Analysis of the effect of the implementation of IFRS 16 Leases on the financial ratios of retail companies listed on the JSE

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TITLE: Analysis of the effect of the implementation of IFRS 16 *Leases* on the financial ratios of retail companies listed on the JSE

ABSTRACT: The International Accounting Standards Board introduced the International Financial Reporting Standard (IFRS) 16 *Leases* in order to enhance the faithful representation of all lease transactions on the Statement of Financial Position for lessees, in particular. The first-time implementation of IFRS 16 *Leases* had a significant impact on the financial statements of retail companies since they have a common practice of entering into high-value lease agreements. This study aimed to analyse the effect that the first-time implementation of IFRS 16 *Leases* had on key financial ratios of retail companies listed on the Johannesburg Stock Exchange. A content analysis was adopted as this study's research method. The results showed that the first-time implementation of IFRS 16 *Leases* had a notable effect on all profitability and gearing/leverage ratios analysed. Debt/equity and debt/asset ratios mostly increased since debt levels had, on average, a greater increase than assets recognised with the first-time implementation of IFRS 16 *Leases* not previously accounted for in the Statement of Financial Position. Overall, the return-on-asset ratio decreased due to an increase in assets recognised and a decrease in earnings resultant from an increase in depreciation and interest expense. Earnings before interest, taxation, depreciation and amortisation percentage increased overall. The results for return on equity are inconclusive since half the companies experienced a decrease in the ratio and the other an increase. It is important for shareholders and any other investors to take into consideration the effect of IFRS 16 *Leases* before buying/selling shares or investing solely on the increase or decrease in the ratios.

KEYWORDS: Effect, financial ratios, financial statement, International Accounting Standards, IAS 17 *Leases*, IFRS 16 *Leases*, JSE, lease, lessee, operating leases, retail companies.

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LIST OF ABBREVIATIONS

D/A	Debt/Asset
D/E	Debt/Equity
EBIDA	Earnings Before Interest and Depreciation and Amortisation
EBIT	Earnings Before Interest and Taxes
EBITDA	Earnings Before Interest, Taxation, Depreciation and Amortisation
GAAP	Generally Accepted Accounting Principles
IAS	International Accounting Standards
IASB	International Accounting Standards Board
IFRS	International Financial Reporting Standard
JSE	Johannesburg Stock Exchange
ROA	Return on Asset
ROE	Return on Equity

CHAPTER 1: INTRODUCTION AND BACKGROUND TO THE STUDY

1.1 INTRODUCTION

Leasing assets has been a common flexible source of finance for entities for decades (IASB, 2016; Iskandar *et al*., 2018:1) whereby an entity supplies a third party with the right to use one of its assets in return for a continual rental fee income, rather than selling it, or where an entity takes up the right to use the asset of a third party, as opposed to buying the required asset (IFRS Foundation, 2016:11). The motivation for leasing assets rather than buying them includes cost reductions in maintenance, saving on the initial investment and flexibility in upgrading assets (Iskandar *et al.*, 2018:1). The history of accounting for lease transactions in the financial records of entities dates as far back as 1949, when the Committee on Accounting Procedure issued the *Disclosure on Long-term Lease in Financial Statements of Lessors* guide, followed by the 1964 *Reporting of Leases in Financial Statements of Lessees* guide issued by the Accounting Principles Board (Lease Accelerator, 2018). Accounting for leases in the financial records of entities subsequently evolved, and the International Accounting Standards (IAS) 17 *Accounting for Leases* was introduced in 1982 to account for leases, followed by the IAS 17 *Leases* in 1997 (IASPlus, 2020a; IASPlus, 2013).

The IAS 17 *Leases* prescribed accounting policies and disclosures to lessees and lessors in respect of finance and operating leases (IASPlus, 2020a). A finance lease is defined as a lease which “transfers substantially all the risks and rewards incidental to ownership”, and an operating lease is defined as a lease that “does not transfer substantially all the risks and rewards incidental to ownership” (IASPlus, 2013). Lessees and lessors were allowed to use their discretion to classify and account for the lease transaction either as an operating lease or finance lease (IASPlus, 2013). The classification depended mainly on whether or not the leased asset’s risk and rewards were transferred from the lessor to the lessee. An example of carrying an asset’s risks, referring to losses (IASPlus, 2013), would be when an asset is damaged; in other words, who would be responsible for repairing the asset. On the other hand, an example of carrying rewards would be the increase in the asset’s value (IASPlus, 2013); that is, who would benefit from the increase in value.

If risks and rewards were transferred from the lessor to the lessee, it would have been classified as a finance lease (Bunea-Bontaş, 2017:79) where a lessee, in its financial records, would account for the asset as its own and raised a corresponding lease liability in its Statement of Financial Position (IASPlus, 2013). The interest on the lease liability and depreciation relating to the assets was to be accounted for in the Statement of Profit or Loss and Other Comprehensive Income as an expense, and the lease payment would be accounted for in the Statement of Financial Position (IASPlus, 2013). The lessor, on the other hand, would derecognise the asset and recognise the remaining lease instalments as a receivable if the lessor also classified the lease transaction as a finance lease (IASPlus, 2013).

In contrast, if the risk and rewards were not transferred from the lessor to the lessee, the lease transaction would have been classified as an operating lease (Baastad & Aslaksen, 2017:2). The lessee would only account for a lease expense in the Statement of Profit or Loss and Other Comprehensive Income and the rental payments in the Statement of Financial Position (IASPlus, 2013), and the lessor would only recognise the rental income in the Statement of Profit or Loss and Other Comprehensive Income and the payment in the Statement of Financial Position (IASPlus, 2013).

The main problem with IAS 17 *Leases* was 'off-balance-sheet financing'. This is when lease transactions do not appear on companies' Statement of Financial Position since these lease transactions are not considered to be debt (Montinaro, 2018:34).

Off-balance-sheet financing also appears when no assets or liabilities are recognised on companies' Statement of Financial Position (Montinaro, 2018:34). According to Aktaş *et al.* (2017:858) and Beattie *et al*. (2006:86), IAS 17 *Leases* has been criticised by financial statements' users. Aktaş *et al.* (2017:858) argue that companies reflecting major operating leases in their financial statements do not present a true reflection of the companies' Statement of Financial Position. IAS 17 *Leases* gives companies that adopt the IFRS the right to classify their leases as either finance or operating. This right leads to a significant difference in the preparation of companies' financial statements since two similar transactions can be reported differently, which prevents financial statements from providing better information and makes it difficult to compare

companies' financial statements with one another (Montinaro, 2018:3). Duke *et al.* (2009:28) explain that companies have benefited from operating leases since both assets and liabilities were kept off the Statement of Financial Position (also known as off-balance-sheet transactions) (Montinaro, 2018:34; Morales-Díaz & Zamora-Ramírez, 2018:107) and only disclosed the future lease obligations in a note to the financial statements. Duke *et al.*'s (2009:28) results indicate that companies that report operating leases avoided or rather did not account for an average of US$450 million (R7.5 billion) in assets and US$584 million (R9.7 billion) in liabilities (Oanda, 2020). Furthermore, the International Accounting Standards Board (IASB) (IASB, 2016) reports that over 85% of all lease commitments or liabilities did not appear on listed companies' (using the International Financial Reporting Standard (IFRS) or the United States' Generally Accepted Accounting Principles (GAAP)) Statement of Financial Position that equated to an estimated amount of US$3.3 trillion (R55.0493 trillion) (Oanda, 2020).

In an effort to enhance the accuracy of accounting for leases and to eliminate the aforementioned inconsistency inherent to IAS 17 *Leases*, the IASB developed a new standard for leases, IFRS 16 *Leases*, which replaced the IAS 17 *Leases* (Bunea-Bontaş, 2017:78). The main objective of IFRS 16 *Leases* is to report lease transactions in a manner faithfully representing the transactions and that the lessee accounts for all lease transactions by recognising, in the Statement of Financial Position, an asset and liability resulting from the lease – unless one of two recognition exemptions apply (IFRS Foundation, 2020b). These exemptions are if the asset is a low-value asset or a short-term (12 months or less) lease (IASPlus, 2020b). IFRS 16 *Leases* eliminates the difference between an operating lease and a financial lease for the lessee and guarantees the disclosure of all the leases in the lessee's Statement of Financial Position (Öztürk & Serçemeli, 2016:144). IFRS 16 *Leases* allows the lessee to capitalise a larger portion of their current operating leases. All leases should be recognised on the lessee's Statement of Financial Position as assets, in addition to the corresponding liability (Öztürk & Serçemeli, 2016:144). Furthermore, IFRS 16 *Leases* requires that operating leases be reported separately as leases or specifically as property, plant and equipment (You, 2017:11).

It is anticipated that the change in the standards will have a significant effect on the financial statements of the lessees since all ongoing and upcoming lease transactions that (in the past) would have been accounted for as operating leases by the lessee should be recognised as right-of-use assets and corresponding liabilities in their Statement of Financial Position. The annual depreciation of the right-of-use asset and interest on the lease liability should be accounted for as expenses in the Statement of Profit or Loss and Other Comprehensive Income (Baastad & Aslaksen, 2017:3; Morales-Díaz & Zamora-Ramírez, 2018:106; Wong & Joshi, 2015:27). In addition, metrics, such as total debt level, that are used in the financial statements as a reference will also change (Morales-Díaz & Zamora-Ramírez, 2018:106).

IFRS 16 *Leases* will also have a significant effect on companies' financial statements – on both the Statement of Financial Position and the Statement of Profit or Loss and Other Comprehensive Income (Magli *et al*., 2018:76; Veverková, 2019:1370) – as well as many financial ratios that refer to figures in the Statement of Financial Position and the Statement of Profit or Loss and Other Comprehensive Income (Morales-Díaz & Zamora-Ramírez, 2018:106). The following financial ratios are anticipated to be affected by the first-time implementation of IFRS 16 *Leases:* debt/asset (D/A) ratio, debt/equity (D/E) ratio, return-on-asset (ROA) ratio and return-on-equity (ROE) ratio (Cape 2019:41; Deloitte, 2016:2; KPMG, 2016a:3; Öztürk & Serçemeli, 2016:149; Sari *et al*., 2016:142; Wong & Joshi, 2015:32; You, 2017:25; Yu, 2019:133). ROA, for example, is expected to decrease since new assets are to be recognised (Morales-Díaz & Zamora-Ramírez, 2018:113; Öztürk & Serçemeli, 2016:154; You, 2017:2). Earnings before interest and depreciation and amortisation (EBIDA) are expected to increase due to operating leases that are no longer recognised; rather, depreciation expenses and interest expenses are recognised in the Statement of Profit or Loss and Other Comprehensive Income (Deloitte, 2016:1; KPMG, 2016b). As the previously mentioned ratios are expected to change due to the capitalisation of operating leases in the Statement of Financial Position, it is worth calculating these financial ratios to determine how the implementation of IFRS 16 *Leases* will affect these ratios (Joubert *et al*., 2017:2; Sari *et al*., 2016:139).

It is furthermore anticipated that the first-time implementation of IFRS 16 *Leases* will have a significant effect on financial statements in industries that primarily use

high-value fixed assets, such as property, plant and equipment, and that prefer to fund such assets by leasing (Aktaş *et al*., 2017:859). The IASB (2016) and Yu (2019:132) single out the airline, retail, telecommunications and transport industries as the industries that will be the most impacted by the implementation of IFRS 16 *Leases* and would face the most difficulty in the application of it since lease transactions form an integral part of the operations of entities in these industries. With the new lease standard, lessees that, in the past, employed high-volume operating leases and kept them off the Statement of Financial Position will see a substantial rise in their assets and liabilities, a reduction in equity and a worsening in some of their financial ratios, such as ROA (Aktaş *et al*., 2017:859). According to KPMG (2016b), before the implementation of IFRS 16 *Leases* in January 2019, companies had to gather substantial data on their leases and create measurements and estimates to be recorded in the 2018 financial statements. Some researchers (You, 2017:6; Yu, 2019:132) have attempted to analyse the effect that the change from IAS 17 *Leases* to IFRS 16 *Leases* will have on the financial statements of companies within the airline industry in particular.

You (2017) conducted a study on the capitalisation of the operating leases of 31 listed airline companies around the world and found that the adjusted assets and liabilities increased, but the adjusted equity decreased. Furthermore, You (2017) demonstrated an increase in the leverage ratios and in the median ROE and ROA.

Yu (2019:133) conducted a study on a Chinese airline company, Air China. Yu's (2019:133) study concluded that total assets and liabilities, earnings before interest, taxation, depreciation and amortisation (EBITDA) and asset ratio increase due to the capitalisation of operating leases.

