheltered from the effect of a financial crisis on retirement assets, and the benefits promised must be paid regardless of what happens to the assets in the employer’s pension plan (Munnel, Aubry & Muldoon, 2008), as there is a legal or constructive obligation that is created by DBPs (IASB, 2011a: IAS 19 paragraph 29). However, if the employer is affected by a financial crisis (affecting the core business) the employer’s ability to fund any shortfall in the DBP will be affected. Thus, participants (employees) in DBPs are not totally sheltered from the effects of a financial crisis.

The participants (employees) of DBPs may face insolvency risk if the employer declares bankruptcy when the DBP is not fully funded (Broadbent, Palumbo & Woodman, 2006). However, this risk is mitigated in some countries where there are agencies that take over the obligation of the bankrupt employer. Broadbent, Palumbo and Woodman (2006) cite the United States and United Kingdom, where agencies take over responsibility for making some portion of the promised payments).

**2.2.3 The use of an actuary to value the DBO**

IAS 19 paragraph 59 (IASB, 2011a) encourages, but does not require, an employer entity to employ a qualified actuary in the measurement of all material post-employment benefit obligations. The paragraph further notes that, for practical reasons, an employer entity may request a qualified actuary to carry out a detailed valuation of the obligation
Accountants who are charged with fairly presenting financial information about the pension plan’s (DBP’s) assets and obligations often rely on actuarial experts who conduct complex analysis to estimate the value of future obligations, present values, and expected returns on plan assets (Easterday & Eaton, 2010; Por & Iannucci, 2006). The valuation of a DBP is complex, as there are many factors that the actuary needs to consider (funding of the DBP, forecasting interest rates, returns, and consideration of the uncertainties of the future).

2.2.4 Risk management of DBPs

Over the past few years, there has been growing awareness of the risks associated with DBPs. Low interest rates, improving life expectancies, and volatile global stock markets have brought DBP risk-management to the forefront of corporate thinking (Reid, 2010) and affected the economic wellbeing of many DBPs (Barrie, Turnbull & McCulloch, 2005). Due to the long duration of pension liabilities, unforeseen market changes in the risks (low interest rates, improving life expectancies, and volatile global stock markets) can have a significant effect on the funding status of DBPs (Reid, 2010).

Other authors such as Broadbent, Palumbo, and Woodman (2006) also identified several risks (investment, longevity, inflation, portability, vesting, employer insolvency, fiduciary, etc.) associated with DBPs and DCPs, explained the risks, and identified who bears the risks (the employee or employer). In addition to the risks related to DBPs, employers have a fiduciary duty to their stakeholders, both retirees and active employees, to carefully invest and manage DBP assets (Easterday & Eaton, 2010). There are also barriers to effective risk-management (lack of up to date information on plan liabilities, inaccurate valuations, assets and liabilities reported separately, and lack of granular asset-liability data) (Reid, 2010). These limitations could hinder the effective risk-management of DBPs, if not managed appropriately.
The risks and barriers identified above must be managed appropriately. In practice, trustees are appointed to manage the DBPs (and DCPs) that are operated by an employer entity. The trustees provide a mandate to fund managers, which includes inter alia, the types of investments, the required returns, the riskiness of investments, fees, etc. In drawing up the mandate, trustees take into account the various risks identified in previous paragraphs. The returns and risks are then monitored by the trustees to ensure that the mandate is followed.

Traditionally, entities have focused on the management of investment risk (Reid, 2010). In recent years, entities have become increasingly aware that changes in pension plan deficits can be equally driven by changes in the DBP liability, the exposures being interest rate risk, inflation risk, and longevity risk (Reid, 2010). Liability-driven instruments (LDI) have become a key component of many pension plans’ risk reduction strategies, where long-term fixed-income instruments’ cash flows closely match the pension liability (Reid, 2010).

Reid (2010) suggests that there are other methods to manage pension (DBP) liability risk, and offers the example of transferring the entire pension liability to a life insurance company, but warns that there is a premium charged on the liability transferred. Reid also looks at using hedging or swap contracts as alternatives to remove risks of inflation and longevity.

2.2.5 The shift from DBPs to DCPs

Today, fewer and fewer companies offer DBPs because they are extremely costly in light of lower interest rates, and are volatile investment returns that resulted in DBP obligations soaring in recent years (Bloom, 2013). DBPs are suffering from several negative influences, namely increased longevity, demographic trends, and earlier retirement, which imply a longer period of retirement and a much more expensive pension (Altmann, 2001).

The advantages of DCPs are that the employer entity’s cost is known, the participant (employee) bears the investment risk, and the structure is simpler (Dent & Sloss, 1996). They identify cumbersome legislation, ease of integration with social security plans
(DCP-type plans), cost of DCPs, and easier planning as reasons for the trend from DBPs to DCPs.

The risks related to DBPs identified earlier in this chapter are linked to the shift from DBPs to DCPs. This trend of the movement to DCPs has been discussed in academic articles (Severinson, 2008; Easterday & Eaton, 2010; Dent & Sloss, 1996; Broadbent, Palumbo & Woodman, 2006; Altmann, 2001).

Despite the move towards DCP (from DBPs) that has been made by many companies (Easterday & Eaton, 2010), their legacy DBPs (plans that are closed to new entrants or winding down) and their obligations often remain on company balance sheets and continue to have financial effects (Severinson, 2008). The company sponsoring DBPs is also exposed to regulatory risk, that is, if there is underfunding of the pension plan, the sponsoring company may be asked to allocate money to restore the funding to an acceptable level (Sandu, 2012).

Broadbent, Palumbo, and Woodman (2006) document the shift from DBPs to DCPs. The study looks at trends in various countries, along with the factors that contribute to the shift. In their view, the factors contributing to the shift to DCPs are regulatory and tax changes, increasing cost of DBPs, labour mobility and changes in pension accounting. The authors conclude that in the trend from DBPs to DCPs, employees exposed to inflation risk, market risk, and longevity risk, which was previously borne by the employer entity. However, the authors note that employees are not doing well in managing these risks in making optimum asset allocations.

2.3 The pre-2013 treatment of DBPs under IAS 19, (IASB, 2009)

While salaries are usually paid in cash immediately, pension (DBP) obligations are accrued on the statement of financial position until the obligations are paid to the retiring employees or their beneficiaries (Sandu, 2012). The effect of this is that pension accounting is more complex, and it is important that the financial statement users are able to see the influence that pensions have on current and projected cash flows, earnings, assets, and liabilities (Beechy, 2009).
The objective of IAS 19 is to prescribe the accounting treatment and disclosure for employee benefits. The net DBP liability/asset is recognised as the difference between the DBO and the plan assets. Pre-2013, adjustments were made to the net DBP liability/asset to smooth the effect on profit or loss. The adjustments included the deferral of actuarial gains and losses (corridor method) and the deferral of past service cost. In contrast, the changes implemented in 2011 to IAS 19 requires that the full net DBP liability/asset (with limitations) should be recognised in the statement of financial position, and the effect of smoothing profit or loss is achieved by recognising certain remeasurements in OCI.

The pre-2013 treatment of DBPs is discussed in this section of the review, and the amendments issued in 2011 to IAS 19 are discussed in the next section (see 2.4).

**2.3.1 Calculation of DBPs’ liability/asset**

The net DBP liability is calculated by deducting the plan assets from the DBO. The net result from the calculation can be a surplus (the fair value of the plan assets are greater than the DBO), or a deficit (the fair value of the plan assets are less than the DBO). This net DBP liability/asset is recognised in the statement of financial position and the related movements in the Statement of Comprehensive Income (service cost, interest cost, return on plan assets, and actuarial gains and losses).

Although the net DBP liability/asset should reflect the commitment that an employer entity has with respect to DBPs, certain adjustments are made to the net DBP liability/asset because of smoothing (treatment of actuarial gains and losses), recognition of past service costs and the ceiling that is placed on the DBP asset (where applicable). These adjustments could result in variations in the recognition of the DBP liability/asset in the financial statements of employer entities, and therefore financial information cannot be entirely comparable (Morais, 2008).

IAS 19, paragraph 50(a), (IASB, 2009) provides the steps involved in accounting for DBPs. The employer entity must use an actuarial technique, the projected unit credit method, to estimate the ultimate cost to the employer entity of the benefits earned by employees. This process involves making estimates and assumptions (employee
turnover, mortality rates, salary increases, etc.) in order to calculate the benefit, which is then discounted back to the reporting period, since the obligation may be settled many years after the employee has rendered the related service. Interest is charged on the plan obligation in the statement of comprehensive income, and disclosed under the staff cost note.

Under IAS 19, paragraph 102 (IASB, 2009), the fair value of any plan assets is deducted in determining the amount recognised in the statement of financial position. This paragraph goes on to provide a way to calculate the fair value of assets where there is no quoted market price (the use of discounted cash flows to calculate the fair value of the asset). The return on plan assets comprises interest, dividends, and other revenue derived from the plan assets, including realised and unrealised gains or losses. Plan assets are reported net of administration costs and taxes. The expected movement in the value of the plan asset (expected returns) is recognised in the Statement of Comprehensive Income and disclosed as part of staff cost.

### 2.3.2 Actuarial gains and losses

As mentioned earlier in the introduction to this section, there are adjustments that are made to the net DBP liability/asset to smooth the effect on profit or loss. One such adjustment is the deferral of actuarial gains and losses (the corridor method). IAS 19, paragraph 92 (IASB, 2009), provided entities with options on the treatment of actuarial gains and losses for DBPs. These options included the deferral of actuarial gains and losses (the corridor approach), a systematic approach that results in faster recognition in profit and loss (which could be immediately), or the immediate recognition of the actuarial gains and losses in OCI.

