



The impact of financial performance on the Best Company to Work For ratings

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Abstract

Best Company to Work For (BCTWF) survey promoters argue that participation in the survey results in higher productivity and profitability of organisations. The BCTWF survey essentially follows the universalist Human Resources Management (HRM) approach and this is in conflict with the contingent HRM view.

The research investigated whether participation in the BCTWF survey leads to superior financial performance. Data from thirty two companies was eventually used in the research. Bivariate fits and pairwise correlations are examples of two of the statistical tools that were used to establish if a relationship exists between the BCTWF rankings and various financial ratios.

The research showed that good financial performance does lead to a high rating in the BCTWF survey and that a higher ranked company does not necessarily perform financially better than a lower ranked company.



Declaration

I declare that this research project is my own work. It is submitted in partial fulfilment of the requirements for the degree of Master of Business Administration at the Gordon Institute of Business Science, University of Pretoria. It has not been submitted before for any degree or examination in any other university. I further declare that I have obtained the necessary authorisation and consent to carry out this research.

Hilel January	Date



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Chapter 1: Introduction

1.1 Background

On the Deloitte.com website (www.bestcompany.com) (2009) the company states that the Best Company to Work For (BCTWF) survey is fast becoming a 'must do' for top South African organisations. The website further states that one of the consequences of participation in the BCTWF survey is greater productivity and profitability. The Deloitte website (www.bestcompany.com) states that the survey offers participants an opportunity to benchmark themselves against industry peers and gain increased recognition as a company that regards its human resources (HR) as a strategic asset.

The use of the word 'benchmark' illustrates that the BCTWF survey is based on a bundle of best practices that are used to compare the Human Resources Management (HRM) practices of various organisations. According to Pfeffer (2005) and Boxall and Purcell (2008), the use of a set of best practices to manage employees is called the universalist or best practice approach. The BCTWF survey is thus a universalist approach to HRM. By stating that the BCTWF survey leads to greater productivity and profitability, the website thus purports that the universalist approach to HRM leads to increased financial performance.

The research will attempt to establish whether the assertion by the Deloitte BCTWF rating company is factual and, in turn, attempt to prove or disprove if the universalist approach to HRM leads to superior financial performance.

1.2 Research problem

Companies attract much attention by receiving a rating in the BCTWF survey. At present there are a number of organisations that conduct BCTWF surveys. Two of these organisations include





<u>ra/</u>) and CRF's Best Employers

(SA) (<u>www.bestcompaniestoworkfor.co.za/</u>). Of these, the Deloitte BCTWF survey is the most popular and there were 123 participants in the survey in 2008 (www.bestcompany.co.za/).

Telfer (2008) found that there is a positive relationship between a positive ranking in the BCTWF survey and employee engagement. Tefler (2008) further found that while there is a moderate correlation between BCTWF rankings and increased branding, there existed inconsistencies between the ranking and applicant attraction and employee retention. Tefler's (2008) study, however, does not indicate whether the relationship between BCTWF ranking and organisational financial performance exists.

Telfer's (2008) study also does not specifically address the causality of the relationship between a Top Five BCTWF ranking and financial performance in the South African context. Telfer (2008) does accept, however, the research conducted by Huselid (1995) which states that there exists a positive relationship between the BCTWF and financial performance.

Upon studying the work of Huselid (1995), however, it was established that companies' employees and senior managers were used to complete questionnaires. The Deloitte BCTWF survey agrees with Huselid (1995), and an inference made by the survey is that participation leads to greater productivity and profitability (www.deloitte.co.za). Rosenzweig (2007), citing Thorndike (1920), disagrees with Huselid (1995) and claims that the process of using employees to determine the BCTWF rankings and making inferences about companies is flawed since it is subject to the halo effect. The research will determine whether this inference is true by looking at more objective (as opposed to subjective feedback from employees) financial indicators.

The research will assist companies in looking at more objective measures when benchmarking themselves against other organisations. Further to this, the research is of relevance to business since it will seek to establish whether a good rating in the BCTWF does lead to positive financial



reconsider participation in the BCTWF survey in future.