The effect of the first-time implementation of IFRS 16 *Leases* on retail companies is yet to be explored (PwC:2016a:13). In South Africa, the retail industry significantly contributes to economic-wide jobs (it is frequently recognised as the second-biggest field in the national economy), business and Gross Domestic Product (Wrigley & Lowe, 2010:1). Examples of major leases by retail companies include renting buildings, offices, machinery and other equipment required for the implementation of core business processes (Baastad & Aslaksen, 2017:3). In 2017, the South African retail

industry generated R1 trillion in revenue, according to Statistics South Africa (Stats SA, 2018).

Although many studies (Aktaş *et al*., 2017:859; Baastad & Aslaksen 2017:3; Öztürk & Serçemeli, 2016:144; Yu, 2019:132) have shown the effect of the implementation of IFRS 16 *Leases* on financial ratios and key performance indicators of retail companies, little research has been done to see what the effect is on retail companies listed on the Johannesburg Stock Exchange (JSE) (Cape, 2019:25).

Since the retail industry has been outlined as an industry that will experience the most difficulty with the implementation of IFRS 16 *Leases*, an investigation into the effect the standard's implementation has on their financial performance and position is worth considering since retail companies, in particular lessees, mostly depend on lease transactions and ought to have implemented IFRS 16 *Leases* as of 1 January 2019.

1.2 PROBLEM STATEMENT

Since lessees previously had the option to classify lease transactions as a finance lease or an operating lease, depending on the transferral of rights and rewards of the leased asset from the lessor to the lessee, inconsistent information with regard to the leased assets was being disclosed in the financial statements. In an attempt to counter off-balance-sheet financing, the IASB introduced IFRS 16 *Leases* to ensure that assets and liabilities pertaining to future lease instalments are included in the Statement of Financial Position in order to ensure a more faithful representation of leases in the lessee's Statement of Financial Position. It is, however, not clear how the first-time implementation of IFRS 16 *Leases* will affect the financial statements of retail companies.

Research has been done to determine what the effect will be on the financial ratios of companies around the world in different sectors, but little research has been done to determine what the effect will be on the financial ratios of JSE-listed retail companies.

Based on the aforementioned problem statement, the following research question can be formulated: what is the effect of the newly introduced IFRS 16 *Leases* on the financial ratios of retail companies listed on the JSE?

1.3 OBJECTIVES

1.3.1 Primary objective

Determine the effect of the first-time implementation of IFRS 16 *Leases* on the financial ratios of JSE-listed retail companies.

1.3.2 Secondary objectives

The primary objective will be achieved through the following secondary objectives:

1.3.2.1 Empirical and theoretical objective

- Identify key financial ratios for retail companies listed on the JSE.

1.3.2.2 Empirical objectives

- Determine which financial ratios are key to the retail companies listed on the JSE, with reference to the financial statements of the selected companies;
- Compare the financial statements before (previously stated amounts) and after (restated amounts) the implementation of IFRS 16 *Leases,* and determine how the first-time implementation affects the financial ratios of the selected JSE-listed retail companies; and
- Provide information to the users of the financial statements on where to focus their attention in order to make informed decisions based on the results obtained from the financial ratio analysis.

1.4 RESEARCH METHODOLOGY

1.4.1 Philosophical assumptions

There are different kinds of philosophical assumptions a researcher incorporates into research. These philosophical assumptions include ontology, epistemology, methodology and axiology (Guba & Lincoln, 1994:107).

According to Richardson (2012:84), an ontological assumption can be taken from realist or idealist points of view on what truth is. This differentiation reflects the underlying assumption of whether nature is built based on the ideas added to the human learning process or if truth occurs independently of the observer (Richardson,

2012:84). Furthermore, ontology assesses what the researcher thinks about the truth and what guidelines the researcher uses to evaluate the reliability of the truth (Richardson, 2012:84). Ontology can, therefore, be described as the reality the researcher wants to explore. In this study, retail companies were selected to gather information to interpret the effects of the first-time implementation of IFRS 16 *Leases* on the financial ratios of these companies. In terms of this research, a question that can be asked in terms of ontology is what the effect of the first-time implementation of IFRS 16 *Leases* will be on the financial ratios of JSE-listed retail companies.

Epistemology is the researcher's interpretation of the truth or what is considered to be valid knowledge and how one gains this knowledge (Fletcher, 2017:182). Hiller (2016:100) argues that epistemology is focused on its own set of beliefs about the essence of a researcher's interaction with the study. Epistemology can be described as the essence of knowledge. In terms of epistemology, the question that can be asked is how – and to what extent – the financial ratios will be affected by the first-time implementation of IFRS 16 *Leases*.

This research is concerned with numbers and the use of financial statements of retail companies. The study regards the effect of the implementation of IFRS 16 *Leases* on the 2019 or 2020 financial statements as a key consideration to gain an understanding of the subject matter. This assisted the researcher in measuring and analysing the effect that the implementation of IFRS 16 *Leases* will have on the financial ratios of retail companies listed on the JSE. The results gave the researcher an idea of which financial ratios have been affected to a greater or lesser extent.

Hiller (2016:100) defines epistemology as the way a researcher learns what is thought to be known. As with ontology, a researcher can approach the pursuit of information from a variety of different epistemologies (Hiller, 2016:100). The research needs to philosophically align with a research paradigm, which will affect the methodology that the research adopts (Mingers, 2003:559). Hiller (2016:100) further states that every epistemology is focused on its own set of assumptions (also known as research paradigms), which may include positivism and interpretivism. Positivism maintains that true knowledge is founded on a study of ideas originating from universal hypotheses and that legitimate knowledge is knowledge which has undergone empirical research

(Richardson, 2012:84). An interpretive researcher, on the other hand, is concerned with interpreting the universe as it is focused on the personal experience of individuals (Antwi & Hamza, 2015:218).

This research is subjective and dependent on the researcher's point of view and is, therefore, positioned within the interpretivist paradigm. The interpretivist paradigm was selected as this study aimed to analyse and interpret the effect that the first-time implementation of IFRS 16 *Leases* had on the financial ratios of retail companies listed on the JSE. Furthermore, this study provides information to the users of the financial statements as to which financial ratios have been affected the most. The ontology and epistemological assumptions used within this research guided the research methodology that the researcher adopted in the quest to solve the research problem.

Methodology is the research designs and methods used to gain knowledge of a research problem (Kivunja & Kuyini, 2017:28). This study's methodology is further explored in Section 2.3. Axiology refers to the ethical problems which needed to be addressed in this study (Kivunja & Kuyini, 2017:28). Kivunja and Kuyini (2017:28) state that axiology includes defining, assessing and understanding the principles of right and wrong with regard to the research. In this study, the results of the effect of the implementation of IFRS 16 *Leases* represent the interpretation of the effect of the results to provide a balanced perspective on the findings.

1.4.2 Empirical research

Empirical research helps with the development of theories and to verify suggested theories (Jasti & Kodali, 2014:1081). Empiricism refers to making observations in order to obtain knowledge (Patten & Galvan, 2020:6). By pursuing careful observation plans, the researcher is engaged in a structured and reflective method (Patten & Galvan, 2020:6). In this study, the effect of the implementation of IFRS 16 *Leases* on the financial ratios of JSE-listed retail companies was determined and analysed.

1.4.3 Methodological considerations

1.4.3.1 Research design

Research methodology is described by Maree *et al*. (2016:51) as the process a researcher adopts to obtain, analyse and interpret data or information in order to derive

new knowledge. The research design adopted can either be quantitative or qualitative, or a mixture of the two.

According to Morgan (2018:269), quantitative research contains numbers to gather information. Tuli (2010:106) further states that quantitative research is associated with efforts to measure social phenomena, and gather and interpret numerical data. Quantitative research is deductive, which is accompanied by survey studies and experimental designs, producing current numerical results (Morgan, 2018:272). Quantitative research may thus be defined as drawing conclusions based on the collection of numerical data and can adopt an experimental, non-experimental or semi-experimental nature (Maree *et al.*, 2016:166; Meadows, 2003:464).

Qualitative research is knowledge built through the perspective and experiences of researchers (Tuli, 2010:103). Qualitative research is inductive as researchers like to explore, are focused and are less concerned with generalisability but are more focused on a deeper interpretation of the study (Tuli, 2010:100). Qualitative research can be described as investigating problems.

In this study, a qualitative design was adopted to determine what the overall effect on the financial ratios of JSE-listed retail companies will be after the first-time implementation of IFRS 16 *Leases*. This research focused on the meaning of the information gathered, rather than on statistics, and on the interpretation of the researched financial statements. Lastly, the interpretation of the results and the discussion thereof assisted the researcher in informing users of the financial statements where to focus their attention to make informed decisions based on the financial ratios.

1.4.3.2 Study population and sample

As previously mentioned, the retail industry faced difficulties with the implementation of IFRS 16 *Leases*, and therefore, an investigation of the effect of the first-time implementation of IFRS 16 *Leases* on their financial ratios is worth considering. This study selected retail companies listed on the JSE. The retail industry can be described as an industry that uses large rent premises for their stores (PwC, 2016a:2). Such leases are typically medium term, such as those taken out by shopping centres (PwC,

2016b). Leasing is an effective and commonly used method for financing. It enables companies to use property and equipment without incurring large cash outflows (PwC, 2016b).

The criteria for selecting the previously mentioned companies were based on companies that have operating leases in their financial records since the lessee can capitalise operating leases in the Statement of Financial Position in order to eliminate off-balance-sheet transactions (You, 2017:11).

You (2017:6) and Yu (2019:132) limited the sample population of their research to a single industry, namely airline companies. You's (2017) study focused on 31 listed airline companies around the world. This study, instead, focused on JSE-listed retail companies. The companies were studied, and it was determined that 25 had implemented IFRS 16 *Leases* in their 2019 or 2020 financial statements. Twenty-nine retail companies were listed on the JSE at the beginning of the 2020 calendar year (African Markets, 2020), but only 25 towards the second half of the year, as four had been delisted. These 25 companies formed the sampling population of this study. Each one of these listed companies' financial statements was investigated. By working through every retail company's financial statements, it was found that some companies had already implemented IFRS 16 *Leases* in their 2019 financial statements. Other companies only implemented IFRS 16 *Leases* in their 2020 financial statements. It was discovered that six companies had implemented IFRS 16 *Leases* in their 2019 financial statements, and 19 companies had implemented IFRS 16 *Leases* in their 2020 financial statements.

Of the 25 companies considered, only 12 had fully audited financial statements for 2019 or 2020 and included IFRS 16 *Leases*. Of the 12, six companies had fully audited financial statements that implemented IFRS 16 *Leases* for their 2019 year-end, and six companies had fully audited financial statements that implemented IFRS 16 *Leases* in their 2020 year-end. The other 13 companies, which only had IFRS 16 *Leases* implemented in their interim financial statements, were disregarded, as only companies with fully audited financial statements that had already implemented IFRS 16 *Leases* for a full financial year were investigated. Therefore, in this study, only the 12 companies whose fully audited financial statements were available were used. By

including only fully audited financial statements, the resulting financial ratios were more trustworthy and accurate. Companies that only had interim financial statements were not used since interim financial statements are not 'final' and can easily change, which results in the financial ratios not showing an accurate picture. Purposive sampling was used to select these companies, as the African Markets (2020) website was used to determine which companies are retail companies.

In this study, the research period was reduced to one year instead of the three years You (2017:7) and Yu (2019:134) investigated. The research period was one year as retail companies should, at this point, have applied IFRS 16 *Leases* as of 1 January 2019.

To conclude, a total of 12 companies were used. Six had implemented IFRS 16 *Leases* in their 2019 financial statements, and the other six had implemented IFRS 16 *Leases* in their 2020 financial statements. Using the fully audited financial statements of the companies investigated was more transparent than using the interim financial statements. Regarding the 2019 financial statements of the six companies which implemented IFRS 16 *Leases* in 2019, the 2018 audited figures were compared to the 2018 restated audited figures. Similarly, regarding the 2020 financial statements of the other six companies which implemented IFRS 16 *Leases* in 2020, the 2019 audited figures were compared to the 2019 restated audited figures. The financial statements were compared to determine the effect IFRS 16 *Leases* had on the financial ratios of JSE-listed retail companies.

1.4.3.3 Data collection technique and analysis

In this study, a content analysis was executed to investigate the effect of the implementation of IFRS 16 *Leases* on the financial ratios of JSE-listed retail companies. A content analysis can be defined as a comprehensive and thorough approach to the study of documentation collected or produced in the process of research (Stemler, 2015:1; White & Marsh, 2006:23).