The options provided by IAS 19 (IASB, 2009) provided employer entities with a choice of the amount and placement of actuarial gains and losses (Morais, 2010). The existence of different accounting policies for similar transactions may reduce the comparability of financial information and create a potential for managers’ opportunistic behaviour (Morais 2008). These options have added to the complex nature of DBPs
(pension accounting), and affect the user’s ability to assess an employer entity’s financial statements.

The corridor is the amount at which the net cumulative actuarial gains and losses at the end of the previous reporting period exceeded the greater of, 10% of the present value of the DBO at that date (before deducting plan assets), or 10% of the fair value of any plan assets, at that date. Calculated as the corridor, this amount is recognised over the average remaining working lives of the participants of the DBP (IASB, 2009: IAS 19, paragraph 93).

According to Morais (2008), the corridor method used to account for actuarial gains and losses has been justified, because the long period over which DBPs are held, gives the employer entity the opportunity to reverse or off-set some of the actuarial gains or losses. Using the corridor method to defer actuarial gains and losses could reduce balance sheet volatility (Beechy, 2009) by deferring the recognition of gains and losses that fell outside of the corridor (Donaldson, 2013).

**2.3.3 Past service cost**

The other adjustment that can be made to the net DBP liability/asset is the treatment of past service cost. Past service cost results from the change in the present value of the DBO from a plan amendment (when the employer entity introduces or withdraws a DBP, or changes the benefits payable), or curtailment (when an employer entity significantly reduces the number of employees covered by the plan). The past service cost could either be positive (when benefits under the plan increase), or negative (when benefits under the plan decrease). Past service cost is recognised as an expense on a straight-line basis over the average period until the benefits become vested (IASB, 2009: IAS 19 paragraph 96). If the past service cost has already vested following the introduction of the change to the DBP, an employer entity shall recognise the past service cost immediately. The amortisation of the past service cost until the benefit is vested, results in a deferral of the portion not yet vested. This treatment results in the DBP liability/asset not fully reflective of the employer entity’s commitments in the statement of
financial position, and makes comparisons between entities difficult, since not all entities will have past service cost that has been deferred.

2.3.4 Limit on DBP asset

If the net DBP is an asset (plan surplus), IAS 19, paragraph 58 (IASB, 2009), limits the amount that can be recognised in the statement of financial position. The amount is the lower of the amount of the deficit and the total of any cumulative unrecognised net actuarial losses and past service costs, and the present value of any economic benefits available in the form of refunds from the plan or reductions in future contributions to the plan. The discount rate that is used is the same rate used to calculate the present value of the DBO. This ceiling is placed to limit the value of the asset to its recoverable amount.

2.3.5 Result on the statement of comprehensive income

The adjustments that were allowed under IAS 19, (IASB, 2009) for the treatment of actuarial gains and losses, past service cost, and the limit placed on DBP assets made the comparability of financial statements difficult. These adjustments resulted in limited consistency between entities, even if the entities used the same accounting standard to account for the DBP. Paragraph 61 of IAS 19, (IASB, 2009) allowed the employer entity to recognise the current service cost, interest cost, expected return on any plan assets, actuarial gains and losses (according to the accounting policy), past service cost, and the effect of curtailments or settlements in profit or loss. Under IAS 19 (pre-2011 amendments), service cost, interest cost, and expected return on assets was recognised in profit or loss. In addition, IAS 19 (IASB, 2009) allowed actuarial gains and losses to be recognised in profit or loss or OCI, depending on the accounting policy applied by the employer entity.

2.3.6 Disclosure of DBPs

An employer entity shall disclose information that enables users of financial statements to evaluate the nature of its DBPs and the financial effects of changes in those plans during the period (IAS 19, paragraph 120 (IASB, 2009)).
Paragraph 120A of IAS 19 (IASB, 2009) further details the disclosure requirements in the financial statements. These disclosures include the accounting policy for the treatment of actuarial gains and losses, a description of the type of plan (DCPs/DBPs), a reconciliation of the balance for the DBO (service cost, interest cost, actuarial gains and losses, benefits paid, past service cost, etc.). A reconciliation of the plan assets (including the expected return on plan assets, actuarial gains and losses, contributions and benefits paid). The actuarial assumptions must also be disclosed (interest rate charged on DBO, expected return on plan assets, and mortality rates). The detail of this disclosure is incorporated in the development of the content analysis in Chapter 4.

### 2.4 Amendments to IAS 19 (issued in 2011)

As previously discussed in Chapter 1 and in 2.3 of this chapter, the IASB issued amendments to IAS 19 in 2011. The philosophy or thinking of DBPs has changed to one of a financial asset or liability (IASB, 2011a:BC75). The amendments do not allow for any adjustments or choices in the calculation of the DBP liability/asset, and the full liability/asset for DBPs are recognised in the Statement of Financial Position. The most significant changes are the immediate recognition of actuarial gains and losses and past service cost. Under the amendments, the service costs and interest costs are charged to profit or loss, and all other remeasurements are charged to OCI. The noise in the movement in the DBP liability/asset is recognised in OCI, and removes the volatility from profit or loss.

Pearcy (2011), KPMG’s global International Financial Reporting Standards (IFRS) Employee Benefits standard’s leader, said:

> The global economic crisis increased the focus on the off-balance sheet pension liabilities that can result from the corridor’s deferred recognition. The IASB’s proposal to eliminate this deferral received widespread support and mandating their recognition in other comprehensive income will increase comparability in this area. Actuarial gains and losses can be volatile and this presentation solution keeps that volatility out of net income and earnings per share.
Pearcy (2011) makes reference to the focus on off balance sheet liabilities (effectively deferred gains and losses from DBPs) and that the recognition in OCI will enhance comparability.

The amendments ensure that the financial statements provide investors and other users with a clear picture of the pension (DBP) commitments (IASB, 2011b). These amendments are effective for annual periods beginning on or after 1 January 2013, but earlier implementation is allowed.

2.4.1 Calculation and recognition of DBPs liability/asset (after the amendments)

The method to calculate the net DBP liability/asset has not changed with the issuance of the amendments to IAS 19 in 2011 (the projected unit credit method is used to calculate the DBO (IASB, 2011a: IAS 19 paragraph 57) as discussed in 2.3.1). The fair value of the plan assets are then deducted from the DBO to get to a net DBP liability/asset. The only change in the amended IAS 19 is the removal of the adjustments that are made to the DBP liability/asset (the corridor approach for the treatment of actuarial gains and losses and the allocation of past service cost over the vesting period is no longer allowed).

2.4.2 The calculation of the fair value of plan assets (after the amendment)

The use of IFRS 13, *Fair Value Measurement*, (IASB, 2011d) to measure the fair value of plan assets in the DBP is an amendment in IAS 19 (IASB, 2011a). IFRS 13 provides a framework for the measurement of fair value and disclosures on the measurement. However, the disclosure requirements under IFRS 13 do not apply to the fair value measurement of plan assets under IAS 19, since IAS 19 has specific disclosure requirements related to the plan assets (IASB, 2011a; IAS 19 paragraph 142).

2.4.3 Adjustments made to DBP liability/asset (actuarial gains and losses, past service cost, limit on DBP asset)

As mentioned earlier, the first significant amendment to IAS 19 was the removal of the corridor approach for the treatment of actuarial gains and losses and the introduction of the concept of remeasurements in DBPs. In the IASB’s view, the immediate recognition
provides information that is relevant to users, and provides a more faithful representation of the effect of DBPs on the employer entity (IASB, 2011a:BC70). The elimination of options also makes it easier for users to compare entities, since entities will have a consistent accounting treatment of actuarial gains and losses for DBPs. The immediate recognition could potentially result in volatility in the statement of financial position, but this will provide a complete picture of the commitments the employer entity has with respect to DBPs. Also, the employer entity may be more accountable to manage the volatility as a result of shifts in the net DBP liability/asset, thereby enhancing the risk management of DBPs.

The second significant amendment to IAS 19 related to past service cost. Under IAS 19, paragraph 103 (IASB, 2011a), an employer entity shall recognise past service cost as an expense at the earlier of when the plan amendment or curtailment occurs, or when an employer entity recognises related restructuring costs (under IAS 37). The treatment of past service cost under the amended IAS 19 differs to the previous version of IAS19 (see 2.3.3, which allocated the past service cost over the vesting period). The amendment results in immediate recognition of the cost (Bloom, 2013).

In the IASB’s (IASB, 2011a:BC156) view, the immediate recognition of unvested past service cost is consistent with the recognition of unvested current service cost as an obligation. The IASB acknowledged that if an entity recognised the unvested past service cost over the vesting period, the entity could change how much of the total expense is recognised, by changing the vesting condition and the vesting period. Any approach to attributing unvested benefits to periods of service is arbitrary, therefore the amendment to IAS 19 requires immediate recognition of past service cost.

The limit placed on the DBP asset has not changed under the amendment. IAS 19, (IASB, 2011a) still limits the amount of the asset that can be recognised in the statement of financial position. The asset recognised under paragraph 63 of IAS 19 (IASB, 2011a) should not exceed the aggregate of the present values of any refunds expected from the plan and any expected reductions from future contributions arising from the surplus (IASB, 2011a:BC101). This ceiling is placed to limit the value of the asset to its recoverable amount.
2.4.4 Remeasurements for DBPs in statement of comprehensive income

The amended IAS 19 requires staff cost and net interest to be recognised in profit and loss (disclosed under the staff cost note and financing cost notes respectively). All other changes (experience adjustments) are taken to OCI. This replaces the interest cost of the DBO and return on plan assets that were recognised in staff costs, with a single net interest component that is recognised separately in finance cost or income.