1.3 Research scope

The research was conducted on companies that were ranked in the Deloitte BCTWF survey between 2001 and 2008. These companies only include those that are listed, in which case their financials are publicly available.

Halo effect

The Deloitte BCTWF surveyed companies for the past eight years were assessed to determine if they received the high ranking due to the halo effect, or if the BCTWF survey has been conducted in an objective manner (i.e. free of biases).

Financial performance

Companies involved in the scope included the likes of SAB, Absa and Barloworld. All of these companies are well known and financially sound. A valid question is, therefore: Did these companies' financial soundness lead to a good rating, or is the reverse true?' In other words, does good financial performance lead to good increases and bonuses, and does this, in turn, lead to employees giving companies a good BCTWF rating (see Figure 1.1 below)?

Figure 1.1



Diagram by Hilel January



1.4 The research aim

The Deloitte website claims that participation in the survey results in

- an improved ability to attract and retain better talent;
- feedback to benchmark, develop and track action plans;
- improved employee motivation, dedication and customer satisfaction;
- greater productivity and profitability;
- independent, statistically valid external input;
- identified gaps between employer/employee perceptions;
- the opportunity to learn from the best; and
- an effective marketing tool.

The Deloitte website (www.deloitte.com) claims that the survey is an "independent, statistically valid external input." However, in order to make this claim the survey will have to be supported by objective and effective research and all possible halos (Thorndike, 1920) will have to be removed.

Deloitte (www.deloitte.com) further claims that the survey leads to "greater productivity and profitability." The aim of the research is to test this by determining if there is a positive relationship between the BCTWF survey and financial performance. In their research, Brown and Perry (1994) recommend that removing the halo from Fortune's Most Admired Companies requires assessing variables such as sales, growth and return on assets (ROA).

The research will attempt to eliminate the impact of the halo effect by evaluating financial indicators such as return on equity (ROE), earning per share (EPS), debt to equity ratio and the current ratio of companies that ranked in the BCTWF survey (see Chapter 4 for an explanation of each of these ratios). The financial indicators used in this research will be based on an



interview with Nhlanganiso N YUNIBESITHI YA PRETORIA al, a private equity investment company worth R1,5bn. Johannesburg Stock Exchange (JSE) listed companies appearing on the BCTWF survey between 2001 and 2008 will be evaluated.



Chapter 2: Literature Review

2.1 Introduction

Over the years, many authors and scholars have written about various HRM practices and the halo effect. Chapter 2 will uncover some of the findings highlighted by these scholars and authors. The findings will be used to refine the research methodology and design.

2.2 The universalist view

Boxall and Purcell (2008) define the universalist (or 'best practice') human resources management model as one where firms identify and adapt best practices in the way they work and manage people. In studying other HRM researchers, Delery and Doty (1996) state that universalists posit that there exists some HRM practices that are always better than others, and that all organisations should adopt these practices.

Pfeffer (2005, reprinted from 1995) states that there are interrelated practices that characterise companies that are effective in achieving competitive success through how they manage people. In another management review, Pfeffer (1998) states that a number of terms have been used to describe such management practices: high commitment, high performance, high involvement, and so forth. Boxall and Purcell (2008) and a number of people management strategy authors refer to these HRM practices as universalistic (or 'best practice'). Pfeffer (1998) identifies these best practices as the following:

- Employment security;
- Selective hiring of new personnel;
- Self-managed teams and decentralisation of decision-making as the basic principles of organisational design;
- Comparatively high compensation contingent on organisational performance;



- Extensive training;
- Reduced status distinctions and barriers, including dress, language, office arrangements and wage differences across levels; and
- Extensive sharing of financial and performance information throughout the organisation.