This study performed a content analysis by using the financial statements of 12 retail companies listed on the JSE. The period used to conduct the content analysis was one year. The financial ratios evaluated depended on the results obtained from the

investigation of key financial ratios of JSE-listed retail companies. Based on the results obtained, the financial ratios were categorised or coded as key to the selected industry. The financial ratios were calculated using Microsoft Excel, and the data analysis was also, to some extent, done in the same software. The calculation results were divided into categories for each calculated financial ratio which is key to the industry selected. A comparison of the financial statements was made.

All the above results were evaluated, and relevant conclusions were drawn to inform financial statement users where to focus their attention in order to make informed decisions based on the results obtained from the analysis of the financial ratios. This also raises awareness for companies that are yet to implement IFRS 16 *Leases* on which ratios will be most affected.

1.4.3.4 Ethical consideration

According to Kivunja and Kuyini (2017:28), ethical consideration is conducting the practice of showing what is right or wrong in a study. Kivunja and Kuyini (2017:28) further state that four ethical principles need to be upheld in ethical considerations: property, accessibility, accuracy and privacy. Property is knowing whose research it is and if there will be any payments made for the research (Kivunja & Kuyini, 2017:28). Accessibility is knowing who will be able to access the research and how they will be able to access it (Kivunja & Kuyini, 2017:28). Accuracy is ensuring that the data in the study is recorded accurately (Kivunja & Kuyini, 2017:28). Privacy is the terms and precautions through which the data should be obtained and evaluated (Kivunja & Kuyini, 2017:28). In this study, the researcher was not in contact with any participants. The study information is not confidential as the financial statements of the listed companies, readily available on the worldwide web, was used to determine the effect of the implementation of IFRS 16 *Leases* on the financial ratios of JSE-listed retail companies. This study was evaluated by the Economic and Management Sciences Research and Ethics Committee of the North-West University, who determined the level of risk – the prediction of the risk would have been expected to be low.

1.5 DOCUMENT OVERVIEW

1.5.1 Chapter 1: Introduction and background to the study

This chapter included a discussion of the off-balance-sheet transactions that took place in the past and the financing of IFRS 16 *Leases* that was introduced to counter the off-balance sheets; it was also explained how this new standard was treated. This chapter also discussed the problem associated with IAS 17 *Leases*. The chapter included the primary objective of determining what the effect of the implementation of IFRS 16 *Leases* has been and the secondary objectives used to achieve the primary objective. The methodology was also included, which described the industry chosen for this study and the methodology used to execute this study.

1.5.2 Chapter 2: Research article

A research article was conducted to address the main study objective to determine what the effect of the first-time implementation of IFRS 16 *Leases* on the financial ratios of selected JSE-listed retail companies has been.

1.5.3 Chapter 3: Conclusions and recommendations

A conclusion was drawn on how the implementation of IFRS 16 *Leases* affected the key financial ratios of the JSE-listed retail companies. These results were used to raise awareness for companies who are yet to implement IFRS 16 *Leases* and for financial statement users about which key financial ratios were more affected than others.

CHAPTER 2: ANALYSIS OF THE EFFECT OF IFRS 16 *LEASES'* IMPLEMENTATION ON THE FINANCIAL RATIOS OF JSE-LISTED RETAIL COMPANIES

2.1 BACKGROUND

A recent shift has taken place in the accounting treatment and disclosure of lease transactions, in particular, the lease transactions of lessees (IASB, 2016). The change in accounting for lease transactions has improved the comparability and transparency on the Statement of Financial Position for the lessee (Magli *et al*., 2018:77). The previous lease accounting standard, IAS 17 *Leases*, classified a lease transaction as either an operating lease or financial lease, depending on whether or not the risk and rewards related to the leased asset were transferred to the lessee (Magli *et al*., 2018:77). IAS 17 *Leases* has, however, been criticised by financial statement users as there were significant differences in the accounting treatment and disclosure of finance leases and operating leases, which made it difficult to compare companies' financial statements (IFRS Foundation, 2016:28; Öztürk & Serçemeli 2016:147). Under IAS 17 *Leases*, lessees were not obligated to recognise assets and liabilities resulting from operating leases in their Statement of Financial Position (Correia, 2019:15-5; IFRS Foundation, 2016:29).

The IASB thus introduced the new accounting standard, IFRS 16 *Leases*, in order to account for all the leases on the Statement of Financial Position of the lessee to faithfully represent lease transactions (Borges, 2019:22; IFRS Foundation, 2016:28). IFRS 16 *Leases* eliminates the distinction between an operating lease and a finance lease for the lessee and requires all leases to be treated in the same manner as finance leases under IAS 17 *Leases* (IFRS Foundation, 2020a). IFRS 16 *Leases* requires the lessees to recognise lease assets and liabilities related to all lease transactions on the Statement of Financial Position, apart from short-term assets (less than 12 months) or low-value assets where the lessee can elect the recognition exemption (IASPlus, 2020b). If the recognition exemption is elected, no lease asset or lease liability should be accounted for in the financial records. The lessee will recognise a right-of-use asset and a corresponding lease liability in the Statement of Financial Position (Borges, 2019:11; Öztürk & Serçemeli 2016:144). Furthermore, the depreciation relating to the right-of-use asset and interest expenses relating to the

lease liability will be recognised in the Statement of Profit or Loss and Other Comprehensive Income (Quach & Tu, 2020:14).

The most fundamental change between IAS 17 *Leases* and IFRS 16 *Leases* is the lease accounting for the lessee. The main differences between these two standards are summarised in Table 1 below.

Table 1: Differences in accounting standards for the lessee

	IAS 17 *Leases*	**IFRS 16 *Leases***
Classification of the lease	Classification of a finance lease and an operating lease depends on the 'risk and rewards criteria'. Whether a lease is classified as a finance lease or an operating lease depends on the substance of the lease rather than the form.	No differentiation between finance leases and operating leases. All lease transactions are accounted for in the same manner unless the recognition exemption applies where lessees choose to recognise a low-value asset or a short-term lease (less than 12 months).
Effect on Statement of Financial Position	**Finance lease**: Recognise an asset and a corresponding liability. **Operating lease**: Lease smoothing is used which could result in a prepaid expense or accrued expense, which in turn, could affect the Statement of Financial Position.	New assets (right-of-use asset) and liabilities (lease liability) should be recognised unless the lessee chooses the exemption criteria to classify the lease as a short-term asset or a low-value asset. If the latter exemption applies, the lease will be accounted for in a similar manner as IAS 17 *Leases* accounts for operating leases.

	IAS 17 *Leases*	**IFRS 16 *Leases***
Statement of Profit or Loss and Other Comprehensive Income	**Finance lease**: Depreciation and interest expenses. **Operating lease:** The lease smoothing principle is used, whereby the actual payment is not recognised as the expense but rather the equalised amount over the lease period.	Depreciation of the right-of-use asset should be recognised. Interest expenses of the lease liability should be recognised using the effective interest rate method.

Sources: IASPlus (2013); IASPlus (2020a); IASPlus (2020b); IFRS Foundation (2016); IFRS Foundation (2020b).

IFRS 16 *Leases* is expected to have a significant effect on the Statement of Financial Position for the lessees since a substantial number of operating leases were not previously included in their Statements of Financial Position (under IAS 17 *Leases*). This off-balance-sheet financing appears when no assets or liabilities are recognised on the lessee's Statement of Financial Position in respect of a leased asset that is in substance financed by the lessor (Montinaro, 2018:34). Operating leases must now be accounted for on the Statement of Financial Position (Montinaro, 2018:34). This will, in turn, also have an effect on the financial position and key financial ratios of lessees (Hladika & Valenta, 2018:256; Segal & Naik, 2019:2). The higher the amount of the operating leases, the greater the effect on the lessee's financial position is anticipated to be (Hladika & Valenta, 2018:256).

The first-time implementation of IFRS 16 *Leases* will lead to an increase in the assets and liabilities since new assets and liabilities not previously accounted for as such are recognised under IFRS 16 *Leases* (Ellimäki, 2016:14). This is expected to lead to an initial increase or decrease in the D/E and D/A ratio as a result of the first-time implementation of IFRS 16 *Leases*, depending on whether the assets or liabilities are more. The carrying value of the lease asset will decrease more rapidly than the carrying amount of the lease liability (Bunea-Bontaş, 2017:82) since the asset depreciates on a straight-line basis. In contrast, the liabilities are decreased by the

number of lease payments received but are often compounded by interest payments generated over the lease period (Montinaro, 2018:49). This will lead to a more rapid decrease in equity compared to that of IAS 17 *Leases* (Bunea-Bontaş, 2017:82) since the right-of-use asset depreciates more rapidly than the lease liability. As the right-of-use asset depreciates more rapidly than the lease liability, it is expected that it will lead to an increase in D/E and D/A ratio in the subsequent years – after the initial increase or decrease following the first-time implementation of IFRS 16 *Leases*.

On the other hand, operating leases will no longer be recognised as operating expenses in the financial records of the lessee; instead, depreciation of the leased asset accounted for and interest expenses of the lease liability will be recognised (Ellimäki, 2016:14). This is expected to lead to an increase in companies' EBITDA if IFRS 16 *Leases* is implemented (Bunea-Bontaş, 2017:82). No lease expenses are recognised, and the depreciation and interest expense will not be taken into consideration in the calculation of EBITDA. Due to the assets and liabilities being recognised under IFRS 16 *Leases*, it could affect financial ratios such as ROE, ROA, D/E and D/A.

The first-time implementation of IFRS 16 *Leases* will have a significant effect on lease transactions of companies that lease a large range of high-value items that include vehicles, warehouses, power plants, convenience shops, mobile towers and aircraft (PWC, 2016a:2). The effect on companies that make use of small value leases will not be as significant since the IASB offers exemptions for these low-value assets (Deloitte, 2016:3; PWC, 2016a:2). While nearly every company uses leasing as a way of gaining access to properties, the form and number of properties it leases, and the conditions and arrangements of these lease agreements, vary considerably (PWC, 2016a:8). As a result, the first-time implementation of IFRS 16 *Leases* will have different implications for different industries. The retail industry will be significantly affected since it has a common practice of entering into property lease agreements for its stores (Aktaş *et al*., 2017:860; Segal & Naik, 2019:7). Leasing real estate is a crucial practice for retail companies, and evaluating and reassessing whether a store has the economic potential to prolong a retail lease will lead to substantial judgements (PWC, 2016a:8). Furthermore, retail companies would need to distinguish service charges

from lease items for certain tenants, such as shop-in-shop leases and large supermarket outlets (PWC, 2016a:8).

2.2 THE POTENTIAL EFFECT IFRS 16 *LEASES* WILL HAVE ON FINANCIAL RATIOS

2.2.1 Financial ratios anticipated to be affected by the first-time implementation of IFRS 16 *Leases*

Financial ratios are defined as a numerical value provided by two or more values taken from a company's Statement of Financial Position, Statement of Profit or Loss and Other Comprehensive Income, or Cash Flow Statement (Arkan, 2016:15). Usually, financial ratios are viewed as a quantified statistic in the form of a percentage, multiple or ratio that is intended to measure the financial, operating and competitive performance of a business (Arkan, 2016:15). The financial ratios are capable of supplying investors with information on the true valuation of businesses (Marsha & Murtaqi, 2017:214).

Therefore, based on the anticipation of Wong and Joshi (2015), Sari *et al*. (2016), IFRS Foundation (2016), Öztürk and Serçemeli (2016), Morales-Díaz and Zamora-Ramírez (2018) and Maglio *et al*. (2018), the first-time implementation of IFRS 16 *Leases* will have a significant effect on assets, liabilities, equity and net profit since new assets and liabilities are recognised, which affect financial ratios such as profitability, liquidity and financial leverage ratios.

Wong and Joshi (2015) examined the effect of the first-time implementation of IFRS 16 *Leases* on the financial ratios and financial statements of the top Australian companies listed on the Australian Stock Exchange in 2010. The top 107 companies were selected and included sectors such as industrial, material, metal, mining, health care and biotechnology. They found that the ROE ratio decreased by 1.23%, which is not considered significant. The ROA ratio increased by 15.31%, the D/E ratio increased by 31.69%, and the D/A ratio increased by 10.11%.

Sari *et al*. (2016) attempted to determine the effect of the first-time implementation of IFRS 16 *Leases* on the financial statements and financial ratios of Turkish retail companies whose securities were publicly listed on the Istanbul Stock Exchange. They

used the constructive lease capitalisation method introduced by Imhoff *et al.* (1991) for the purpose of their study. Sari *et al.*'s (2016) results showed that the first-time implementation of IFRS 16 *Leases* had a statistically significant effect on the financial ratios they tested. The financial ratios they tested were the ROE ratio, the ROA ratio, the D/E ratio and the D/A ratio for 2010 to 2013. For the 2010 financial year, the ROE ratio decreased by 249.95%, while the ROA ratio decreased by 105.45%. Furthermore, the D/E ratio increased by 213.21%, while the D/A ratio decrease by 38.30%.