Under the amendment, a deficit will result in interest expense (and a surplus will result in interest income), reflecting the financing effect of the amount owed to or from the DBP. The net financing cost is disclosed in the finance cost note to the Statement of Comprehensive Income. This is a change from the previous approach in IAS 19 (IASB, 2009), where a deficit could result in finance income if the return on plan assets exceeded the interest cost on the DBO.

Remeasurement is a new component in the calculation of the DBP liability/asset under IAS 19 (IASB, 2011a) and includes changes in estimates (affecting the DBO) and fair value changes in plan asset. The basis of the change is that the net DBP liability/ asset is equivalent to a payable or receivable. As with a payable or receivable, the full amount is presented in the statement of financial position. In the IASB’s view, this approach is simpler, and better represents the underlying economics of the change. Also included in remeasurements, are changes in actuarial assumptions. As stated by Sir David Tweedie (IASB, 2011b) in Chapter 1, the amendments to IAS 19 help to separate out the background noise of changes in pension liabilities from the underlying financial performance of the core business.

The remeasurements (actuarial gains and losses) are included in OCI, which includes income items not contained in profit or loss, often because of their potential volatility (Bloom, 2013, Donaldson, 2013). Under the amendment, actuarial gains and losses will remain in OCI, not to be recycled into profit (Bloom, 2013). The IASB acknowledged that the Conceptual Framework and IAS 1 do not describe clear principles to identify where items should be recognised in OCI other than profit or loss. The IASB concluded
that the most informative way to present remeasurements with different predictive values is in OCI (IASB, 2011a:BC90).

2.4.5 Disclosure (after the amendments)

The Statement of Financial Position will reflect the full commitment related to DBPs (since actuarial gains and losses are recognised immediately). The Statement of Comprehensive Income is classified in three components based on the nature of the income or expense. The first component is staff costs, which include disclosure of expected return on plan assets, current and past service costs, benefits paid, and contributions made to the plan. The second component is net interest (finance cost), which is the net charge for the DBP liability/asset. The third component includes remeasurements (which includes all other changes to the DBP liability/asset, such as experience adjustments), which is recognised in OCI.

Under IAS 19 (IASB, 2009), the disclosure did not highlight the risks from DBPs that the employer entity operated. The amendments make it easier for users to assess the characteristics of an entity DBP, the amounts recognised in the financial statements, and the risks arising from the plans. IAS 19, paragraph 139 (IASB, 2011a), requires an employer entity to disclose the characteristics of the DBP, and a description of the risks to which the plan exposes the employer entity.

2.5 Conclusion on literature review

DBPs liabilities/assets are of a long-term nature. The challenge arises because in order to calculate the liability/asset, estimates and assumptions must be made about the future, which is uncertain. The uncertainty related to DBPs is likely to persist over a long period (until the last participant or beneficiary exits the plan). This involves making demographic assumptions and financial assumptions. Unforeseen market changes in the risks (low interest rates, improving life expectancies, and volatile global stock markets) can have a significant effect on the funded status of DBPs.

The funded status of a DBP is the difference between the market value of the assets set aside to discharge the plans future actuarial obligations, and indicates the surplus/deficit
in the DBP. An overfunded DBP is when plan assets exceed the plan obligation, and an underfunded plan is when plan assets are less than plan obligations. Factors affecting the funded status of a DBP include the market performance of plan assets, inaccurate or unrealistic assumptions, and decisions made to procrastinate, making cash payments to fund the plan adequately. Actuaries and accountants differ somewhat in the roles that each plays in determining the amount for DBPs, with accountants choosing the accrued benefit method (with salary projection) to achieve intercompany comparability. However, companies may choose any method for funding, since all actuarial methods are equally valid with only the pattern of contributions differing.

The calculation of the net DBP liability/asset is complex and actuaries are used to estimate the amount. The amount of the DBPs liability/asset on the Statement of Financial Position is normally significant or material, and there must be adequate risk management strategies for these DBPs. The associated risks with DBPs have resulted in a shift from DBPs to DCPs, and the factors contributing to the shift are regulatory and tax changes, the increasing cost of DBPs, labour mobility, and changes in pension accounting. With the shift to DCPs, employees are now exposed to inflation risk, market risk, and longevity risk, which was previously borne by the employer entity, and are not doing well in managing these risks.

Under IAS 19 (IASB, 2009), the net DBP liability/asset is recognised as the difference between the DBO less the plan assets. The projected unit credit method is used to determine the DBO. Pre-2013, adjustments were made to the net DBP liability/asset to smooth the effect on profit or loss. The adjustments included the choice for the treatment of actuarial gains and losses where companies had a choice to defer actuarial gains and losses (corridor approach), recognition in profit or loss, or recognition in OCI. The other adjustments that were permitted were the deferral of past service cost and the limit placed on the DBP asset that can be recognised. These adjustments affected the comparability of financial statements, since there could be variations in information (DBPs) presented in the financial statements.

The first significant amendment to IAS 19 requires the full commitment related to DBPs to be reflected in the Statement of Financial Position, which involves actuarial gains and
losses to be recognised immediately. The change requires the Statement of Comprehensive Income to be classified in three components, based on the nature of the income or expense. The first component is staff costs, which includes disclosure of expected return on plan assets, current and past service cost, benefits paid, and contributions made to the plan. The second component includes net interest (finance cost), which is the net charge for the DBP liability/asset. The effect of this change is that the DBP is viewed as an accounts payable/receivable and the interest charged on the payable/receivable. The third component will include remeasurements (which includes all other changes to the DBP liability/asset, such as experience adjustments), which is recognised in OCI, thereby removing the volatility in profit or loss.

The amendments also make it easier for users to assess the characteristics of an entity’s DBP, requiring an employer entity to disclose the characteristics of the DBP and a description of the risks to which the plan exposes the employer entity.

The second significant amendment to IAS 19 requires an employer entity to recognise past service cost as an expense at the earlier of when the plan amendment or curtailment occurs, or when an employer entity recognises related restructuring costs (under IAS 37). The immediate recognition of unvested past service cost makes the treatment consistent with other companies, preventing any arbitrary allocation of cost. This removes the choice that employer entities had with regard to the timing and amount of past service cost.

There was no change to the limit placed on the recognition of the DBP asset under the amended IAS 19.
Chapter 3: Research Methodology

3.1 Introduction

As stated in Chapter 1, the objective of the paper is to perform a content analysis of the presentation and disclosure of DBPs in the financial statements of a sample of South African listed companies. As previously listed in Chapter 1, the following sub-objectives have been identified:

- to establish the number of companies that operate DBPs and DCPs from the sample of listed companies on the JSE;
- to establish the number of companies in the sample that have positive and negative balances;
- to assess the appropriateness and adequacy of the accounting policies used by companies;
- to assess the appropriateness of the disclosure supporting the amounts recognised in the statement of financial position; and
- to assess the appropriateness of the disclosure supporting the income and expenses recognised in the statement of comprehensive income.

In Chapter 2, a literature review was performed in the area of post-employment benefits to assess the amount of literature in this area, and also to identify the issues that exist in the area of post employee benefits. The accounting requirements in terms of IAS 19 were also discussed, including amendments issued to IAS 19 in 2011.

In this chapter the research methodology for this study is discussed, including the sampling methodology to be applied, the research design, and the interpretation and presentation of the information collected.

3.2 Research methodology

The research methodology followed is a content analysis of the annual financial statements of a sample of JSE-listed companies, by reviewing the presentation and disclosure of the DBP and DCP information contained in these reports.
The JSE requires that listed companies report their financial results using IFRS as the reporting framework (interim and year-end reporting). Since IAS 19 is a standard issued by the IASB, JSE-listed companies must use this standard to report employee benefits granted to employees.

The content analysis comprised both quantitative and qualitative techniques. Kumar (2005:17) looks at the difference in quantitative and qualitative research methodologies. Quantitative methodology is more structured, where the emphasis is on a form of measurement, and is more objective. In contrast, qualitative methodology is unstructured or flexible in nature, with the emphasis on a description of variables, and the findings are more interpretative (subjective) in nature.

3.3 Sampling methodology

The top 40 companies (with the highest market capitalisation) were chosen as part of the sample for which the content analysis was performed. The annual financial statements for 2011 were obtained from the respective companies’ websites (these financial statements are publically available documents since the companies are listed). The year-end annual financial statements were used in the content analysis, as these reports include the full pension disclosures in the notes to the annual financial statements (interim financial statements include an abridged set of financial information). The year-end annual financial statements are also audited as opposed to the interim reports, which are reviewed by the auditors.