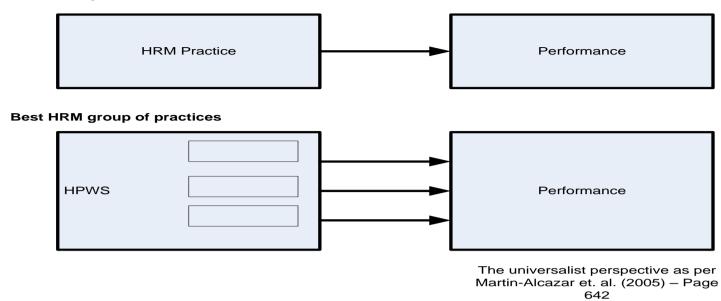
Martin-Alcazar, Romero-Fernandez and Sanchez-Gardey (2005) state that the universalist perspective is the simplest approach to analysis of the HRM practices. The universalist perspective is based on the existence of a linear relationship between variables (such as job design and remuneration) that can be extended to the entire population (see Figure 2.1). Martin-Alcazar et al. (2005) state that the universalist view implicitly denies that the different elements that build the system could be combined in different patterns of practices that could be equally efficient for the company.

According to Martin-Alcazar et al (2005) the universalist approach alone falls short since it is characterised by a lack of solid theoretical foundations. The universalist approach places emphasis on empirical testing of the HRM performance relationships, and leads to high levels of statistical significance and a lack of essential variables, constructs and relationships (Martin-Alcazar et al, 2005).



Figure 2.1

Best HRM practice



From the literature it is evident that universalists advocate that a strict set of HRM practices should be adhered to by all organisations. Universalists are opposed to the interactivity of HRM variables and promote a linear approach.

2.3 Contingent view

According to Purcell (1999), the contingency view (also referred to as the 'best fit' or 'matching' model) makes it possible to model a type of HRM 'needed' for a given type of business and the conditions necessary for this to be adopted in a wide number of firms in similar circumstances and situations.

In studying various researchers, Delery and Doty (1996) state that contingency theorists believe that in order to be effective, an organisation's HRM practices must be consistent with other aspects of the organisation. Boxall and Purcell (2008) state that the contingency HRM model calls for companies to adapt their HR strategies to other elements of the firm's strategy and to its wider environment.

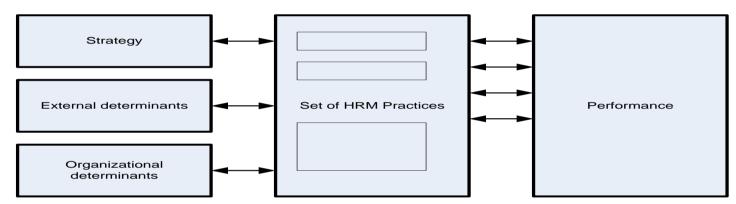
According to Martin-Alcazar



spective introduces a different

starting assumption in relation to the universalists. Contrary to linearity advocated by universalists, contingency theorists propose a model based on interactivity (See Figure 2.2). Martin-Alcazar *et al.* (2005) argue that although the contingency approach builds a theoretical body that is more solid than the universalist view, this approach does not reach the statistical strength and rigour of the latter.

Figure 2.2



The contingent persepctive as per Martin-Alcazar et. al. (2005) – Page 642

Contingency advocates, therefore, do not promote a rigid set of practices to be followed by all organisations in various sectors. Companies that follow the contingency route should align their HRM practices to other elements of the organisation.

2.4 Contrasting the contingency and universalist approaches

Purcell (1999) does not believe that there is a set of HRM practices that are necessarily superior to another. Purcell (1999, p36) aptly states this in the following quote:

"The claim that the bundle of best practice HRM is universally applicable leads us into a utopian cul-de-sac and ignores the powerful and highly significant changes in work, employment and society visible inside organisations and in the wider community. The search for bundles of high commitment work practices is important, but so too is the search for understanding of the



circumstances of where and the substitution of the substitution of

Martin-Alcazar et al. (2005) contrasts the two HRM approaches in Table 2.1, as follows:

Table 2.1

	Basic assumption	Relationship among variables	Level of analysis
Universalistic	Existence of best	Linear, and universally	Single practice. One
	HRM practices.	generalisable.	single practice leads to
			superior performance.
Contingent	These are not best	The relationship between	Many contingent
	practices. Their effects	the dependent and	works just focus on a
	depend on third	independent variable will	single practice.
	variables, such as	be mediated by	
	corporate strategy or	contingency variables.	
	the internal and external		
	environment.		