Öztürk and Serçemeli (2016) examined the effect of the first-time implementation of IFRS 16 *Leases* on the Statement of Financial Position and financial ratios of a Turkish airline industry, Pegasus Airline Company, in 2015. This study showed that the ROE ratio increased by 15.6%, the ROA ratio decreased by 34.4%, the D/E ratio increased by 75.3%, and the D/A ratio increased by 16.9%.

A study conducted by Morales-Díaz and Zamora-Ramírez (2018) examined the effect of the first-time implementation of IFRS 16 *Leases* on 646 European listed companies. They studied various sectors, including transportation, telecommunications and hotels. They found that the total assets and total liabilities increased significantly, leverage increased significantly, and interest coverage decreased. However, the results of their examination varied considerably depending on the sector.

Maglio *et al*. (2018) examined the effect of the first-time implementation of IFRS 16 *Leases* on profitability and leverage ratios of 40 companies listed on the Borsa Italian's Main Market in 2015. The profitability ratios included the ROE, ROA, EBITDA/total assets, EBITDA/total equity, and the leverage ratios included D/E and asset/equity. They found that the ROE decreased by 1.30%, ROA decreased by 7.2%, EBITDA/total assets decreased by 6.02% and EBITDA/total equity increased by 7.05%. Furthermore, the D/E ratio increased by 38.89%, and the asset/equity ratio increased by 14.40%.

In the studies performed by Wong and Joshi (2015), Sari *et al*. (2016), Öztürk and Serçemeli (2016), Morales-Díaz and Zamora-Ramírez (2018), and Maglio *et al*. (2018), it appears that the results are inconsistent between the researchers' findings.

These results were determined before the actual implementation of IFRS 16 *Leases*; therefore, the researchers had to use the constructive lease capitalisation method in order to determine the unrecorded leases and their effect on the assets and liabilities (Öztürk & Serçemeli, 2016:144). In other words, the researchers had to estimate the number of new assets, liabilities and expenses which would have been raised if IFRS 16 *Leases* was capitalised on the lessees' Statement of Financial Position.

Since the financial ratios were calculated based on the estimated number of assets, liabilities and lease expenses, their results were only an indication of what is expected to happen from the first-time implementation of IFRS 16 *Leases*. Thus, a further investigation to determine the actual effects on the financial ratios is required.

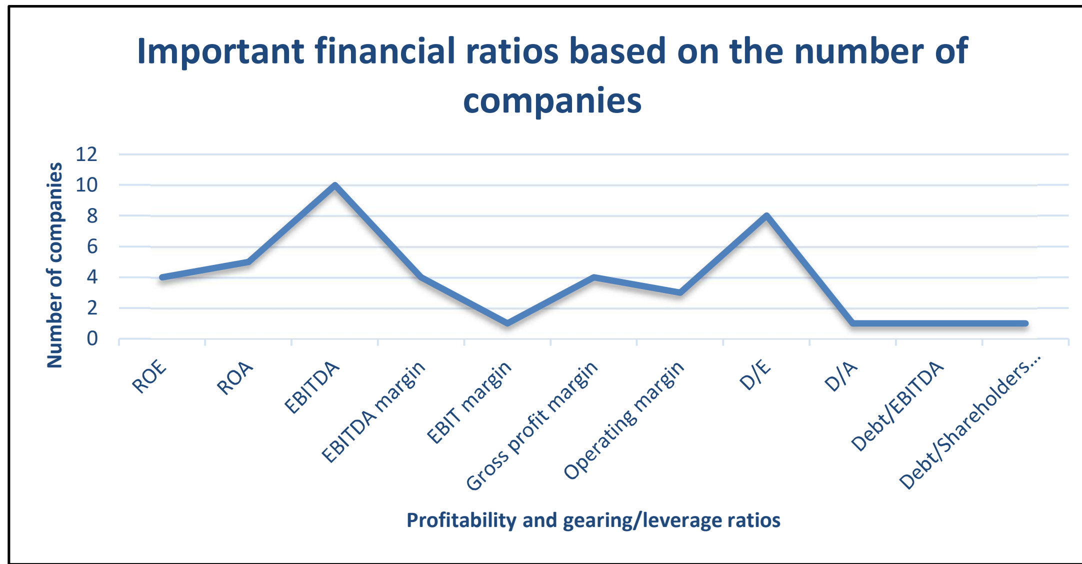
Although the above studies (Maglio *et al*., 2018; Morales-Díaz & Zamora-Ramírez, 2018; Öztürk & Serçemeli, 2016; Sari *et al*., 2016; Wong & Joshi, 2015) showed the effect of the first-time implementation of IFRS 16 *Leases* on financial ratios and key performance indicators of industries in various sectors, there has been little research done to see what the effect will be on JSE-listed retail companies (Cape, 2019:25).

2.2.2 Key financial ratios of JSE-listed retail companies

This section discusses the financial ratios that were key to the retail companies listed on the JSE.

In order to determine what key financial ratios will be affected the most (due to the first-time implementation of IFRS 16 *Leases* on retail companies), one should consider which financial ratios are considered key by these companies. Since this study only focused on selected JSE-listed retail companies, only those companies' financial statements were investigated to determine which financial ratios they consider to be key. Figure 1 demonstrates the key financial ratios of the selected JSE-listed retail companies.

Figure 1: Important financial ratios based on the number of companies



Source: Author

The integrated and annual financial statements of each company were investigated to determine what financial ratios were specifically reported. From this, a conclusion was drawn that each company has different financial ratios which they report and that not one financial ratio was specifically reported by all the companies at once. The first seven financial ratios (Figure 1) refer to the profitability ratios the retail companies report. The last four financial ratios (Figure 1) refer to the gearing/leverage ratios the retail companies report. As seen in Figure 1, retail companies mostly report the following profitability ratios: EBITDA (83.3% of the selected companies), ROA (41.7% of the selected companies), ROE (33.3% of the selected companies), EBITDA margin (33.3% of the selected companies), gross profit margin (33.3% of the selected companies) and less so on the Earnings Before Interest and Taxes (EBIT) margin (8.3% of the selected companies). Furthermore, the retail companies report mostly on the following gearing/leverage ratio: D/E (66.7% of the selected companies), and less so on the following ratios: D/A (8.3% of the selected companies), debt/EBITDA (8.3% of the selected companies) and debt/shareholders interest (8.3% of the selected companies). Therefore, based on the information in Figure 1, it can be concluded that the retail companies' key financial profitability and gearing/leverage ratios are: ROE, ROA, EBITDA, gross profit margin and D/E. Of these key financial ratios, those, including the D/A, that will be affected by the first-time implementation of IFRS 16

Leases will be investigated. All the key ratios mentioned were considered relevant, apart from the gross profit margin, as this ratio is not affected by the first-time implementation of IFRS 16 *Leases*. The key financial ratios reported by the retail companies investigated are also the key financial ratios previous studies anticipated the first-time implementation of IFRS 16 *Leases* would affect (Maglio *et al*., 2018; Morales-Díaz & Zamora-Ramírez, 2018; Öztürk & Serçemeli, 2016; Sari *et al*., 2016; Wong & Joshi, 2015).

Since previous research was done only on the potential effect IFRS 16 *Leases* will have on the financial ratios, there is no 'real' evidence of what effect IFRS 16 *Leases* will have on the financial statements of companies. This study, however, contributes to the body of knowledge of the actual effect on the ratios, as companies should have applied IFRS 16 *Leases* as of 1 January 2019. This study focused on the same ratios as previous research since these ratios are considered to be affected the most by the first-time implementation of IFRS 16 *Leases.*

2.3 METHODOLOGY

2.3.1 Research approach and design

According to Asenahabi (2019:78), a research design must include a method to evaluate the analysed data in order to include relevant research results and conclusions that will allow the researcher to give recommendations based on the study. Asenahabi (2019:78) further states that researchers should choose a design that will best fit their research, which could include one of the following: quantitative, qualitative or mixed methods.

Quantitative research provides statistical findings which are interpreted by statistical and numerical evidence (Rahman, 2017:105). Quantitative research is deductive since researchers can deduce the measurable results that could arise with new scientific evidence from their assumptions – if their assumptions are true (Antwi & Hamza, 2015:220).

On the other hand, qualitative research is not concerned with numeric values but with deepening the comprehension of a specific issue (Queirós *et al*., 2017:370). Qualitative research is inductive since it likes to observe, is process-orientated, has

higher reliability and is less concerned with generalisability but is more focused on the deeper interpretation of a study (Antwi & Hamza, 2015:220; Zalaghi & Khazaei, 2016:228). This study used a qualitative research design to determine the effect of the first-time implementation of IFRS 16 *Leases* on JSE-listed retail companies. This study focused on the meaning of the information obtained rather than the statistics and focused on the interpretation of the researched financial statements. A qualitative research design was used to analyse and interpret the effect of the first-time implementation of IFRS 16 *Leases* on the financial ratios. The interpretation and the discussion of the results ensure that financial statement users are informed as to why there was a certain change in the ratios and where to focus their attention in order to make informed decisions based on the financial ratios.

2.3.2 Sample selection

This study examined the effect of the first-time implementation of IFRS 16 *Leases* on JSE-listed retail companies. The retail industry was selected as it relies heavily on lease transactions. The study sample comprised 25 retail companies listed on the JSE (African Markets, 2020). These listed companies' financial statements were reviewed. By conducting an elimination process, it was found that some companies implemented IFRS 16 *Leases* in their 2019 financial statements. Others only implemented IFRS 16 *Leases* in their 2020 financial statements. The results of this review process were that six companies implemented IFRS 16 *Leases* for the first time in their 2019 financial statements, and 19 companies implemented IFRS 16 *Leases* in their 2020 financial statements.

Of the 25 companies, only 12 had fully audited annual financial statements (depending on the year, being 2019 or 2020, of first-time implementation) which included IFRS 16 *Leases*. This was done in order to perform a comparison of the annual financial statements. Six companies had fully audited annual financial statements which included IFRS 16 *Leases* in their 2019 financial statements, and six companies had fully audited financial statements which included IFRS 16 *Leases* in their 2020 financial statements. The remaining 13 companies only implemented IFRS 16 *Leases* in their interim financial statements. Therefore, they were disregarded as part of the sample population since only companies with full audited financial statements that already implemented IFRS 16 *Leases* for a full financial year were investigated. By

only including full audited financial statements, the resulting financial ratios were more trustworthy and accurate. In conclusion, 12 retail companies listed on the JSE were used in this study.

2.4 STUDY METHOD USED

Previous studies determined what the effect of the first-time implementation of IFRS 16 *Leases* will be on airline, telecommunication and retail companies. The most commonly used method to determine the effect of the first-time implementation of IFRS 16 *Leases* was the constructive lease capitalisation method introduced by Imhoff *et al.* in 1991 (Morales-Díaz & Zamora-Ramírez, 2018; You, 2017:21). Imhoff *et al.* (1991) developed this method around the capitalisation of unrecorded leases and to analyse its effect on assets and liabilities (Öztürk & Serçemeli, 2016:144). This study did not use the constructive lease capitalisation method as retail companies should already have implemented IFRS 16 *Leases* in their 2019 financial statements.

Other studies made use of a quantitative methodology (Maglio *et al*., 2018; Morales-Díaz & Zamora-Ramírez, 2018; Öztürk & Serçemeli, 2016), whereas this study made use of a qualitative methodology. A content analysis was used to evaluate the effect of the first-time implementation of IFRS 16 *Leases* on 12 JSE-listed retail companies. A content analysis is useful to summarise or explain data or behaviour accurately or to predict or describe interactions with data (Drisko & Maschi, 2015:58). Graneheim *et al*. (2017:30) describe a qualitative content analysis as the description and interpretation of the content of a study. Graneheim *et al*. (2017:30) further state that during a study, a researcher sorts the coded content into categories and proceeds to search for the content and formulate it as themes on different levels. In this study, however, the financial statements of the retail companies were used to determine the effect of the first-time implementation of IFRS 16 *Leases*. The audited and integrated financial statements were used as they are readily available on the World Wide Web. An in-depth investigation was done on each of the aforementioned companies' financial statements to determine how the companies disclosed the effect of IFRS 16 *Leases* in order to calculate the financial ratios. The previously stated and restated amounts were calculated and provided in the financial statements, or included in the notes to the financial statements for the relevant year. Therefore, calculating the previously stated or restated amounts was not necessary as both were provided. The

line items which were used in the calculations of the financial ratios are total assets, total liabilities, total equity, revenue, operating profit, EBITDA and net profit. These ratios were compared to one another before (previously stated amount) and after (restated amounts) the first-time implementation of IFRS 16 *Leases*. These ratios are discussed in detail in Section 2.5 (Results and Discussions). The period used in the content analysis was one year: the financial year before the implementation of IFRS 16 *Leases* and the financial year the standard was applied for the first time. Therefore, where the 2019 financial year applied, the 2018 audited figures were compared to the 2018 restated audited figures, and where the 2020 financial year applied, the 2019 audited figures were compared to the 2019 restated audited figures.