3.4 Research approach

As a starting point for the content analysis, a broad assessment was performed on the top 40 JSE-listed companies, a sample size of 40 companies (to assess the split between DBPs and DCPs and to get an overall indication of the status of the plans, see 3.4.1). A specific assessment was then performed on the companies that have DBPs to assess the existence of disclosures (quantitative assessment), and the quality of certain disclosures (see 3.4.2 and 3.4.3 respectively).
3.4.1 Broad assessment of the top 40 JSE-listed companies

A review was performed on the sample of the top 40 JSE-listed companies. The following was determined during the broad assessment of the sample:

- An assessment on the types of plans that was operated by the top 40 JSE-listed companies (DBPs or DCPs, or both DBPs and DCPs, or none).
- Where there are DBPs, an assessment of whether a defined benefit liability or asset was recognised in the Statement of Financial Position.
- For DBP liabilities, a percentage of the size of the liability relative to the total liabilities in the statement of financial position. The liability as a percentage of total liabilities was calculated per company, and an average for all companies that have DBPs was then be calculated. This approach was followed since companies report in different currencies (ZAR, GBP, US dollar) and also different denominations (millions, thousands).
- The companies’ accounting policy for the treatment of actuarial gains and losses (to assess what method was applied to account for actuarial gains and losses).
- The treatment of past service cost.

3.4.2 Specific assessment for the existence of the disclosure of DBPs

According to IAS, 19 paragraph 120 (IASB, 2009), an employer entity shall disclose information that enables users of the financial statements to evaluate the nature of the DBPs and the financial effects of the changes in those plans during the period.

The specific assessment was performed on the significant disclosure requirements of IAS 19 (IASB, 2009), and was performed on the 34 companies that have DBPs from the sample of 40 companies. The pre-2009 requirements of IAS 19 were used to assess the existence of disclosure because the amendments are effective for reporting periods beginning on or after 1 January 2013. The annual financial statements for this period were not available at the time this minor dissertation was being prepared.
A Yes/No/Not Applicable scale is used for the existence test of the 34 companies that have DBPs to establish whether the required disclosure was made. The following disclosures were tested for existence in the sample:

- general description of the type of plan;
- disclosure of reconciliations for DBPs (net DBP liability/asset, plan assets, and DBO);
- disclosure of funded and unfunded portion;
- disclosure in the Statement of Comprehensive Income (current service cost, interest charge, expected return on plan asset, actuarial gains and losses, past service cost, effect of curtailment, and effect of limitation on asset);
- fair value of DBPs assets per category;
- narrative description of the calculation of the expected value of DBPs’ assets;
- sensitivity analysis;
- disclosure of five-year history for DBPs;
- disclosure of expected payments for the next financial year for DBPs; and
- an overall assessment of the existence of disclosures.

### 3.4.3 Test for the quality of disclosure of DBPs

This section measured the quality of the DBPs’ disclosures in the annual financial statements (using IAS 19 (IASB, 2009)). A hierarchical scale was used to assess the quality of disclosure of DBPs in the sample. The scale included a range of three levels of quality, comprising perfunctory quality, standard quality, and excellent quality. The criteria applied for categorising the disclosures into the three levels are discussed in Chapter 4. The qualitative assessment is applied to the following:

- the company’s accounting policy used for DBPs; and
- the principal actuarial assumptions used at the end of the reporting period.
3.5 Interpretation of information obtained from the content analysis

The information obtained from the content analysis is included in Chapter 4 of this study. This includes summaries of the findings of the content analysis and include tables, and associated commentary to place the findings into context, with relevant links to the literature review performed in Chapter 2.

Finally, the research question is answered in Chapter 5 and a conclusion reached on this minor dissertation.
Chapter 4: Results

4.1 Introduction

The objective of this minor dissertation is to perform a content analysis of the presentation and disclosure of DBPs in the annual financial statements of the top 40 JSE-listed companies. The appropriateness of the presentation and disclosure of DBPs is assessed using IAS 19 reporting requirements.

The results from the content analysis performed are reflected in three parts as follows:

- The first part includes a broad assessment of the top 40 JSE-listed companies.
- The second part contains the findings of the specific content analysis (where the annual financial statements were tested for the existence of the required disclosures under IAS 19 (IASB, 2009)). A quantitative approach was applied in testing the existence of these disclosures.
- The third part includes a measure of the quality of the disclosures of DBPs in the annual financial statements (under IAS 19 (IASB, 2009)). A hierarchical scale is used to measure the quality of disclosure (discussed in Chapter 3).

4.2 Broad assessment of the top 40 JSE-listed companies

The broad assessment was performed to get an indication of the current status of DBPs and DCPs that are operated by the top 40 JSE-listed companies. This assessment informed the rest of the content analysis by guiding the sample size of companies that operate DBPs for the specific assessment (4.3) and the qualitative assessment (4.4). The broad assessment provided insights that linked back to the literature review performed in Chapter 2. The broad assessment comprised the following:

- types of post-employment plans operated by the top 40 JSE-listed companies (Table 4.1);
- the DBP liabilities/assets (Table 4.2);
- the value of pension liabilities as a percentage of total liabilities (Table 4.3);
- the companies’ accounting policy for recognising actuarial gains and losses (Table 4.4); and
- the accounting policy applied for past service cost (Table 4.5).

**Types of post-employment plans operated by the top 40 JSE-listed companies**

Companies can provide post-employment benefits in the form of DBPs and/or DCPs, or neither, requiring employees to manage their own retirement planning. The characteristics of DBPs and DCPs vary with each plan having a different cost implication and related impact on the financial statements of the company (see Chapter 2). Also previously discussed, under DCPs the amount is easily determinable and the amount paid by the company is expensed, and the company has no further obligation to the members. In contrast, DBPs use a defined benefit formula to calculate the amount of the promised benefit and the cost to the employer (and these can also be affected by changes in the actuarial risk and investment risk of the DBP).

The point of departure of this content analysis (Table 4.1) is to obtain an indication of the number of the top 40 JSE-listed companies that operate DBPs and/or DCPs, or neither.

**TABLE 4.1: Types of plans (DBPs and/or DCPs) operated by the top 40 JSE-listed companies**

<table>
<thead>
<tr>
<th>DCP</th>
<th>DBP</th>
<th>Both DCP and DBP</th>
<th>Neither nor DCP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of companies with respective plans</td>
<td>39 (98%)</td>
<td>34 (85%)</td>
<td>1 (2%)</td>
</tr>
</tbody>
</table>

Table 4.1 indicates that the majority of the top 40 JSE-listed companies have both DBPs and DCPs, with 1 company having neither a DCP nor a DBP. An interesting finding was that all companies that operated DCPs had DBPs.
As discussed in the literature review, fewer companies are offering DBPs because of the cost associated with these types of plans, influenced by lower interest rates and volatile investment returns, which resulted in DBPs’ obligations increasing (Bloom, 2013). The literature review also indicated a shift in companies offering DCPs (Severinson, 2008; Easterday & Eaton, 2010; Dent & Sloss, 1996; Broadbent, Palumbo & Woodman, 2006; Altmann 2001). The shift from companies offering DBPs to DCPs cannot be seen in Table 4.1 because the analysis was done over a single year. However, there were companies in the sample that had closed/winding down DBPs, which could indicate some change in the offering of benefits (where DCPs are offered to employees instead of DBPs).

It can be concluded from Table 4.1 that a significant number of the top 40 JSE-listed companies still have DBPs (34 of the 40 companies in the sample). The content analysis for the quantitative and qualitative analysis (4.3 and 4.4 respectively) was performed on the 34 companies that have DBPs.

**DBP liabilities and DBP assets in the Statement of Financial Position**

The 34 companies that have DBPs may have either a net DBP liability/asset in the Statement of Financial Position, or a combination of a DBP liability and a DBP asset. As discussed in Chapter 2, the funded status of a DBP as defined by Menzefricke and Smeliauska (2012), is the difference between the market value of the assets set aside to discharge the plan’s future actuarial obligations. The accounting for DBPs follows a similar approach in that the surplus or shortage (DBP asset or liability) in the fund is the difference between the plan assets and the DBO. Also as previously discussed, unexpected market performance of plan assets, unrealistic assumptions, and delays in making cash payments are sources of pension funding problems (which influences the funded status of DBPs). Therefore, it is relevant to assess the proportion of companies that have net DBP liabilities versus net DBP assets, which is performed in Table 4.2.
TABLE 4.2: DBPs’ liabilities and assets in the Statement of Financial Performance

<table>
<thead>
<tr>
<th>Net liability</th>
<th>DBP</th>
<th>Net DBP asset</th>
<th>No information provided</th>
</tr>
</thead>
<tbody>
<tr>
<td>31</td>
<td>2</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>91%</td>
<td>6%</td>
<td>3%</td>
<td></td>
</tr>
</tbody>
</table>

Percentage calculated over the 34 companies that have DBPs. The net DBP liability/asset was calculated based on the amounts recognised in the Statement of Financial Position.

Table 4.2 indicates that a significant number of companies have net DBP liabilities with a significantly smaller number of companies having net DBP assets.

As previously discussed, Munnel, Aubry and Muldoon (2008) noted that, in principle, participants (employees) are sheltered from the effect of a financial crisis on retirement assets, and the benefits promised must be paid regardless of what happens to the assets in the employer's pension plan (DBP). However, if the employer entity’s core business is affected, there could be implications on the ability of the employer entity to make the promised payments to participants. As discussed in Chapter 2, Sandu (2012) noted that an employer entity is exposed to regulatory risk (where there is underfunding of the pension plan (DBP), the sponsoring company may be asked to allocate money to restore funding to an acceptable level).