Delery and Doty (1996) wrote an article which articulated the important differences among the universalist, contingent and configurational perspectives in HRM, and then empirically tested hypotheses that are consistent with the logic of each of the perspectives.

The results in the Delery and Doty (1996) study illustrate that each of the different HRM perspectives is viable and leads to different assumptions about the relationships among HRM



perspective is more complex than universalist arguments since contingency arguments imply interactions, as opposed to universalists relationships incorporated in universalists theories. The study had its restrictions, however, since it was limited to the banking industry, the population

was small and the issue of causality was not addressed using a longitudinal study.

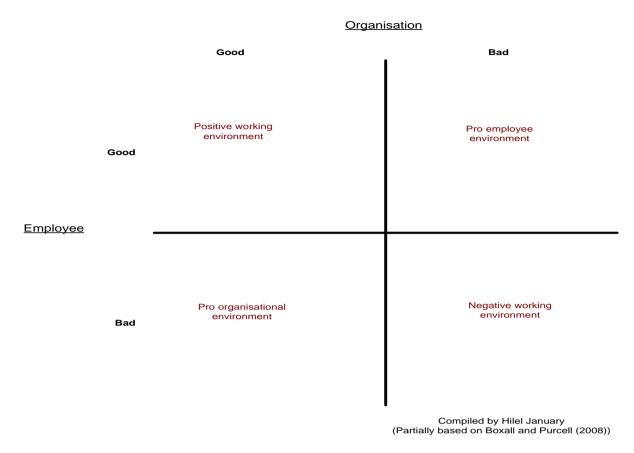
Boxall and Purcell (2008) state that the staunchest advocates of best practice argue that all firms will see performance improvements if they identify and implement the universalist approach.

Legge (1978), cited in Boxall and Purcell (2008), disagrees with best practice advocates and asks the following questions about the universalist approach: For whom is best practice 'best'? Whose goals and interests are being served? What if a practice is good for corporate returns and bad for workers?

Boxall and Purcell (2008) state that best practice models are usually silent with regards to these types of questions. In choosing best practices, a company may be faced with the choices outlined in Figure 2.3.

Figure 2.3





In the **Positive Work Environment quadrant**, the HRM best practices favour the employees and the organisation. Employers and employees are willing to make the sacrifices necessary to ensure productivity and profitability are increased. Employers are sensitive to employee needs, such as market-related (or above) salaries and flexi-hours. In turn, employees are sensitive to employer needs, such as increased productivity and working extended hours, if necessary. In this quadrant, employees are more than willing to assist the organisation in achieving its financial goals.

The **Pro-organisational quadrant** represents HRM practices that are implemented to almost solely favour the organisation. Actions such as corporate restructuring to justify the laying off of employees favours the organisation only. Employee and good HRM practices are a secondary concern for senior management in this quadrant.



In a **Negative Work environment**, the universalist HRM practices do not favour the employees and there is a general mistrust between an organisation and its people. Employees distrust the organisation's management and have an acrimonious relationship with other staff.

The **Pro-employee quadrant** addresses the situation where policies such as unionisation (supported by a strong union) favour the employees. Weak HRM practices only exacerbate the position of the employers in this quadrant.

Figure 2.3 can, therefore, be used as a framework to strike a balance between what is good for the employee and the organisation. Trying to find this balance, some may argue, will result in companies 'playing' in the contingency HRM domain.

2.5. Contingency and universalism and the impact on performance

Wood (1999) conducted a study on a number of authors that are advocates of universalism, as well as contingency HRM practices. Wood (1999), through the study, was able to draw conclusions of each of these HRM practices on firm performances. The study illustrated that below the top layer of universalism and contingency are a number of more complicated issues linking HRM practices to performance. The first issue raised by Wood (1999) being that in order to link any of the HRM practices to performance, companies can take different routes. How a company configures its HRM system determines the route to take.