As part of the first-time implementation of IFRS 16 *Leases,* companies (in particular, lessees) are obligated to recognise right-of-use assets and corresponding lease liabilities. The recognition of the right-of-use asset could have a significant effect on the ROA ratio. The lease liability will have additional interest expenses which should be recognised due to the lease liability, and therefore, it will have an effect on the ROE ratio and the EBITDA calculation. Furthermore, if a company has a considerable amount of debt in comparison to its equity, it can run the risk of defaulting on certain loans and going bankrupt (Ellimäki, 2016:15). Therefore, it is important for retail companies to ensure they do not have more debt than equity and to maintain their debt levels (Ellimäki, 2016:15). A very high D/A ratio for a company will be unattractive due to the high degree of risk; a meagre D/A ratio for a company may also be unattractive due to the aforementioned leveraged returns (Correia, 2019:5-19; Restianti & Agustina, 2018:31). These ratios are also worth determining since new assets and liabilities should be recognised, which will significantly affect the ratios and the financial position of companies.

The financial ratios that were evaluated in this study are the profitability ratios and the gearing/leverage ratios. The profitability ratios include the ROE ratio, ROA ratio and EBITDA ratio. The gearing/leverage ratios include the D/E ratio and the D/A ratio. These ratios were used as they are significantly affected by the first-time implementation of IFRS 16 *Leases* since retail companies are obligated to recognise right-of-use assets and corresponding lease liabilities in their Statements of Financial Position. A review was done on the number of retail companies that used each of the

financial ratios (summarised in Figure 1). A conclusion was drawn that, on average, most retail companies report the following profitability ratios: ROE, ROA and EBITDA, with the latter being the most reported. The retail companies also reported the following gearing/leverage ratios: D/E and D/A, with D/E being the most reported. It was determined that the five ratios identified in the review of the retail companies' financial statements are the most commonly assessed financial ratios. These ratios were calculated using Microsoft Excel for ease of use. Microsoft Excel is a useful tool as the formulas automatically update if there is a change in the values. It is also widely known and commonly used by accounting professionals. The results of the calculations were divided into categories for each of the financial ratios: the first category was profitability ratios (ROE, ROA and EBITDA), and the second category was gearing/leverage ratios (D/E and D/A).

All of the above financial ratios were evaluated, and relevant conclusions were drawn in order to assist financial statement users on where to focus their attention in order to make informed decisions based on the results of the financial ratios calculated. The financial ratios that were used in this study are discussed below in order to understand how they were calculated.

2.4.1 Profitability ratio

Profitability ratios reflect how well a company performs to produce a profit for its investors/shareholders (Evans & Mathur, 2014:36). Furthermore, these ratios provide users with a clear understanding of how effectively the company has managed its assets to generate profit and shareholder value (Arkan, 2016:18).

2.4.1.1 Return on equity

The ROE ratio measures a company's profitability by showing how much profit the company will generate from the money the shareholders have invested (Khotbi & Rousseau, 2018:11; Veverková, 2019:1371). ROE is derived by calculating a percentage by dividing the net profits of the shareholders (after the deduction of interest expenses and taxation) by the funds, namely equity, the shareholders have invested (Correia, 2019:5-24; Khotbi & Rousseau, 2018:11).

2.4.1.2 Return on asset

The ROA ratio is a company's earnings of shareholders' net profits after the deduction of interest expenses and taxation divided by the company's total assets. ROA measures the profitability of a company in relation to its assets employed (Correia, 2019:5-22; Utami, 2017:27). The ratio represents the productivity of management in the use of assets to produce earnings (Habib *et al*., 2016:73).

2.4.1.3 Earnings before interests, taxation, depreciation and amortisation

The EBITDA ratio is a company's operating choices, as it considers the company's profitability from its core activities before taking into account the effect of capital management, debt and non-cash products, such as depreciation (Ellimäki, 2016:15). EBITDA is calculated by adding the company's depreciation and amortisation to its operating profit (Correia, 2019:5-21; IFRS Foundation, 2016:88).

2.4.2 Gearing/leverage ratios

Long-term solvency ratios, also referred to as leverage ratios, are structured to determine the amount of risk faced by a company (Arkan, 2016:17). This combination gives a straightforward view of how a company's finances and operating operations are funded (Amrutha *et al*., 2019:501). The common leverage ratios are D/E and D/A (Amrutha *et al*., 2019:500; Arkan, 2016:18).

2.4.2.1 Debt/equity

The D/E ratio measures the ratio of a company's total debt to its total equity (Correia, 2019:5-19; Ellimäki, 2016:15; Veverková, 2019:1371). The ratio shows the extent to which the total debt is covered by the shareholders' funds (Correia, 2019:5-19).

2.4.2.2 Debt/asset

The D/A ratio (also referred to as the solvency ratio) is the ratio of a company's total debt to its total assets and measures the total funds given by creditors (Correia, 2019:5-19; Khotbi & Rousseau, 2018:16; Veverková, 2019:1371). Furthermore, the company's total debt includes its current liabilities and, in most situations, its preference share capital (Correia, 2019:5-19). The higher a company's D/A ratio, the greater its financial risk (Restianti & Agustina, 2018:31).

2.5 RESULTS AND DISCUSSIONS

The results of the effect of the first-time implementation of IFRS 16 *Leases* are discussed in this section.

Table 2 and Table 3 show the restated amounts, amounts before IFRS 16 *Leases* (previously stated amounts), the percentage change and the increase or decrease in the financial ratios. Where the 2019 financial statements were applicable, the 2018 audited figures were compared to the 2018 restated audited figures. Similarly, where the 2020 financial statements were applicable, the 2019 audited figures were compared to the 2019 restated audited figures. The financial statements were compared to determine the effect IFRS 16 *Leases* had on the financial ratios of JSE-listed retail companies.

Table 2 shows the effect on the profitability ratios before and after the implementation of IFRS 16 *Leases.* It includes the minimum, maximum and average change in each ratio.

Table 2: Effect of IFRS 16 *Leases* on the profitability ratios

	Restated	**Before IFRS 16 *Leases***	**% Change**	**Increase/ Decrease**
ROE				
Company with minimum change	27%	17,12%	-7,39%	Decrease
Company with maximum change	47,60%	38,21%	57,69%	Increase
Average collective change of all companies	20,14%	19,30%	8,89%	Increase
ROA				
Company with minimum change	22,85%	32,25%	-29,14%	Decrease
Company with maximum change	24,20%	15,90%	105,34%	Increase
Average collective change of all companies	12,09%	12,52%	6,99%	Increase

	Restated	Before IFRS 16 *Leases*	% Change	Increase/ Decrease
EBITDA				
Company with minimum change	70,72%	70,72%	0,00%	Unchanged
Company with maximum change	22,98%	13,93%	137,52%	Increase
Average collective change of all companies	20,58%	17,98%	33,40%	Increase

Source: Author

When comparing each retail company's ROE ratio before and after the first-time implementation of IFRS 16 *Leases,* there was a minimum decrease of 7,39% for one company, a maximum increase of 57,69% for another and an average collective increase of 8,89% for the 12 companies. Five companies experienced a decrease in their ROE ratio, while seven companies experienced an increase. The decrease in the ROE ratio some companies experienced was due to a significant decrease in their net profit compared to the decrease in their equity. The decrease in the net profit was due to lessees having to recognise the depreciation of the right-of-use assets and interest expenses of the lease liabilities, which were previously not recorded under IAS 17 *Leases;* instead, a lease expense was recognised. However, the depreciation and interest expense amount to more than the lease expense. This led to an overall decrease in profit. Therefore, the effect on the net profit is greater than before the IFRS 16 *Leases*. Furthermore, some companies had fewer operating leases in the prior year that should have been accounted for as a right-of-use asset. Most companies made use of the exemption criteria to recognise a low-value asset or a short-term asset. The increase in the ROE ratio some companies experienced was due to the significant decrease in their equity compared to the decrease in their net profit. The decrease in the equity was due to the capitalisation of the lease liability, which was more than the capitalisation of the right-of-use asset since right-of-use assets depreciate more rapidly than lease liabilities.

When comparing each of the 12 retail companies' ROA ratios before and after the first-time implementation of IFRS 16 *Leases*, it was determined that, overall, there was

a decrease in their ROA. Four of the companies experienced an increase in ROA, and seven companies experienced a decrease. The company with the greatest decrease in ROA had a decrease of 29,14%, and the company with the greatest ROA increase had an increase of 105,34%. With regard to all the companies, there was an overall average ROA increase of 6,99%. The overall decrease in the ROA ratio was due to the total assets having an overall greater increase compared to the EBIT/operating profit of the retail companies. A decrease in the EBIT/operating profit was due to the retail companies' expenses increasing compared to their expenses before IFRS 16 *Leases*. The increase in the expenses was since the depreciation is normally excluded from the operating expenses (Öztürk & Serçemeli, 2016:148) but is now included; thus, the EBIT/operating profit decreased. The increase in the assets was due to the right-of-use assets which were recognised as non-current assets in the Statement of Financial Position.

When comparing each company's EBITDA ratio before and after the first-time implementation of IFRS 16 *Leases*, all the companies experienced an increase. The minimum percentage change for the 12 companies remained unchanged. A maximum increase of 137,52% was experienced by the 12 companies, and there was an average increase of 33,40% for the 12 companies. The increase in the EBITDA ratio was due to no lease expenses being recognised. Furthermore, the depreciation relating to the right-of-use asset and the interest expense relating to the lease liability were not taken into account in the calculation. In other words, the operating profit was calculated, and then the depreciation relating to the right-of-use asset was re-added to calculate the earnings before the effect of the depreciation and interest expenses.

Table 3 shows the effect on the gearing/leverage ratio before and after the implementation of IFRS 16 *Leases.* It includes the minimum, maximum and average change in each ratio.

Table 3: Effect of IFRS 16 *Leases* on the gearing/leverage ratios

	Restated	Before IFRS 16 *Leases*	% Change	Increase/ Decrease
D/E				
Company with minimum change	0,31	0,40	-24%	Decrease
Company with maximum change	9,58	3,60	166%	Increase
Average collective change of all companies	3,36	1,95	47%	Increase
D/A				
Company with minimum change	0,23	0,34	-31%	Decrease
Company with maximum change	0,46	0,30	53%	Increase
Average collective change of all companies	0,60	0,55	9%	Increase

Source: Author

Overall, the retail companies experienced an increase in D/E and D/A ratios in their financial statements due to the first-time implementation of IFRS 16 *Leases* – with the exception of two companies that experienced a decrease in their D/E ratio and three companies that experienced a decrease in their D/A ratio. The D/E ratio had a minimum decrease of 24%, a maximum increase of 166% and an average increase of 47%. The D/A ratio had a minimum decrease of 31%, a maximum increase of 53% and an average increase of 9%. The increase in the D/E and D/A ratios were since lessees had to recognise a right-of-use asset and a corresponding lease liability in their Statement of Financial Position, which were previously not recorded in terms of IAS 17 *Leases*. The right-of-use asset was less than the lease liability recognised in the Statement of Financial Position. This is since the right-of-use asset depreciates over the asset's useful life on a straight-line basis, while the liability decreases according to the number of lease payments made but then often increases according to the number of interest payments made over the lease period (Montinaro, 2018:49).

This led to a significant decrease in the retail companies' equity compared to that under IAS 17 *Leases*. The decrease in the D/E ratio of the two companies was due to a significant decrease in their liabilities compared to the decrease in their equity. Furthermore, these companies experienced a significant decrease in their liabilities compared to the other companies that experienced an increase in their liabilities.

2.6 CHAPTER CONCLUSION

This study focused on the effect of the first-time implementation of IFRS 16 *Leases* on selected JSE-listed retail companies. The retail industry was selected for this study as it had been significantly affected by the first-time implementation of IFRS 16 *Leases* due to its reliance on lease transactions. This study did not use the lease capitalisation method introduced by Imhoff *et al.* (1991). In other words, no estimation was made regarding the number of assets, liabilities and lease expenses; rather, the actual financial statements of the retail companies, which were readily available on the World Wide Web, were used.

In general, the first-time implementation of IFRS 16 *Leases* had a significant effect on the retail companies' financial assets, liabilities and equity due to new assets and liabilities that were recognised.