The value of the DBP liabilities to total liabilities

As previously discussed (Severinson, 2008; Por & Iannucci, 2006; Menzefricke & Smieliauska, 2012), DBO (pension liabilities) can be one of the biggest liabilities that an employer entity has on its balance sheet, and due to its significance, users place much focus on this liability. It is relevant to assess the significance of the pension liability to total liabilities in order to confirm or refute what the literature has stated (Table 4.3).
TABLE 4.3: Value of DBP liabilities to the total liabilities

<table>
<thead>
<tr>
<th>DBP liability</th>
<th>DBP liability as % of total liabilities (average)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,6%</td>
<td></td>
</tr>
</tbody>
</table>

The DBP liabilities were calculated as a percentage of total liabilities per company, and an average calculated for the 34 companies that have liabilities.

Table 4.3 indicates that DBP liabilities to total liabilities is 1,6% for the top 40 JSE-listed companies. This percentage is relatively small, and may be contrary to previous authors' statements that DBP liabilities are significant to the total liabilities in the Statement of Financial Position. However, the liabilities still remain in the Statement of Financial Position, and continue to have a financial impact, as noted by Severinson (2008).

It is also worth noting that there were five companies that had DBP pension liabilities that were greater than 5% of total liabilities, with the highest percentage of pension liabilities to total liabilities recorded at 7,4%.

However, consideration must also be given to the adjustments that are made in the calculating of the DBP liability/asset under IAS 19 (IASB, 2009), as these have a direct influence on the ultimate DBP liability recognised. The adjustments were made as a result of the options that were previously provided under IAS 19.

**Adjustments made in calculating the DBP liability/asset under IAS 19**

As discussed in Chapter 2, the adjustments made in calculating the DBP liability/asset include the deferral of actuarial gains and losses (the corridor method), the recognition of past service cost over the vesting period, and the limitation in recognising DBP assets. These adjustments limit the comparisons that can be made, since they affect the ultimate DBP liability/asset recognised in the Statement of Financial Position. These adjustments are discussed in the following sections.
The company’s accounting policies for recognising actuarial gains and losses

IAS 19, paragraph 92 (IASB, 2009), provided entities with options on the treatment of actuarial gains and losses for DBPs (which included the deferral of actuarial gains and losses (the corridor approach), recognition in profit or loss or the immediate recognition in OCI). The potential effect of these options is that companies accounting for the treatment of actuarial gains and losses vary, making comparisons between companies difficult and not entirely comparable (Morais, 2008). The accounting policies for the treatment of actuarial gains and losses used by the 34 companies that have DBPs are summarised in Table 4.4.

**TABLE 4.4: The companies’ accounting policies for recognising actuarial gains and losses**

<table>
<thead>
<tr>
<th>Accounting policy for recognising actuarial gains and losses</th>
<th>Deferral of actuarial gains and losses</th>
<th>Recognition in profit or loss</th>
<th>Recognition in OCI</th>
<th>No disclosure</th>
</tr>
</thead>
<tbody>
<tr>
<td>16 (47%)</td>
<td>6 (18%)</td>
<td>8 (23%)</td>
<td>4 (12%)</td>
<td></td>
</tr>
</tbody>
</table>

As seen in Table 4.4, the 34 companies that have DBPs apply different accounting policies for the treatment of actuarial gains and losses, which confirms the variation in choices for the treatment of actuarial gains and losses, as noted by Morais (2008).

16 companies choose the deferral of actuarial gains and losses, eight companies immediately recognise actuarial gains and losses in OCI, and six companies recognise actuarial gains and losses in profit or loss. There were four companies in the sample where there was inadequate disclosure in the accounting policies to assess how actuarial gains and losses were treated.
However, the IASB removed the options for the treatment of actuarial gains and losses by issuing amendments to IAS 19 in 2011, requiring the immediate recognition of actuarial gains and losses, so the full commitment is reflected in the Statement of Financial Position (see 2.4.3). The IASB expects this change to improve the comparability and faithfulness of information for DBPs. This change will have an effect on the 16 companies that defer actuarial gains and losses and the 6 companies that recognise actuarial gains and losses in profit or loss.

It can be concluded that there is a variation in the treatment of actuarial gains and losses, which is consistent with the literature. A significant number of companies chose to defer actuarial gains and losses (the corridor approach), followed by companies recognising actuarial gains and losses in OCI, and the least number of companies recognising actuarial gains and losses in profit or loss.

**Treatment of past service cost**

According to IAS 19, paragraph 97 (IASB, 2009), past service cost is when a defined benefit plan attributes benefits to past service, or introduces changes to benefits payable for past service. The change can result in an increase or decrease in benefits to employees. Such changes are recognised over the vesting period under IAS 19 (IASB, 2009). The treatment of past service cost is summarised in Table 4.5. and is discussed below.

**TABLE 4.5: Treatment of past service cost**

<table>
<thead>
<tr>
<th></th>
<th>Number of companies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recognised over vesting period</td>
<td>18 (53%)</td>
</tr>
<tr>
<td>Recognised immediately</td>
<td>4 (12%)</td>
</tr>
<tr>
<td>Not mentioned in the accounting policy</td>
<td>12 (35%)</td>
</tr>
</tbody>
</table>

Table 4.5 indicates that 18 companies recognise past service cost over the vesting period, and four companies recognise the cost immediately. The effect of recognising
past service cost over the vesting period makes comparisons between companies difficult. Each company can choose different placement and timing of the past service cost in profit or loss. The effect of this would be an adjusted DBP liability/asset in the Statement of Financial Position inconsistent with other companies. There were 12 companies that did not mention how past service costs are treated.

However, the IASB issued amendments to IAS 19 in 2011, requiring the recognition of past service cost as an expense at the earlier of the plan amendment or curtailment, or when an entity (company) recognises restructuring costs under IAS 37 (see 2.4.3). This amendment is expected to standardise the treatment of past service cost, thereby making companies treat the cost consistently, and enhancing the comparability.

4.3 Specific assessment-test for the existence of disclosures under IAS 19 (IASB, 2009)

This section looked at the existence of IAS 19 disclosures (pre the 2011 amendments) for 34 companies that operated DBPs. The findings were linked to the literature review performed in Chapter 2 (where applicable). An overall assessment of the existence of disclosures is included at the end of this section. The findings from the test for existence of disclosures are included as follows:

- general description of the type of plan (Table 4.6);
- disclosure of reconciliations for DBPs (net DBP liability/asset, plan assets and DBO) (Table 4.7);
- disclosure of funded and unfunded portion (Table 4.8);
- disclosure of total expense in profit or loss (Table 4.9);
- fair value of DBPs assets per category (Table 4.10);
- narrative description of the calculation of the expected value of DBPs’ assets (Table 4.11);
- sensitivity analysis (Table 4.12);
- disclosure of five-year history for DBPs (Table 4.13);
- disclosure of expected payments for DBPs for the next financial year (Table 4.14);
- an overall assessment of the existence of disclosures (Table 4.15).

**General description of the type of plan**

A general description should provide users with a basic explanation of the type of DBP that the company operates. The result of the companies that provided a general description of the type of plan is included in Table 4.6.

**TABLE 4.6: General description of the type of plan-DBP**

<table>
<thead>
<tr>
<th>General description included in the Retirement benefits notes</th>
<th>Number of companies</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>34 (100%)</td>
</tr>
</tbody>
</table>

Table 4.6 indicates that all 34 companies provided a general description of the DBPs. The information was included in the accounting policy or in the retirement benefit note to the financial statements. The overall description included the pension plan and medical plans, the names of the plans, the fact that the pension plans are governed by local regulations, and if the plan was closed to new employees, changes in group structures (mergers), and the new pension plans that were taken over.

**Disclosure of reconciliations for DBPs**

The disclosure requires reconciliations for changes in the plan assets and DBO in the retirement benefit note. In the IASB’s view, the reconciliations should provide information about the plan and should include amounts that have been deferred (IASB, 2009: BC85A(a)). The 34 companies that have DBPs were analysed for the disclosure of reconciliations for the net DBP liability/asset, DBO, and DBP assets (Table 4.7).
**TABLE 4.7: Disclosure of reconciliations for DBPs**

<table>
<thead>
<tr>
<th>Reconciliation of net DBP liability/asset, DBO and DBP asset</th>
<th>Number of companies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reconciliation of net DBP liability/asset, DBO and DBP asset</td>
<td>31 (91%)</td>
</tr>
<tr>
<td>No reconciliation disclosed</td>
<td>3 (9%)</td>
</tr>
</tbody>
</table>

Table 4.7 indicates that 31 companies provided reconciliations for the plan assets, DBO, and net DBP liability/asset, and three companies did not provide any disclosures.

The overall format for the reconciliations was standard, comprising the opening balance, movement in the balance, and the closing balance for the plan assets and DBO. The reconciliation for the movement in the fair value of plan assets included expected return on plan assets, actuarial gains and losses (where the corridor approach is applied), contributions, benefits paid, etc. The reconciliation for the movement in the DBO included current and prior service cost, interest cost, actuarial gains and losses (where the corridor approach is applied), contributions, benefits paid, curtailments, and other adjustments.

**Disclosure of funded and unfunded portion**

The DBO should be analysed into amounts arising from plans that are unfunded and plans that are wholly or partly funded. The disclosure of the DBO that is funded (where plan assets are set aside to discharge the plans future obligations (Menzefricke & Smiejauska (2012)) and unfunded status is relevant for users to assess the obligations that the company has for DBPs. The information should assist users in analysing the DBO that is funded, compared to the DBO that is unfunded. The 34 companies that have DBP were analysed for the existence of disclosures for the DBO (Table 4.8).
TABLE 4.8: Disclosure of funded and unfunded portion

<table>
<thead>
<tr>
<th></th>
<th>Number of companies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Companies with analysis of DBO</td>
<td></td>
</tr>
<tr>
<td>into funded /unfunded</td>
<td>31 (91%)</td>
</tr>
<tr>
<td>No analysis of DBO</td>
<td>3 (9%)</td>
</tr>
</tbody>
</table>

Table 4.8 indicates that 31 companies disclosed the analysis of the funded/unfunded status of the DBO, and three companies did not provide any analysis. There were certain companies that stated that the plans were unfunded in the accounting policy note (which was considered to be sufficient for the purposes of the content analysis).