Secondly, Wood (1999) states that the debate between the two HRM practices is about organisational fit, and in turn about the relative importance of either Total Quality Management (TQM) or the significance of HRM. The third issue is that more attention should be given to



psychological mediators and WINIBESITHI YA PRETORIA 99) states that the issues of environmental fit should be directly addressed and not reduced to strategic fit.

Wood (1999) thus concludes that when linking HRM to performance, both contextual variables and measures of strategy should be included in the HR performance analysis.

2.6 The BCTWF and universalist HRM

The BCTWF (www.bestcompany.co.za) programme is based on a questionnaire survey. This survey offers BCTWF clients an opportunity to benchmark themselves against industry peers and gain increased recognition as a company that regards people as a strategic asset. The fact that the survey is able to benchmark different companies implies that Deloitte uses a 'best practice' (or universalist) HRM approach in its assessments.

The BCTWF survey further claims that "even incremental gains in employee productivity can have a profound impact on customer satisfaction levels, as well as your company's overall financial performance." This statement by the BCTWF promoters is in line with the best practice advocates, such as Marchington and Grugulis (2000, page 1), citing Pfeffer, who argued that "a particular set of HR practices can increase a company's profits, and that the impact is more pronounced when complementary groups (or 'bundles') of HR practices are used together, and that this conclusion holds true for all organisations, irrespective of their context."

Surveys like the BCTWF, therefore, advocate the universalist approach to HRM. Telfer (2008, page 19) supports this by stating, "Universal practices emerge when firms benchmark against one another (Farndale & Paauw, 2007). By virtue of the fact that BCTWF benchmarks all companies against the same criteria (assumed 'best practice'), as opposed to the 'best-fit'

approach proposed by conting approach."

Comparing the work of Pfeffer (1998) and an excerpt for a Deloitte BCTWF road show presentation (obtained from Telfer, (2008)) resulted in Table 2.2.

Table 2.2

"Best practices" included in the	Pfeffer (1998) - Seven practices of successful
BCTWF survey	organisations
Job satisfaction	Not explicitly mentioned in Pfeffer (1998)
Values and culture	Selective hiring of new personnel
Communication	Reduced status distinctions and barriers, including dress, language, office arrangements, and wage differences across levels
Leadership	Self-managed teams and decentralisation of decision-making as the basic principles of organisational design
Management style	Self-managed teams and decentralisation of decision-making as the basic principles of organisational design
Training and development	Extensive training
HR policies and procedures	Employment security
Change management	Not explicitly mentioned in Pfeffer (1998)
Diversity and transformation	Reduced status distinctions and barriers, including dress, language, office arrangements, and wage differences across levels
Performance management	Extensive sharing of financial and performance information throughout the organisation
Recognition and rewards	Comparatively high compensation contingent on organisational performance
Innovation	Not explicitly mentioned in Pfeffer (1998)

Table 2.2 illustrates that there is a strong link between the BCTWF survey 'best practices' and the views of one of the leading advocates of the universalist approach, viz Pfeffer. This is further evidence that the BCTWF survey follows the universalist approach.



formance

2.7 Employee attitud

The BCTWF survey is based on feedback from employees (www.bestcompany.co.za). Companies are given survey questionnaires that are handed to employees to be completed. Schneider, Hanges, Smith and Salvaggio (2003, P849) state that, "The relationship between employee attitudes and organisational performance is complex, and it is too simplistic to assume that satisfaction attitudes lead to organisational performance or market performance – some do and some do not and some employee attitudes apparently are the result of financial and market performance." Schneider et al.'s (2003) result was based on research done on companies in the USA. The research concluded that financial performance (based on certain financial indicators) had a more profound effect on employee satisfaction than the other way around.

Schneider *et al.*'s (2003) research had some limitations, such as different procedures being used by different companies.

Koys (2001) conducted a study on 45 business units of a large food service corporation with operations in the USA and Canada. The study was conducted to address the issue of whether positive employee attitudes and behaviours influence business outcomes, or whether positive business outcomes influence positive employee attitudes. The results of the study suggest that HRM outcomes influence organisational effectiveness, rather than the other way around. Specifically, Koys (2001) implies that organisational citizenship behaviour influences profitability, and employee satisfaction influences customer satisfaction.