This resulted in the financial ratios being significantly affected. The ROE ratio had mostly increased, with an average of 8,89%. The ROA ratio had an average increase of 6.99%, and EBITDA increased, with an average of 33,40%. The increase in ROE was due to the significant decrease in equity compared to the decrease in net profit. The decreases in the ROE and ROA ratios were due to a decrease in earnings resultant from an increase in depreciation and interest expense. The increase in the EBITDA ratio was due to the depreciation and interest expenses which were not included in the calculation. Furthermore, the EBITDA ratio increased as no lease expenses were taken into consideration in the calculation. The D/E and D/A ratios had an average increase of 47% and 9%, respectively. Due to the first-time implementation of IFRS 16 *Leases*, the D/A ratio had increased which, under normal circumstances, is an indication of higher risk. At first glance, lenders, such as the banks, will reassess whether to offer a loan to the company as IFRS 16 *Leases* does not affect a company's risk status, only its ratios. The bank should, therefore, take the first-time

implementation of IFRS 16 *Leases* into consideration. Shareholders and other investors need to take into consideration the effect of IFRS 16 *Leases* before buying/selling shares or investing solely on the increase or decrease in the ratios. This is since the companies' status in most cases did not change, or not as much, before and after the implementation of IFRS 16 *Leases*. Furthermore, for future lease contracts, retail companies should consider whether it would be more beneficial to lease assets rather than buy them (as this includes saving on the initial investment and cost reductions in maintenance) or to choose the exemption criteria in order to classify the lease as a short-term asset or a low-value asset, as this will improve the financial ratios.

This study has limitations as it focused on only 12 JSE-listed retail companies. Not all the retail companies listed on the African Market were used as only 12 companies had fully audited financial statements which included the effect of IFRS 16 *Leases*. At the time of this study, the remaining companies only had IFRS 16 *Leases* implemented in their interim financial statements. Therefore, this study focused on only a small sample and one industry. Further research could be done to determine the effect of the first-time implementation of IFRS 16 *Leases* on a larger sample in different industries listed on the JSE and in other parts of the world.

CHAPTER 3: CONCLUSIONS AND RECOMMENDATIONS

3.1 OBJECTIVE OF THIS CHAPTER AND THE RESEARCH STUDY

This chapter discusses how the primary study objective was achieved through the secondary objectives and provides a summary of the research findings, conclusions and recommendations.

The primary study objective was to determine the effect of the first-time implementation of IFRS 16 *Leases* on the financial ratios of JSE-listed retail companies.

The secondary objectives entailed:

The empirical and theoretical objective:

- Identify key financial ratios for retail companies listed on the JSE.

Empirical objectives:

- Determine which financial ratios are key to the retail companies listed on the JSE, with reference to the financial statements of the selected companies;
- Compare the financial statements before (previously stated amounts) and after (restated amounts) the implementation of IFRS 16 *Leases,* and determine how the first-time implementation affects the financial ratios of the selected JSE-listed retail companies; and
- Provide information to the users of the financial statements on where to focus their attention in order to make informed decisions based on the results obtained from the financial ratio analysis.

This study examined the effect of the first-time implementation of IFRS 16 *Leases* on the financial ratios of JSE-listed retail companies. The retail industry was selected for this study as it relies heavily on lease transactions and was expected to be among the industries that would be affected the most due to the first-time implementation of IFRS 16 *Leases*. The study sample population comprised 25 retail companies listed on the JSE. It was found that six companies had already implemented IFRS 16 *Leases* in

their 2019 financial statements; 19 only implemented IFRS 16 *Leases* in their 2020 financial statements for the first-time.

Of the 25 companies, only 12 had fully audited annual financial statements – which included IFRS 16 *Leases* – for the 2019 or 2020 financial year. Of those 12 companies, six had fully audited financial statements, which included IFRS 16 *Leases*, for their 2019 financial statements, and six had fully audited financial statements, which included IFRS 16 *Leases*, in their 2020 financial statements. The other 13 companies only implemented IFRS 16 *Leases* in their interim financial statements and were thus disregarded as only companies with fully audited financial statements that had already implemented IFRS 16 *Leases* for a full financial year were investigated.

3.2 RESEARCH FINDINGS AND CONCLUSIONS

Chapter 2 provided a brief overview of the main differences between IAS 17 *Leases* and the new lease standard, IFRS 16 *Leases*, which was introduced by the IASB to account for all lease transactions on the lessee's Statement of Financial Position. The main purpose of the change is to eliminate off-balance-sheet financing and to ensure all lease transactions are accounted for on the Statement of Financial Position in order to faithfully represent all lease transactions. Table 1 (Chapter 2) showed the main differences between the accounting standards.

The main difference is that there is no differentiation between finance leases anymore. All lease transactions are accounted for in the same manner unless the recognition exemption applies where lessees choose to recognise a low-value asset or a short-term lease (less than 12 months). If the recognition exemption is elected, no lease asset or lease liability is accounted for in the financial records. The lessee then recognises a right-of-use asset and a corresponding lease liability in the Statement of Financial Position. The depreciation relating to the right-of-use asset and the interest expenses relating to the lease liability are recognised in the Statement of Profit or Loss and Other Comprehensive Income – previously not accounted for in terms of IAS 17 *Leases*.

To address the primary study research objective, key financial ratios to be assessed were determined in fulfilment of the first secondary objective. The first secondary

objective was achieved by identifying the key financial ratios of the JSE-listed retail companies. The integrated and annual financial statements of the selected companies were reviewed in order to determine which financial ratios they reported. If the retail companies reported specific financial ratios to their financial statement users, the author considered them as key to that company. The number of retail companies that used each of the financial ratios is illustrated in Figure 1. The conclusion was drawn that, on average, the retail companies report the following profitability ratios: ROE, ROA and EBITDA, with the latter being the most reported. The retail companies also reported the following gearing/leverage ratios: D/E and D/A, with D/E being the most reported. Furthermore, a literature review was used to determine what key financial ratios were investigated in previous studies on the first-time implementation of IFRS 16 *Leases*. It was determined that the five ratios identified in the review of the retail companies' financial statements are the most commonly assessed financial ratios.

The second and third secondary objectives were achieved simultaneously. The retail companies' financial statements were used to determine the effect of the first-time implementation of IFRS 16 *Leases* on financial ratios. Audited and integrated financial statements were used as these were readily available on the World Wide Web. In order to calculate the financial ratios, an in-depth investigation was done on each of these companies' financial statements to determine how the companies disclosed the effect of IFRS 16 *Leases*. The line items which were used in the calculations of the financial ratios were total assets, total liabilities, total equity, revenue, operating profit, EBITDA and net profit. These ratios were compared to one another both before and after the first-time implementation of IFRS 16 *Leases*. The financial ratios used in this study were profitability and gearing/leverage ratios. The profitability ratios were ROE, ROA and EBITDA, and the gearing/leverage ratios were D/E and D/A.

Table 2 showed the effect on the profitability ratios both before and after the implementation of IFRS 16 *Leases.* The table showed the minimum, maximum and average change in each ratio that resulted from the implementation of IFRS 16 *Leases*. Regarding the ROE, one retail company experienced a maximum decrease of 7.39%, another company experienced a maximum increase of 57,69%, and the 12 companies experienced an average collective increase of 8,89%. One company experienced a decrease in its ROA ratio of 29,14%, another company experienced an

increase of 105,34%, and there was an overall average increase of 6,99%. The EBITDA ratio's minimum percentage change remained unchanged (0%). There was a maximum increase of 137,52%, and the average collective increase for the 12 companies was 33,40%.

Table 3 showed the effect on the gearing/leverage ratios before and after the implementation of IFRS 16 *Leases.* The table showed the minimum, maximum and average change in each ratio that resulted from the implementation of IFRS 16 *Leases*. Overall, the retail companies experienced an increase in D/E and D/A ratios in their financial statements. The D/E ratio had a maximum decrease of 24%, a maximum increase of 166% and an average increase of 47%. On the other hand, the D/A ratio had a maximum decrease of 31%, a maximum increase of 53% and an average increase of 9%.

The fourth secondary objective was achieved by encouraging financial statement users to consider the change in the ratios on a company-by-company basis in order to make informed decisions. It is important for shareholders and other investors to take into consideration the effect of IFRS 16 *Leases* before buying/selling shares or investing solely on the increase or decrease in ratios (on a company-by-company basis). This is since companies' status in most cases did not change, or not as much, before and after the first-time implementation of IFRS 16 *Leases*.

3.3 OVERALL CONCLUSION

In conclusion, the first-time implementation of IFRS 16 *Leases* had a significant effect on the lessee's assets, liabilities and equity due to the right-of-use assets and lease liabilities being recognised. It also had a notable effect on the profitability and gearing/leverage ratios analysed. The ROE ratio had mostly increased, with an average of 8,89%. The ROA ratio had mostly increased, with an average of 6,99%. The EBITDA ratio had increased, with an average of 33,40%. The increase in ROE was due to the significant decrease in equity compared to the decrease in net profit. The decrease in ROE and ROA ratio was due to a decrease in earnings resultant from an increase in depreciation and interest expense. The increase in the EBITDA ratio was due to the depreciation and the interest expenses which were not included in the calculation. Furthermore, the EBITDA ratio increased as no lease expenses were

taken into consideration in the calculation. The D/E and D/A ratio had an average increase of 47% and 9%, respectively. The increase in the D/E and D/A ratios were since lessees had to recognise a right-of-use asset and a corresponding lease liability in their Statement of Financial Position, which were previously not recorded in terms of IAS 17 *Leases*. This is since the right-of-use asset depreciates over the asset's useful life on a straight-line basis (Bunea-Bontaş, 2017:82), while a liability decreases according to the number of lease payments made but often increase according to the interest payments made over the lease period (Montinaro, 2018:49). This led to a significant decrease in the retail companies' equity compared to that of IAS 17 *Leases*.

3.4 LIMITATIONS AND RECOMMENDATIONS

This study has limitations as it focused on only 12 JSE-listed retail companies. Not all the retail companies were considered as not all of them had fully audited financial statements available at the time of the study. Therefore, further research could be done on all JSE-listed retail companies and then compared to this study's findings. If all the retail companies are compared, financial statement users will be able to assess each of the companies with the help of the research conducted. This research paper only focused on the effect on the profitability and gearing/leverage ratios; it would, however, be interesting to see how the first-time implementation of IFRS 16 *Leases* affects the operating lease expense as a ratio to turnover.

Recommendations for further research:

- Perform the same study on all the JSE-listed retail companies and compare its results with this study's results to determine any differences;
- Conduct a similar study on privately-owned retail companies as they would also be affected if they have high volumes of lease transactions; and
- Perform a similar study on retail companies in other countries and compare its results with this study's results.

LIST OF REFERENCES

African Markets. 2020. *Johannesburg Stock Exchange (JSE) – listed companies.* https://www.african-markets.com/en/stock-markets/jse/listed-companies Date of access: 19 Apr. 2020; 5 Nov. 2020.

Aktaş, R., Kargin, S. & Arici, N.D. 2017. Changes new leases standard IFRS 16 has brought and evaluation of its possible effects on financial reports and financial ratios of corporations. *Journal of Business Research–Turk,* 9(1):858-881.

Amrutha, P., Selvam, M. & Kathiravan, C. 2019. Impact of converging to IFRS on key financial ratios with reference to BSE listed firms. *International Journal of Psychosocial Rehabilitation,* 23(1):495-506.

Antwi, S.K. & Hamza, K. 2015. Qualitative and quantitative research paradigms in business research: a philosophical reflection. *European Journal of Business and Management,* 7(1):217-225.

Arkan, T. 2016. The importance of financial ratios in predicting stock price trends: a case study in emerging markets. *Finanse, Rynki Finansowe, Ubezpieczenia*, 1(79):13-26.

Asenahabi, B.M. 2019. Basics of research design: a guide to selecting appropriate research design. *International Journal of Contemporary Applied Researches*, 6(5):76-89.

Baastad, M.S. & Aslaksen, A.B. 2017. *IFRS 16 Leases and its effects on management compensation systems in the Norwegian retail industry*. Norway: BI Norwegian Business School. (Thesis – MSc).

Beattie, V., Goodacre, A. & Thomson, S.J. 2006. International lease-accounting reform and economic consequences: the views of UK users and preparers. *The International Journal of Accounting,* 41(1):75-103.

Borges, S.L.D. 2019. *The expected impact of IFRS 16 on retail companies.* https://bibliotecadigital.fgv.br/dspace/bitstream/handle/10438/27577/The%20expected%20impact%20of%20IFRS%2016%20on%20retail%20companies.pdf?sequence=1&isAllowed=y Date of access: 7 Dec 2020.

Bunea-Bontaş, C.A. 2017. Lease accounting under IFRS 16 and IAS 17 – a comparative approach. *Revista Economia Contemporana,* 2(1):78-84.