**Disclosure of total expense in profit or loss**

The total expense recognised in the Statement of Comprehensive Income should include current service cost, interest cost, expected return on plan assets, expected return on reimbursive rights, actuarial gains and losses, past service cost, and effect of curtailments or settlements (IASB, 2009: IAS 19, paragraph 120A(g)). This information should assist users in identifying the items that were charged to profit or loss when analysing the company’s financial statements. The analysis of the 34 companies for the disclosure of the expense in profit or loss was performed and is included in Table 4.9.

TABLE 4.9: Disclosure of total expense

<table>
<thead>
<tr>
<th></th>
<th>Number of companies that disclosed information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Companies that disclosed total</td>
<td>28 (82%)</td>
</tr>
<tr>
<td>expense in profit or loss</td>
<td></td>
</tr>
<tr>
<td>Companies that did not disclose</td>
<td>6 (18%)</td>
</tr>
<tr>
<td>total expense in profit or loss</td>
<td></td>
</tr>
</tbody>
</table>
Table 4.9 indicates 28 companies that provided the disclosure of the charge to the profit or loss, and six companies did not provide any disclosure. The format was generally standard for the companies that provided the disclosure and included the information in a separate section of the retirement benefit note.

Of the six companies that did not provide a disclosure of the charge to profit or loss, three companies showed the move in the DBP liability as part of the note to the retirement benefit note. This disclosure was limited, and it would be difficult for users to assess the charge to the profit or loss.

**Fair value of DBPs’ assets per category**

In the IASB’s view, users need information about the plan assets in order to assess the level of risk inherent in the DBP (IASB, 2009: BC85A(b)). The disclosure on the categories of plan assets provides users with an indication of the riskiness of the types of plan assets (bonds, equities, etc.) and analysed in Table 4.10

**TABLE 4.10: Fair value of DBPs’ assets per category**

<table>
<thead>
<tr>
<th></th>
<th>Number of companies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disclosed the fair value of plan assets per category</td>
<td>22 (65%)</td>
</tr>
<tr>
<td>Did not disclose the fair value of plan assets per category</td>
<td>2 (6%)</td>
</tr>
<tr>
<td>No Assets-unfunded</td>
<td>10 (29%)</td>
</tr>
</tbody>
</table>

Table 4.10 indicates 22 companies that disclosed the categories of plan assets (including one company that did not disclose the plan assets for all DBPs). The disclosure of the fair value of plan assets varied, and included monetary amounts and percentage breakdown of types of assets. There were two companies that did not disclose the categories of plan assets, while 10 companies had unfunded DBPs (the disclosure was not applicable).
**Narrative description of the calculation of the expected value of DBPs’ assets**

This narrative description of the calculation of the DBPs’ assets is relevant, as this provides users with the information of the method companies use to calculate the expected return on plan assets. The plan assets are adjusted for changes in the expected value (either increases or decreases in value). Therefore, the method used to calculate the expected value enables users to make comparisons with other companies for consistency, and also to evaluate the reasonableness of such methods. The disclosure of the narrative description is analysed in Table 4.11.

**TABLE 4.11: Narrative description of the calculation of the expected value of DBPs’ assets**

<table>
<thead>
<tr>
<th>Description</th>
<th>Number of companies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disclosed the basis to calculate the expected return on plan assets</td>
<td>19 (56%)</td>
</tr>
<tr>
<td>Did not disclose the basis to calculate the expected return on plan assets</td>
<td>5 (15%)</td>
</tr>
<tr>
<td>No Assets-unfunded</td>
<td>10 (29%)</td>
</tr>
</tbody>
</table>

Table 4.11 indicates that 19 companies disclosed the basis to calculate the expected return on plan assets, and five companies offered no disclosure. The balance of the 10 companies DBPs were unfunded.

**Disclosure of a sensitivity analysis for medical plans**

In the IASB’s view, a sensitivity analysis is necessary because the effect of changes in a plan’s medical cost trends are difficult to assess (IASB, 2009: BC85A(c)). The sensitivity analysis is required for medical costs only, and provides an indication of the change in the DBP liability with a 1% increase and 1% decrease in medical costs. The existence of the disclosure of a sensitivity analysis for the 34 companies with DBPs is included in Table 4.12.
### TABLE 4.12: Sensitivity analysis

<table>
<thead>
<tr>
<th>Disclosed a sensitivity analysis for DBPs</th>
<th>Number of companies</th>
</tr>
</thead>
<tbody>
<tr>
<td>24 (71%)</td>
<td></td>
</tr>
<tr>
<td>Did not disclose a sensitivity analysis for DBPs</td>
<td>6 (17%)</td>
</tr>
<tr>
<td>No healthcare plans</td>
<td>4 (12%)</td>
</tr>
</tbody>
</table>

Table 4.12 indicates 24 companies disclosed a sensitivity analysis for DBPs that were medical plans. This disclosure included information on the impact of a 1% increase and decrease in medical inflation on the plan obligation and the staff cost. There were six companies that did not provide any disclosure on the sensitivity analysis. Four companies did not have healthcare plans.

**Disclosure of five-year history for DBPs**

This disclosure of a five-year history (under paragraph 120A (p) IAS 19 (IASB, 2009)) assists users in assessing the effect of DBPs on the company’s performance. In the IASB’s view, the trend information is useful and easier for companies to present the current financial statements (as these can be obtained from previous years), than for users to find the figures from previous periods (IASB, 2009: BC85E). The existence of the disclosure of a five-year history for DBPs is included in Table 4.13.

### TABLE 4.13: Disclosure of five-year history for DBPs

<table>
<thead>
<tr>
<th>Disclosed a five-year history for DBPs</th>
<th>Number of companies</th>
</tr>
</thead>
<tbody>
<tr>
<td>24 (71%)</td>
<td></td>
</tr>
<tr>
<td>Did not disclose a five-year history for DBPs</td>
<td>10 (29%)</td>
</tr>
</tbody>
</table>
Table 4.13 indicates that 24 companies provided a five-year history for the DBPs, while 10 companies did not provide the historical information. The five companies that did not provide information will make it difficult for users to obtain information, and may require users to access financial statements from previous years in order to source the information.

**Disclosure of expected payments for DBPs for the next financial year**

In the IASB’s view, information about contributions will provide useful information about the company’s cash flow that cannot be determined by other disclosures (IASB, 2009: BC85A(e)). This disclosure should assist users to assess the company’s ability to make contributions to DBPs in following financial years, and is included in Table 4.14.

**TABLE 4.14: Disclosure of expected payments for DBPs for the next financial year**

<table>
<thead>
<tr>
<th>Disclosed expected payments for DBPs for the next financial year</th>
<th>Number of companies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disclosed expected payments for DBPs for the next financial year</td>
<td>24 (71%)</td>
</tr>
<tr>
<td>Did not disclose expected payments for DBPs for the next financial year</td>
<td>10 (29%)</td>
</tr>
</tbody>
</table>

Table 4.14 indicates that 24 companies provided the amount of the expected payments in the next financial year, while 10 companies did not provide this disclosure. The lack of disclosure of expected payments decreases the ability of users of the financial statements to assess the capacity of the company to make the required payments to DBPs.

**Overall assessment of the existence of disclosures of DBPs**

Based on the test for existence performed on disclosure for DBPs in the financial statements in the previous section (Table 4.6 to Table 4.14), the following table (Table
4.15) summarises the findings. An average is calculated for the overall existence of disclosures for DBPs.

The test for the existence of significant disclosures under IAS 19 (IASB, 2009) was performed on the 34 companies that have DBPs. From the overall assessment (Table 4.15) it can be concluded that a high proportion of companies provided the required disclosures (on average, 85% of the required disclosures were provided by the 34 companies in the sample).

All companies provided disclosure of the general description of the types of DBPs. The majority of companies provided disclosures on the reconciliations for DBPs, the analysis of DBO into funded and unfunded liability, disclosure of the total expense in profit or loss, and the fair value of the plans’ assets. These disclosures were generally consistent across companies.

The majority of companies in the sample also provided disclosure of the sensitivity analysis for DBPs (relevant for healthcare plans), five-year historical information, and expected payment to DBPs for the next financial year was also high, with the majority of companies in the sample of 34 companies providing information. These disclosures would have assisted users in analysing the DBP information in the financial statements to assess the historical trends and also forecast future costs related to DBPs.