Employee satisfaction, therefore, has its part to play in organisational financial performance; however, as per Schneider *et al.* (2003), the relationship is not simplistic.

2.8 Correlation and c UNIVERSITY OF YUNIBESITHI Y

Zickmund (2003) states that concomitant variation is the occurrence of two events that may vary together. When the criterion for concomitant variation is not met (i.e. there is no association between the two variables), it suggests that there is no causal relationship. In this section of the Literature Review, a brief analysis of causality between HRM practices and organisational financial performance will be conducted.

Huselid, Jackson and Schuler (1997) evaluated the impact of HRM effectiveness on a firm's performance. The research included 293 firms in the USA, and the sample comprised of HR managers (92%) and line managers (8%). Huselid *et al.*'s (1997) research concludes that investment in HRM is a potential source of competitive advantage. This was concluded since there is a strong correlation between HRM effectiveness and the firm's performance. The authors thus suggest that there is concomitant variation.

Rosenzweig (2007, P74), citing Edwin Locke, however, points out that, "While the method of correlation may be useful for the purposes of suggesting causal hypothesis, it is not a method of scientific proof. A correlation, by itself, explains nothing." The following question should, therefore, be asked: Does correlation prove causality, and can one variable be attributed to a firm's performance?

The statement by Locke places a question mark on the validity of Huselid *et al.*'s (1997) study. In addition, Huselid *et al.*'s (1997) study has further limitations in that it only evaluates two years (1991 and 1992) and looks at a limited number of measurements, such as gross rate of return on assets (GRATE) and Tobin's Q.



Campbell (1979), suggest that

Wright, Gardner, Monyihan a

three criteria should exist for inferring cause. The first criterion is that covariation should exist between the cause and effect. This means that demonstrating cause requires that the effect be present when the cause is present, and that the effect be absent when the cause is absent. The second criterion is temporal precedence, which requires that the proposed cause exists in time prior to the proposed effect. The final criterion requires that there should be a mechanism to control other variables that might cause the outcome.

The question is thus: Does current research meet the above criteria when linking HRM best practices to financial performance? The study of the literature by Wright *et al.* (2005) suggests that the current research base does not provide the data necessary for drawing causal conclusions implicitly and explicitly.

In a study of 45 business units in a large food service organisation, Wright *et al.* (2005) conclude that the causal order of the effect of HRM practices on a firm's performance could be reversed. The research does not suggest that HRM practices do not have a positive effect on performance. The researchers, however, question the causal relationship between HRM practices and performance.

Simon and DeVaro (2006) argue differently to Wright *et al.* (2005) and, based on their study of the Best 100 (in each year from 1994 – 2002), conclude that an increase in customer satisfaction resulting from Best Companies status yields about a 1,6% increase in ROA. Simon and DeVaro (2006), therefore, suggest the chain of events outlined below (see Figure 2.4).



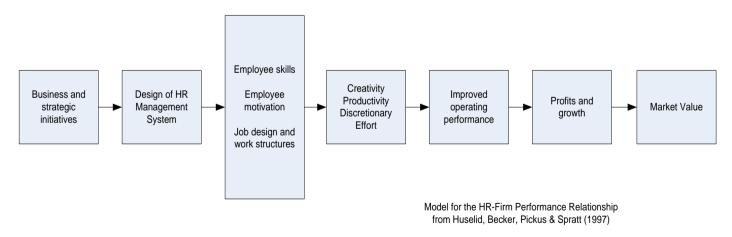


- Drawing by Hilel January

Based on Simon and DeVaro (2006)

Gardner, Wright and Gerhart (2000) question this type of linear thinking employed by Simon and DeVaro (2006). Gardner et al. (2000) state that the common approach by researchers is to assess the organisation's HRM practices and then statistically relate these practices to some financial outcome, such as profitability or shareholder wealth. The issue with that approach, they argue, is the manner in which the intervening variables (e.g. employee skills, job design) are specified. As an example, Gardner et al. (2000) mention Huselid et al.'s (1997) model (see Figure 2.5), which includes intervening variables such as employee skills, employee motivation, job design and work structures, etc. Gardner et. al (2000) states that this model can be modelled differently.