Cape, J. 2019. *A study on the possible impact of constructive lease capitalisation on selected listed South African companies' financial statements, in light of IFRS 16 Leases.* Cape Town: University of Cape Town. (Thesis – MCom).

Correia, C. 2019. *Financial management*. 9th ed. Claremont: Juta.

Deloitte 2016. *Point of view telecommunications. Implications of the new leasing standard.* https://www2.deloitte.com/content/dam/Deloitte/au/Documents/technology-media-telecommunications/deloitte-au-tmt-ifrs-16-aasb-280416.pdf Date of access: 21 Jul. 2020.

Drisko, J. & Maschi, T. 2015. *Content analysis*. New York, NY: Oxford University Press.

Duke, J.C., Hsieh, S.J. & Su, Y. 2009. Operating and synthetic leases: exploiting financial benefits in the post-Enron era. *Advances in Accounting*, 25(1):28-39.

Ellimäki, P. 2016. *Transition to IFRS 16 Leases and its impact on key financial ratios for construction companies in Finland*. Helsinki: Haaga-Helia University of Applied Sciences. (Thesis – Bachelor's Degree in International Business).

Evans, J.R. & Mathur, A. 2014. Retailing and the period leading up to the Great Recession: a model and a 25-year financial ratio analysis of US retailing. *The International Review of Retail, Distribution and Consumer Research,* 24(1):30-58.

Fletcher, A.J. 2017. Applying critical realism in qualitative research: methodology meets method. *International Journal of Social Research Methodology*, 20(1):181-194.

Graneheim, U.H., Lindgren, B.M. & Lundman, B. 2017. Methodological challenges in qualitative content analysis: a discussion paper. *Nurse Education Today*, 56(1):29-34.

Guba, E.G. & Lincoln, Y.S. 1994. Competing paradigms in qualitative research. In: Denzin, N.K. & Lincoln, Y.S., eds. *Handbook of qualitative research*. Thousand Oaks, CA: Sage. pp.105-117.

Habib, H., Khan, F. & Wazir, M. 2016. Impact of debt on profitability of firms: evidence from non-financial sector of Pakistan. *City University Research Journal,* 6(1):70-80.

Hiller, J. 2016. Epistemological foundations of objectivist and interpretivist research. *Music Therapy Research*, 1(1):100-127.

Hladika, M. & Valenta, I. 2018. Analysis of the effects of applying the new IFRS 16 Leases on the financial statements. *Economic and Social Development: Book of Proceedings,* 1(1):255-263.

IASB (International Accounting Standards Board). 2016. *IASB shines light on leases by bringing them onto the balance sheet.* http://archive.ifrs.org/Alerts/PressRelease/Pages/IASB-shines-light-on-leases-by-bringing-them-onto-the-balance-sheet.aspx Date of access: 14 Apr. 2020.

IASPlus. 2013. *IAS 17 – Leases*. https://www.iasplus.com/en/standards/ias/ias17 Date of access: 14 Apr. 2020; 10 Sept. 2020.

IASPlus. 2020a. *IAS 17 – Leases*. https://www.iasplus.com/en/standards/ias/ias17 Date of access: 19 Jul. 2020.

IASPlus, 2020b. *IFRS 16 – Leases*. https://www.iasplus.com/en/standards/ifrs/ifrs-16 Date of access: 10 Sept. 2020.

IFRS (International Financial Reporting Standards) Foundation. 2016. *IFRS 16 Leases.* https://www.ifrs.org/-/media/project/leases/ifrs/published-documents/ifrs16-effects-analysis.pdf Date of access: 19 Feb. 2020; 3 Sept. 2020.

IFRS (International Financial Reporting Standards) Foundation. 2020a. *IAS 17 Leases*. https://www.ifrs.org/issued-standards/list-of-standards/ias-17-leases/ Date of access: 19 Jul. 2020.

IFRS (International Financial Reporting Standards) Foundation. 2020b. *IFRS 16 Leases*. https://www.ifrs.org/issued-standards/list-of-standards/ifrs-16-leases/ Date of access: 19 Jul. 2020.

Imhoff Jr, E.A., Lipe, R.C. & Wright, D.W. 1991. Operating leases: impact of constructive capitalization. *Accounting Horizons,* 5(1):51-63.

Iskandar, B., Wangsaputra, R., Pasaribu, U. & Husniah, H. 2018. *Optimal lease contract for remanufactured equipment*. (IOP conference series: materials science and engineering. IOP Publishing, 012070). https://iopscience.iop.org/article/10.1088/1757-899X/319/1/012070/pdf Date of access: 9 Mar. 2020.

Jasti, N.V.K. & Kodali, R. 2014. A literature review of empirical research methodology in lean manufacturing. *International Journal of Operations & Production Management*, 34(8):1080-1122.

Joubert, M., Garvie, L. & Parle, G. 2017. Implications of the new accounting standard for leases AASB 16 (IFRS 16) with the inclusion of operating leases in the balance sheet. *Journal of New Business Ideas & Trends*, 15(2):1-11.

Khotbi, S. & Rousseau, P. 2018. The characteristics of mergers and acquisitions and their impact on performance in emerging countries: a Saudi Arabian study. https://hal-amu.archives-ouvertes.fr/hal-01932855/document Date of access: 7 Dec. 2020.

Kivunja, C. & Kuyini, A.B., 2017. Understanding and applying research paradigms in educational contexts. *International Journal of Higher Education*, 6(5):26-41.

KPMG 2016a. *IFRS 16 Leases. A more transparent balance sheet. First impression IFRS*. https://assets.kpmg/content/dam/kpmg/pdf/2016/01/leases-first-impressions-2016.pdf Date of access: 21 Jul. 2020.

KPMG 2016b. *New leases standard – introducing IFRS 16*. https://home.kpmg/xx/en/home/insights/2016/01/leases-new-standard-balance-sheet-transparency-slideshare-first-impressions-ifrs16-130116.html Date of access: 19 Apr. 2020.

Lease Accelerator. 2018. *History of lease accounting – why were the new standards introduced?* https://explore.leaseaccelerator.com/history-lease-accounting/ Date of access: 19 Jul. 2020.

Magli, F., Nobolo, A. & Ogliari, M. 2018. The effects on financial leverage and performance: the IFRS 16. *International Business Research,* 11(1):76-89.

Maglio, R., Rapone, V. & Rey, A. 2018. Capitalisation of operating lease and its impact on firm's financial ratios: evidence from Italian listed companies. *Corporate Ownership & Control*, 15(3-1):152-162.

Maree, K., Creswell, J.W., Ebersöhn, L., Eloff, I., Ferreira, R., Ivankova, N.V., Jansen, J.D., Nieuwenhuis, J., Pietersen, J. & Plano Clark, V.L. 2016. *First steps in research*. 2nd ed. Pretoria: Van Schaik.

Marsha, N. & Murtaqi, I. 2017. The effect of financial ratios on firm value in the food and beverage sector of the IDX. *Journal of Business and Management,* 6(2):214-226.

Meadows, K.A. 2003. So you want to do research? 3. An introduction to qualitative methods. *British Journal of Community Nursing,* 8(1):464-469.

Mingers, J., 2003. A classification of the philosophical assumptions of management science methods. *Journal of the Operational Research Society*, 54(6):559-570.

Montinaro, E. 2018. *A shift in lease accounting: the study of the transition from IAS 17 to IFRS 16.* https://tesi.luiss.it/id/eprint/21901 Date of access: 21 Jul. 2020.

Morales-Díaz, J. & Zamora-Ramírez, C. 2018. The impact of IFRS 16 on key financial ratios: a new methodological approach. *Accounting in Europe,* 15:105-133.

Morgan, D.L. 2018. Living within blurry boundaries: the value of distinguishing between qualitative and quantitative research. *Journal of Mixed Methods Research*, 12:268-279.

Oanda. 2020. *Currency converter*. https://www1.oanda.com/currency/converter/ Date of access: 21 Jul. 2020.

Öztürk, M. & Serçemeli, M. 2016. Impact of new standard “IFRS 16 Leases” on Statement of Financial Position and key ratios: a case study on an airline company in turkey. *Business and Economics Research Journal,* 7(1):143-157.

Patten, M.L. & Galvan, M. 2020. *Proposing empirical research: a guide to the fundamentals*. 6th ed. Abingdon-on-Thames: Routledge. Available from North-West University Library: https://search-ebscohost-com.nwulib.nwu.ac.za/login.aspx?direct=true&db=cat01185a&AN=nwu.b2257673&site=eds-live Date of access: 20 Jul. 2020.

PwC. 2016a. *IFRS 16: the leases standard is changing. Are you ready.* https://www.pwc.com/gx/en/services/audit-assurance/assets/ifrs-16-new-leases.pdf Date of access: 20 Jul. 2020.

PwC. 2016b. *An industry focus on the impact of IFRS 16 – retail and consumer.* https://inform.pwc.com/inform2/show?action=informContent&id=1618104902163833 Date of access: 21 Jul. 2020.

Quach, V. & Tu, L., 2020. Implications of accounting standard changes for financial reports: an exploratory study of the transition to IFRS 16. Gothenburg: Gothenburg University. (Dissertation – MCom).

Queirós, A., Faria, D. & Almeida, F. 2017. Strengths and limitations of qualitative and quantitative research methods. *European Journal of Education Studies,* 3(9):369-387.

Rahman, M.S. 2017. The advantages and disadvantages of using qualitative and quantitative approaches and methods in language "Testing and Assessment" research: a literature review. *Journal of Education and Learning,* 6(1):102-112.

Restianti, T. & Agustina, L. 2018. The effect of financial ratios on financial distress conditions in sub industrial sector company. *Accounting Analysis Journal,* 7(1):25-33.

Richardson, A.J. 2012. Paradigms, theory and management accounting practice: a comment on Parker (forthcoming) "Qualitative management accounting research: Assessing deliverables and relevance". *Critical Perspectives on Accounting,* 23(1):83-88.

Sari, E.S., Altintas, T. & Tas, N. 2016. The effect of the IFRS 16: constructive capitalization of operating leases in the Turkish retailing sector. *Journal of Business, Economics and Finance,* 5(1):138-147.

Segal, M. & Naik, G. 2019. The expected impact of the implementation of International Financial Reporting Standard (IFRS) 16 – Leases. *Journal of Economic and Financial Sciences,* 12(1):1-12.

Stats SA (Statistics South Africa). 2018. *Five facts about the retail trade industry.* http://www.statssa.gov.za/?p=11101 Date of access: 22 Apr. 2020.

Stemler, S.E. 2015. Content analysis. In: Scott, R.A. & Kosslyn, S.M., eds. *Emerging trends in the social and behavioral sciences: an interdisciplinary, searchable, and linkable resource*. Hoboken, NY: Wiley. pp.1-14.

Tuli, F. 2010. The basis of distinction between qualitative and quantitative research in social science: reflection on ontological, epistemological, and methodological perspectives. *Ethiopian Journal of Education and Sciences*, 6:97-108.

Utami, W.B. 2017. Analysis of current ratio changes effect, asset ratio debt, total asset turnover, return on asset, and price earning ratio in predicting growth income by considering corporate size in the company joined in Lq45 Index Year 2013-2016. *International Journal of Economics, Business and Accounting Research,* 1(1):25-37.

Veverková, A. 2019. IFRS 16 and its impacts on aviation industry. *Acta Universitatis Agriculturae et Silviculturae Mendelianae Brunensis,* 67(1):1369-1377.

White, M.D. & Marsh, E.E. 2006. Content analysis: a flexible methodology. *Library Trends,* 55(1):22-45.

Wong, K. & Joshi, M. 2015. The impact of lease capitalisation on financial statements and key ratios: evidence from Australia. *Australasian Accounting Business & Finance Journal,* 9(1):27-44.

Wrigley, N. & Lowe, M., 2010. *The globalization of trade in retail services.* https://www.researchgate.net/profile/Neil_Wrigley/publication/228710305_The_Globalization_of_Trade_in_Retail_Services/links/0a85e5316e219083b4000000/The-Globalization-of-Trade-in-Retail-Services.pdf Date of access: 19 Apr. 2020.

You, J. 2017. *The impact of IFRS 16 lease on financial statement of airline companies.* Auckland: Auckland University of Technology. (Dissertation – MBus) https://openrepository.aut.ac.nz/bitstream/handle/10292/10930/YouJ.pdf?sequence=4&isAllowed=y Date of access: 27 Feb. 2020.

Yu, J. 2019. Investigation of IFRS16 effect on the airlines. *Journal of Finance and Accounting,* 7(1):132-135.

Zalaghi, H. & Khazaei, M. 2016. The role of deductive and inductive reasoning in accounting research and standard setting. *Asian Journal of Finance & Accounting,* 8(1):227-241.