However, on average, 15% of the required disclosures were not provided by the 34 companies in the sample, which may have limited users’ ability to interpret and analyse the DBP information. This non-disclosure does raise some concern as to why this disclosure was not provided in the financial statements.
TABLE 4.15: Overall assessment of the existence of disclosures of DBPs

<table>
<thead>
<tr>
<th>Table 4.6</th>
<th>Description of test</th>
<th>Total sample</th>
<th>Yes</th>
<th>No</th>
<th>N/A*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Table 4.6</td>
<td>General description of the type of plan</td>
<td>34</td>
<td>34</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Table 4.7</td>
<td>Disclosure of reconciliations for DBPs</td>
<td>34</td>
<td>31</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Table 4.8</td>
<td>Disclosure of funded and unfunded portion</td>
<td>34</td>
<td>31</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Table 4.9</td>
<td>Disclosure of total expense in profit or loss</td>
<td>34</td>
<td>28</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Table 4.10</td>
<td>Fair value of DBPs’ assets per category</td>
<td>34</td>
<td>22</td>
<td>2</td>
<td>10</td>
</tr>
<tr>
<td>Table 4.11</td>
<td>Narrative description of the calculation of DBPs’ assets</td>
<td>34</td>
<td>19</td>
<td>5</td>
<td>10</td>
</tr>
<tr>
<td>Table 4.12</td>
<td>Sensitivity analysis</td>
<td>34</td>
<td>24</td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td>Table 4.13</td>
<td>Disclosure of five-year history for DBP</td>
<td>34</td>
<td>24</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Table 4.14</td>
<td>Disclosure of expected payments for the next financial year for DBPs</td>
<td>34</td>
<td>24</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Average</td>
<td></td>
<td>34 (100%)</td>
<td>26 (76%)</td>
<td>5 (15%)</td>
<td>3 (9%)</td>
</tr>
</tbody>
</table>
4.4 Assessment of the quality of disclosure for DBPs

The quality of the disclosure provided by the 34 companies was assessed in terms of a hierarchical scale. A scale was utilised, as this assessment is subjective and requires a method to classify the disclosures appropriately. The scale consisted of perfunctory quality, standard quality, and excellent quality. The criteria for categorising the two qualitative disclosures into each of these segments are discussed in the following sections:

- the company’s accounting policy for DBPs; and
- the principal actuarial assumptions used at the end of the reporting period.

4.4.1 Assessment of the quality of the accounting policy for DBPs

Under IAS 19, paragraph 120A (a) (IASB, 2009), an entity shall disclose information about the accounting policy for recognising actuarial gains and losses. The existence of the accounting policy for the treatment of actuarial gains and losses was tested and discussed in Table 4.4. The quality of the accounting policies used for the treatment of actuarial gains and losses of the 34 companies that have DBPs is classified as perfunctory quality, standard quality, or excellent quality (Table 4.16), and the criteria applied is discussed below.

TABLE 4.16: Quality assessment of accounting policy for DBPs

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
<th>Perfunctory</th>
<th>Standard</th>
<th>Excellent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quality of accounting policy for DBPs</td>
<td>34</td>
<td>5</td>
<td>2</td>
<td>27</td>
</tr>
</tbody>
</table>

The accounting policies for DBPs from the majority of companies were classified as excellent quality. The criteria applied in categorising the disclosures into perfunctory quality, standard quality, and excellent quality are discussed below.
Companies were classified as perfunctory quality as these companies did not provide complete disclosure in the DBP’s accounting policy. These companies did not provide information on the accounting policy applied for the treatment of actuarial gains and losses or failed to provide further information on the DBP. There were five companies whose disclosure of their accounting policy for DBPs was classified as perfunctory quality. The limited disclosure of the accounting policy for the five companies does raise a concern, as it limits the ability of users to interpret and analyse the information related to DBPs.

Two of the 5 companies classified as perfunctory quality did not disclose the accounting policy on how actuarial gains and losses were treated (if the actuarial gains and losses are deferred, recognised in profit or loss or OCI). Three companies provided partial information in the accounting policy, but no further information in the retirement benefit note, and therefore their information was classified as being of perfunctory quality.

Two companies whose information was classified as standard quality did not explain how the DBP liability/asset was calculated in the accounting policy note. Although users could refer to paragraph 92 IAS 19 (IASB, 2009) for details on how the corridor method is applied, the disclosure of this information might result in an enhanced understanding of the corridor method. Paragraph 92 IAS 19 (IASB, 2009) is discussed later in this section.

Companies whose information was classified as excellent quality provided an accounting policy that was easy to interpret and understand, and they included relevant information on the DBPs. 27 companies were classified as providing excellent quality and they included the following information in the accounting policy note: the types of plans operated, that DCPs are charged to profit or loss, the fact that the projected unit credit method was used to value the DBP, and how the DBP liability/asset is calculated.

In addition, most of these companies explained how actuarial gains and losses were treated for the DBPs:

- Per paragraph 92 IAS 19 (IASB, 2009), if the net cumulative unrecognised actuarial gains and losses at the end of the previous reporting period exceeded
the greater of 10% of the present value of the DBO, or 10% or the fair value of the assets. This excess is divided by the expected average remaining working lives of employees participating in the plan and recognised in profit or loss: or

- Where actuarial gains and losses are recognised in full through profit or loss; or
- Where actuarial gains and losses are recognised in full through OCI/directly in equity/in the Statement of Comprehensive Income.

Overall, the majority of companies that provided information in the accounting policy were of an excellent quality. The information was easy to read and consistent with other companies that provided information.

4.4.2 Assessment of the principal actuarial assumptions

As previously discussed, DBPs are of a long-term nature and the calculation of the DBP liability/asset involves looking into the future and making assumptions and estimates about the future. These assumptions (salary increases, increase in pension pay outs, discount rate, general inflation, and healthcare inflation) must be disclosed in the retirement benefits note to the financial statements, to inform users of the uncertainties that are involved in the ultimate DBP liability/asset that may or may not recognised in the Statement of Financial Position. Users can also make comparisons with other companies, to benchmark assumptions or to assess for reasonableness. The quality of the disclosure of the actuarial assumptions for the 34 companies that have DBPs is classified as perfunctory quality, standard quality, or excellent quality (Table 4.17), and the criteria for categorising these is discussed below.

**TABLE 4.17: The principal actuarial assumptions used at the end of the reporting period**

<table>
<thead>
<tr>
<th>Disclosure of actuarial assumptions used in reporting DBPs</th>
<th>Total</th>
<th>Perfunctory</th>
<th>Standard</th>
<th>Excellent</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>34</td>
<td>7 (21%)</td>
<td>19 (56%)</td>
<td>8 (23%)</td>
</tr>
</tbody>
</table>
Companies with disclosures classified as perfunctory did not provide disclosures in the retirement benefit note on the actuarial assumptions used for their DBPs. Seven companies were classified as perfunctory quality. The lack of these disclosures will make it difficult for users to analyse and compare the effects of the DBPs (with other companies and year-on-year changes).

Companies with disclosures classified as standard did provide some disclosures on the actuarial assumptions used for DBPs. 19 companies were classified as standard quality and included information on salary increases, increase in pension pay outs, discount rate, general inflation, healthcare inflation, etc.

Eight companies were classified as excellent. These eight companies provided disclosures as follows on salary increases, increase in pension pay outs, discount rate, general inflation, healthcare inflation, etc. In addition, companies classified as excellent quality provided information on mortality assumptions and life expectancies.

Overall, a high number of companies provided standard quality of disclosures on the actuarial assumptions used for DBPs. The majority of companies’ disclosures were classified as standard quality.

4.5 Conclusion

The content analysis was performed in three parts. A broad assessment was performed to obtain the current status of DBPs and DCPs operated by the top 40 JSE-listed companies. A specific assessment was then performed on the 34 companies that operated DBPs, testing for the existence of significant disclosures under IAS 19. The last part of the content analysis involved a qualitative assessment on the accounting policies applied for DBPs, and the principal actuarial assumptions disclosed for DBPs.

In the broad assessment it was determined that a significant number of the top 40 JSE-listed companies (34 companies of the 40 companies in the sample) operated DBPs. There were 39 companies with DCPs, 34 companies have both DBPs and DCPs, and 1 company had neither a DCP nor a DBP. It was also noted that there were companies
that no longer offered DBPs to employees (closed plans), which could indicate a change in offering, where companies offer DCPs as opposed to DBPs.

Of the 34 companies that operated DBPs, 31 companies reflected net DBP liabilities on the companies’ Statements of Financial Position. This confirms that DBPs continue to have a financial impact on a company’s Statement of Financial Position. However, contrary to the literature reviewed, the DBP liabilities as a percentage of total liabilities for the to 40 JSE-listed companies was 1.6%, which was considered low.

IAS 19 (IASB, 2009) allowed certain adjustments in the calculation of the DBP liability/asset, including a choice in the accounting policy for the treatment of actuarial gains and losses (a choice to defer of actuarial gains and losses-corridor approach, the recognition of actuarial gains and losses either in profit or loss, or recognition of actuarial gains and losses in OCI). The other adjustments that were allowed under IAS 19 were the recognition of past service cost over the vesting period, and the limitation placed on recognising DBP assets.

It was determined that there was a variation in the treatment of actuarial gains and losses for DBPs since companies chose different methods to account for the actuarial gains and losses. Of the 34 companies that had DBPs, 16 companies deferred actuarial gains and losses, six companies recognised actuarial gains and losses in profit or loss, and eight companies chose to recognise actuarial gains and losses in OCI.

The broad assessment also established that the recognition of past service cost over the vesting period further resulted in companies choosing the timing and placement of the cost. The effect of this would be an adjusted DBP liability/asset in the Statement of Financial Position.

The IASB issued amendments to IAS 19 in 2011. The amendments included the immediate recognition of actuarial gains and losses requiring the full commitment to be reflected in the Statement of Financial Position. All changes in the DBP liability in adjustments have to be recognised in OCI. There were also changes for the recognition of past service costs, which require the recognition as an expense, at the earlier of the plan amendment or curtailment, or when an employer entity recognises restructuring
costs under IAS 37. This amendment is expected to standardise the treatment of actuarial gains and losses and past service cost, and enhance the comparability.

The test for existence of significant disclosure requirements under IAS 19 (IASB, 2009) indicated that a high proportion of companies provided the required disclosures (on average an 85% compliance was identified). All companies provided disclosure of the general description of the types of DBPs, with the majority of companies providing disclosures on the reconciliations for DBPs, the analysis of DBO into funded and unfunded liability, disclosure of the total expense in profit or loss, and the fair value of the plans assets. The majority of companies in the sample also provided disclosure of the sensitivity analysis for DBPs, five-year historical information, and expected payment to DBPs for the next financial year. These disclosures would have assisted users in analysing the DBP information in the financial statements to assess the historical trends, and also to forecast future costs related to DBPs. However, on average, 15% of companies did not provide the required information, which may limit the user’s ability to interpret and analyse the DBP information. This non-disclosure does raise some concern as to why this disclosure was not provided in the financial statements.

The qualitative assessment on the accounting policy for DBPs indicated, resulted in five companies providing information that was classified as perfunctory quality. These companies did not provide complete disclosure in the accounting policy for the DBPs and did not provide information on the accounting policy applied for the treatment of actuarial gains and losses. The limited disclosure of the accounting policy does raise a concern, as it limits the ability of users to interpret and analyse the information related to DBPs. There were two companies whose disclosures were classified as standard quality, since these companies did not explain how the DBP liability/asset was calculated in the accounting policy note. The remaining 27 companies’ disclosures were classified as excellent quality, and included information on the types of plans operated, the fact that the projected unit credit method was used to value the DBP, and how the DBP liability/asset is calculated.

The qualitative assessment on the principal actuarial assumptions resulted in seven companies’ disclosures being classified as perfunctory quality. These companies did not
provide any disclosure on the actuarial assumptions related to the DBPs. There were 19 companies whose disclosures were classified as standard quality since these companies disclosed information on salary increases, increase in pension pay outs, discount rate, general inflation, and healthcare inflation. Companies whose disclosures were classified as excellent quality provided disclosure for salary increases, increase in pension pay outs, discount rate, general inflation, healthcare inflation, and information on mortality assumptions and life expectancies. There were eight companies whose disclosure of principal actuarial assumptions resulted in them being classified as excellent.
Chapter 5: Conclusion

5.1 Introduction and objective

As discussed in Chapter 1, the problem with DBPs is that they are of a long-term nature and require estimates and assumptions to be made in calculating the DBP liability/asset. The long-term nature affects the adequacy of the liability/asset recognised for DBPs, and the related disclosure in the financial statements of large listed companies.

The objective of the thesis was to perform a content analysis on the presentation and disclosure of DBPs in the financial statements of a sample of South African JSE-listed companies.

The sub-objectives identified in Chapter 1 have been achieved as follows:

- Of the top 40 JSE-listed companies, 34 companies have DBPs and 39 companies have DCPs. One company has neither a DBP nor a DCP.
- 31 companies have net DBP liabilities; two companies had net DBP assets.
- On average, 85% of the required disclosures were provided by the sample companies.
- On the qualitative assessment:
  - Quality of accounting policy – Five companies had perfunctory quality, two companies had a standard quality, and 27 had excellent quality disclosure.
  - Principal actuarial assumptions – seven companies had perfunctory quality, 19 standard quality, and eight had excellent quality disclosures.
- The existence of disclosures supported the amounts in the Statement of Financial Position and Statement of Comprehensive Income.

In order to achieve the objectives of this minor dissertation, a literature review was performed, a research methodology developed for the content analysis, and finally the results were presented. The summaries are included below.
5.2 Literature review

It was established that, under DBPs, the employer entity is obliged to provide agreed benefits to employees, and the actuarial risk and investment risk falls in substance on the employer entity. DBP liabilities/assets are of a long-term nature, requiring estimates and assumptions to be made by actuaries. The reporting of DBPs can be challenging because the calculation of the DBP liability/assets involves looking into the future, and no one knows the extent of the liability until the last participant/beneficiary has exited the plan. This uncertainty is expected to persist over a long time.

The funded status of the DBP is the difference between the fair value of plan assets and the present value of the DBO. The basis used by actuaries to determine the funded status differs to accountants (who use the accrued benefit method with salary projection under IAS 19). The literature indicated that unexpected market performance and inaccurate or unrealistic assumptions and decisions to delay making payments to DBPs affects the funded status of the plan.

The literature also indicated that fewer companies are offering DBPs because of lower interest rates and volatile investment returns, which resulted in DBP obligations increasing. The move towards offering DCPs (instead of DBPs) has been made by many companies; however, old DBPs’ obligations remain on company balance sheets and continue to have financial impacts. Regulatory and tax changes, increasing cost of DBPs, labour mobility, and changes in pension accounting inter alia, contributed to the shift from DBPs to DCPs.

The IASB issued amendments to IAS 19 in 2011, clarifying that net DBP liabilities or assets should be regarded as loans receivable or payable. The amendment does not allow for adjustments in the calculation of the DBP liability/asset, and requires the full DBP liability/asset to be recognised in the Statement of Financial Position (the service costs and interest cost are charged to profit or loss and all other remeasurements (actuarial gains and losses) are charged to OCI). The noise in the movement in the DBP liability/asset is recognised in OCI, and removes the volatility from profit or loss. Under the amendment, past service is recognised at the earlier of when the plan amendment
or curtailment occurs, or when an employer entity recognises related restructuring costs (under IAS 37). The limit on the DBP asset has not changed under the amended IAS 19. The amendment also requires additional disclosures on the risks of DBPs.

5.3 Research methodology

The content analysis was performed on the annual financial statements of the top 40 JSE-listed companies at 31 December 2011 using IAS 19 (IASB, 2009). The analysis comprised three parts.

The first part of the analysis comprised a broad assessment of the top 40 JSE-listed companies (sample of 40 companies) in order to obtain an overall assessment of the status of post-employment benefits. This included the number of companies that have DBPs and/or DCPs, the DBP assets/liabilities, the size of DBP liabilities relative the total liabilities, the accounting policy used for recognising actuarial gains and losses, and the treatment of past service cost.

The second part comprised a specific assessment (quantitative approach) assessing the existence of significant disclosure requirements under IAS 19 (IASB, 2009) and was performed on the 34 companies that had DBPs. A Yes/No/NA scale was used to test the existence of disclosures.

The third part comprised a qualitative assessment, which was performed on the accounting policy applied for DBPs, and the disclosure of the principal actuarial assumptions used for DBPs. Each of these disclosures was assessed using a hierarchical scale comprising perfunctory quality, standard quality, and excellent quality.

5.4 Results

The broad assessment performed on the top 40 JSE-listed companies indicated that a significant number of these companies still have DBPs, with 34 companies of the 40 companies in the sample having DBPs. There were also companies that no longer offered DBPs to employees, or closed the DBPs. The pension liabilities as a percentage of total liabilities is relatively small, which was contrary to the literature review. Of the 34 companies that operated DBPs, 31 companies reflected net DBP liabilities on the
company’s Statement of Financial Position, which confirmed that the DBPs continue to have a financial effect on companies. The adjustments permitted under IAS 19 included the choice in the accounting policy for actuarial gains and losses, the recognition of past service costs over the vesting period, and the limitation of the DBP asset that can be recognised in the Statement of Financial Position. The broad assessment confirmed that these adjustments made comparisons difficult, since the information presented was not totally comparable across companies.

The test for the existence of disclosures (quantitative assessment) under IAS 19 indicated that on average, 85% of the required disclosures were provided by the 34 companies in the sample. The balance of the 15% not provided may potentially limit users’ ability to interpret the DBP information. This non-disclosure does raise some concern as to why this disclosure was not provided in the financial statements.

From the qualitative assessment on the accounting policy for DBPs, it was established that the majority of companies' disclosures were classified as excellent quality as their information was easy to read and consistent with other companies. The description of the corridor method was explained in the policy. The majority of companies' disclosures of principal assumptions for DBPs were classified as standard, as the disclosure included information on salary increases, increase in pension pay outs, discount rate, general inflation, and healthcare inflation. A small percentage of companies were considered to provide excellent quality of disclosure of actuarial assumptions, as these companies provided additional information on mortality assumptions and life expectancies.

5.5 Recommendation and areas for future research

The amended IAS 19 issued in 2011 removed the options for the treatment of actuarial gains and losses (options comprised corridor approach, recognition in OCI, or profit or loss). The amendment requires all remeasurements for DBPs to be recognised in OCI immediately.

The author recommends that future research assesses the impact of this change for the top 40 JSE-listed companies for the 2013 reporting period, as this is when the
amendment becomes effective. This will provide insights into the improvements in reporting that is expected by the IASB. Since all companies will report actuarial gains and losses on a consistent basis, it is expected to make comparisons easier and the full commitment that the company has for DBPs reflected in the Statement of Financial Position.

Another area for future research is the impact of the change in the treatment of past service cost. Under the amendment, past service cost must be recognised as an expense, at the earlier of the plan amendment or curtailment, or when an employer entity recognises restructuring costs under IAS 37. This requirement could result in a significant effect on the profit or loss of companies.

The author also recommends that future research assesses the reasonableness of the actuarial assumptions used in the calculation of DBP liabilities/ assets. This will involve a statistical assessment of the actuarial assumptions, and should be compared across companies listed on the JSE. This information may provide valuable insights into the consistency of assumptions used by companies, and identify any extreme or unrealistic assumptions.
References