Appendix A – Companies listed on African Markets

Company name	Year-end	The date IFRS 16 *Leases* were implemented by the company	Period for the financial year used	Financial statements or interim financial statements
1. ADvTECH Limited	31 December 2019	1 January 2019	1 January 2019 – 31 December 2019	Preliminary audited results for the year ended 31 December 2019
2. African and Overseas Enterprises Limited	30 June	1 July 2019	1 July 2019 – 31 December 2019	Unaudited interim condensed consolidated results for the six months ended 31 December 2019
3. Alert Steel Holdings Limited				Delisted
4. Cashbuild Limited	30 June	1 July 2019	1 July 2019 – 31 December 2019	Audited interim results and dividend declaration for the six months ended 31 December 2019
5. Choppies Enterprises Limited	30 June	1 July 2019	1 July 2019 – 31 December 2019	Reviewed interim group financial results for the six months ended 31 December 2019
6. Clicks Group Limited	29 February	1 September 2019	1 September 2019 – 29 February 2020	Interim condensed consolidated results for the six

Company name	Year-end	The date IFRS 16 *Leases* were implemented by the company	Period for the financial year used	Financial statements or interim financial statements
				months ended 29 February 2020
7. Combined Motor Holdings Limited	28 February	1 March 2019	1 March 2019 – 29 February 2020	Audited integrated report
8. Command Holdings Limited				Delisted
9. Curro Holdings Limited		1 January 2019	1 January 2019 – 31 December 2019	Consolidated and separate financial statements for the year ended 31 December 2019
10. Dis-Chem Pharmacies	28 February	1 March 2019	1 March 2019 – 29 February 2020	Group and company audited annual financial statements for the financial year ended 29 February 2020
11. Holdsport Limited				Delisted
12. Homechoice International Plc	31 December 2019	1 January 2019	1 January 2019 – 31 December 2019	Annual financial statements
13. Imperial Holdings Limited	30 June	1 July 2019	1 July 2019 – 31 December 2019	Interim results for the six months ended 31 December 2019

Company name	Year-end	The date IFRS 16 *Leases* were implemented by the company	Period for the financial year used	Financial statements or interim financial statements
14. Italtile Limited	30 June	1 July 2018	1 July 2018 – 30 June 2019	Integrated Annual Report 2019
15. Lewis Group Limited	31 March	1 April 2019	1 April 2019 – 30 September 2019	Unaudited interim results for the six months ended 30 September 2019
16. Massmart Holdings Limited	31 December	1 January 2019	1 January 2019 - 31 December 2019	Results for the 52 weeks ended 29 December 2019
17. Mr Price Group Limited	28 March	31 March 2019	1 April 2019 – 28 March 2020	Integrated report
18. Pepkor Holdings limited	30 September 2019	1 October 2019	1 October 2019 – 31 March 2020	Unaudited interim results for the six months ended 31 March 2020
19. Pick-N-Pay Holdings Limited	1 March	30 April 2019	30 April 2019 – 1 March 2020	Audited annual financial statements for the period ended 1 March 2020
20. Pick-N-Pay Stores Limited	1 March	30 April 2019	30 April 2019 – 1 March 2020	Audited annual financial statements for the period ended 1 March 2020

Company name	Year-end	The date IFRS 16 *Leases* were implemented by the company	Period for the financial year used	Financial statements or interim financial statements
21. Rex Trueform Clothing Company Ltd	30 June	1 July 2019	1 July 2019 – 31 December 2019	Unaudited interim condensed consolidated results for the six months ended 31 December 2019
22. Shoprite Holdings Limited	30 June	1 July 2019	1 July 2019 – 31 December 2019	Unaudited results for the 26 weeks to 29 December 2019
23. Stadio Holdings Limited	31 December	1 January 2019	1 January 2019 – 31 December 2019	Annual financial statements 31 December 2019
24. Super Group Limited	30 June	1 July 2019	1 July 2019 – 31 December 2019	Unaudited interim results for the six months ended 31 December 2019
25. The Foschini Group Limited		1 April 2019	1 April 2019 – 31 March 2020	Audited condensed consolidated annual financial statements 2020
26. The SPAR Group Limited	30 September	1 Oct 2019	1 October 2019 – 31 March 2020	Results presentation for the six months ended 31 March 2020

Company name	Year-end	The date IFRS 16 *Leases* were implemented by the company	Period for the financial year used	Financial statements or interim financial statements
27. Truworths International Limited	30 June	1 July 2019	1 July 2019 – 31 December 2019	Unaudited group interim results for the 26 weeks ended 29 December 2019 and dividend declaration
28. Verimark Holdings Limited				Delisted
29. Woolworths Holdings Limited	30 June	1 July 2019	1 July 2019 – 31 December 2019	Unaudited group interim results for the 26 weeks ended 29 December 2019 and cash and dividend declaration

Appendix B – Financial ratios of the 12 retail companies

D/E						
		Restated	**Before IFRS 16 *Leases***	**Change in ratio**	**Percentage change**	**Increase/Decrease**
Combined Motor Holdings	**D/E**	3,75	2,95	0,801	27%	Increase
Dis-Chem Pharmacies	**D/E**	4,40	3,20	1,201	38%	Increase
Mr Price Group Limited	**D/E**	0,84	0,41	0,429	104%	Increase
Pick-N-Pay Holdings Limited	**D/E**	9,58	3,60	5,980	166%	Increase
Pick-N-Pay Stores Limited	**D/E**	9,58	3,60	5,980	166%	Increase
The Foschini Group Limited	**D/E**	1,68	1,10	0,582	53%	Increase
ADvTECH Limited	**D/E**	1,15	1,15	0,00	0%	Increase
Curro Holdings Limited	**D/E**	0,94	0,90	0,04	4%	Increase
Homechoice International PLC	**D/E**	0,48	0,45	0,03	6%	Increase
Italtile Limited	**D/E**	0,27	0,30	-0,04	-12%	Decrease
Massmart Holdings Limited	**D/E**	7,40	5,35	2,05	38%	Increase
Stadio Holdings Limited	**D/E**	0,31	0,40	-0,10	-24%	Decrease

		Restated	**Before IFRS 16**	**Change in ratio**	**Percentage change**	**Increase/Decrease**
Minimum	**D/E**	0,31	0,40	-0,10	-0,24	Decrease
Maximum	**D/E**	9,58	3,60	5,98	1,66	Increase
Average	**D/E**	3,36	1,95	1,41	0,47	Increase

D/A						
Combined Motor Holdings	D/A	0,79	0,75	0,043	6%	Increase
Dis-Chem Pharmacies	D/A	0,81	0,76	0,053	7%	Increase
Mr Price Group Limited	D/A	0,46	0,30	0,157	53%	Increase
Pick-N-Pay Holdings Limited	D/A	0,91	0,78	0,12	16%	Increase
Pick-N-Pay Stores Limited	D/A	0,91	0,78	0,12	16%	Increase
The Foschini Group Limited	D/A	0,63	0,52	0,10	20%	Increase
ADvTECH Limited	D/A	0,54	0,58	-0,05	-8%	Decrease
Curro Holdings Limited	D/A	0,48	0,50	-0,02	-3%	Decrease
Homechoice International PLC	D/A	0,32	0,31	0,01	4%	Increase
Italtile Limited	D/A	0,21	0,16	0,05	28%	Increase
Massmart Holdings Limited	D/A	0,88	0,84	0,04	5%	Increase
Stadio Holdings Limited	D/A	0,23	0,34	-0,10	-31%	Decrease

		Restated	**Before IFRS 16**	**Change in ratio**	**Percentage change**	**Increase/Decrease**
Minimum	**D/A**	0,23	0,34	-0,10	-0,31	Decrease
Maximum	**D/A**	0,46	0,30	0,16	0,53	Increase
Average	**D/A**	0,60	0,55	0,04	0,09	Increase

ROE						
Combined Motor Holdings	**ROE**	28,28%	29,03%	-0,75%	-3%	Decrease
Dis-Chem Pharmacies	**ROE**	38,31%	36,30%	2,01%	6%	Increase
Mr Price Group Limited	**ROE**	28,68%	30,38%	-1,70%	-6%	Decrease
Pick-N-Pay Holdings Limited	**ROE**	47,60%	38,21%	9,39%	25%	Increase
Pick-N-Pay Stores Limited	**ROE**	47,60%	38,21%	9,39%	25%	Increase
The Foschini Group Limited	**ROE**	18,79%	18,44%	0,35%	2%	Increase
ADvTECH Limited	**ROE**	12,68%	12,85%	-0,17%	-1%	Decrease
Curro Holdings Limited	**ROE**	3,47%	3,75%	-0,28%	-7%	Decrease
Homechoice International PLC	**ROE**	15,44%	14,66%	0,78%	5%	Increase
Italtile Limited	**ROE**	22,52%	21,61%	0,91%	4%	Increase
Massmart Holdings Limited	**ROE**	-27,00%	-17,12%	-9,88%	58%	Increase
Stadio Holdings Limited	**ROE**	5,29%	5,30%	-0,01%	0%	Decrease

		Restated	**Before IFRS 16**	**Change in ratio**	**Percentage change**	**Increase/Decrease**
Minimum	**ROE**	-27,00%	-17,12%	-9,88%	-7,39%	Decrease
Maximum	**ROE**	47,60%	38,21%	9,39%	57,69%	Increase
Average	**ROE**	20,14%	19,30%	0,84%	8,89%	Increase

ROA						
Combined Motor Holdings	ROA	12,51%	13,22%	-0,70%	-5%	Decrease
Dis-Chem Pharmacies	ROA	13,08%	13,78%	-0,71%	-5%	Decrease
Mr Price Group Limited	ROA	22,85%	32,25%	-9,40%	-29%	Decrease
Pick-N-Pay Holdings Limited	ROA	9,51%	10,96%	-1,44%	-13%	Decrease
The Foschini Group Limited	ROA	12,97%	14,42%	-1,45%	-10%	Decrease
ADvTECH Limited	ROA	11,43%	11,54%	-0,11%	-1%	Decrease
Curro Holdings Limited	ROA	4,83%	5,11%	-0,29%	-6%	Decrease
Homechoice International PLC	ROA	15,61%	15,45%	0,15%	1%	Increase
Italtile Limited	ROA	24,20%	15,90%	8,30%	52%	Increase
Massmart Holdings Limited	ROA	2,75%	1,34%	1,41%	105%	Increase
Stadio Holdings Limited	ROA	5,78%	5,35%	0,43%	8%	Increase
		Restated	**Before IFRS 16**	**Change in ratio**	**Percentage change**	**Increase/Decrease**
Minimum	**ROA**	22,85%	32,25%	-9,40%	-29,14%	Decrease
Maximum	**ROA**	24,20%	15,90%	8,30%	105,34%	Increase
Average	**ROA**	12,09%	12,52%	-0,44%	6,99%	Increase

EBITDA						
Combined Motor Holdings	EBITDA	5,18%	3,94%	1,24%	31%	Increase
Dis-Chem Pharmacies	EBITDA	8,72%	6,56%	2,16%	33%	Increase
Mr Price Group Limited	EBITDA	24,36%	24,06%	0,30%	1%	Increase
Pick-N-Pay Holdings Limited	EBITDA	5,31%	3,93%	1,38%	35%	Increase
Pick-N-Pay Stores Limited	EBITDA	5,31%	3,93%	1,38%	35%	Increase
The Foschini Group Limited	EBITDA	22,98%	13,93%	9,05%	65%	Increase
ADvTECH Limited	EBITDA	24,69%	21,51%	3,18%	15%	Increase
Curro Holdings Limited	EBITDA	23,54%	22,96%	0,58%	3%	Increase
Homechoice International PLC	EBITDA	70,72%	70,72%	0,00%	0%	
Italtile Limited	EBITDA	29,60%	24,73%	4,87%	20%	Increase
Massmart Holdings Limited	EBITDA	4,45%	1,87%	2,58%	138%	Increase
Stadio Holdings Limited	EBITDA	22,11%	17,66%	4,45%	25%	Increase
		Restated	**Before IFRS 16**	**Change in ratio**	**Percentage change**	**Increase/Decrease**
Minimum	**EBITDA**	70,72%	70,72%	0,00%	0,00%	Unchanged
Maximum	**EBITDA**	22,98%	13,93%	9,05%	137,52%	Increase
Average	**EBITDA**	20,58%	17,98%	2,60%	33,40%	Increase

Appendix C – Proof of submission

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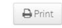
Author Dashboard / Submission Confirmation

Submission Confirmation



Thank you for your submission

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Authors	Le Roux, Rouxle Derbyshire, Erica Schutte, Daniel
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Author Dashboard