Figure 2.5



Gardner et al. (2000) state that more theoretical linear causal models can be used - but which of these are correct? Instead of using the variables outlined by Huselid et al. (1997), an infinite number of variables such as absenteeism, turnover, etc. can be used in the model. The question



the number of variables to be used?

2.9. Halos and bandwagons

Jennings, Palmer and Thomas (2004), citing Feldman (1981), define a halo as the most easily remembered information about a person or performance. The general impression is simply an evaluative summary of the individual or the performance, such as good/poor, or like/dislike. In other words, when individuals are asked what they think of a person or performance, the first thing that comes to mind is usually whether they like or dislike the person or their performance. The halo effect thus has a part to play in the minds of individuals when they conduct performance evaluations on other individuals and on the companies that they are employed by.

Rosenzweig (2007), using the halo effect theory, claimed that the process of using employees (internal) to determine the BCTWF rankings is flawed.

In their research article, 'What Bandwagons Bring: Effects of Popular Management Techniques...', Staw and Epstein (2000) obtained data from 100 companies from 25 different industries. Hypothesis three of their research examined whether 'Organisations will gain in external reputation when they have adopted popular management techniques that are either positively associated with firm performance or actually lead to improved performance,' (Staw and Epstein, 2000, P527). The research found that there was strong evidence that demonstrated how both internal and external legitimacy can be gained by using popular management techniques (for example, implementing best HRM practices). This internal legitimacy gained through HRM and other practices could influence employee ratings in the BCTWF survey. The research by Staw and Epstein (2000), however, found that even though internal legitimacy is gained though popular management techniques, the companies associated

ROA, ROE and RO sales).

Staw and Epstein (2000) and Rosenzweig (2007) thus claim that external parties and employees jump on the bandwagon by looking at popular management techniques, such as HRM best practices (like that proposed by BCTWF survey), when evaluating a company. These internal and external parties should, however, look at more objective factors that influence the company's performance.

Instead of looking at popular management techniques, Hammond and Slocum (1997) focus on halos, specifically the impact of a firm's prior performance on subsequent company reputation. Hammond and Slocum (1997) conclude that the relationship between a firm's reputation and financial performance is complex. One reason that the relationship is so complex is that an organisation has an explicit contract (with shareholders and bondholders) and an implicit contract (with customers and employees), and the company has to find a balance between the needs of the two. Hammond and Slocum (1997) state that if the internal contract stakeholders are not satisfied, they might try to exchange their implicit contract for a more explicit one. For example, if employees doubt the firm's implied employment contract, they might choose to unionise or rate their firm negatively in surveys. The results of the Hammond and Slocum (1997) study suggest that management must be aware of, and deliver the financial results expected by, the stakeholders (internal and external). In the conclusion of their research, Hammond and Slocum (1997, p164) state, "Yet, this suggests a precarious position for management; profit must be earned to 'pay' off the expectation of stakeholders, yet shortcuts that may lead to greater short-term profit may also create dissatisfaction with other stakeholders. This dissatisfaction could then result in a lower reputational score in subsequent years and a decline in profitability."



2.9.1 The halo effect and financial performance

Gardner, Wright and Gerhart (2000) conducted a study to establish if there was a possibility of systemic error in measures of HR performance and firm performance. Respondents to the study were senior HR executives, first year MBA students and Engineering graduates. The respondents to the study had no information regarding the prevalence of HRM practices of low performance and high performance firms.

In analysing literature, Gardner et al. (2000), citing Rush, Thomas and Lord (1977), state that when respondents are given a questionnaire, information processing demands exist. In order to reduce these information processing demands, respondents rely on implicit theories to cue the salient information and fill gaps of missing information. The respondents thus retrieve subjective or objective information about their organisation that corresponds to an implicit theory of firm performance.

Gardner et al.'s (2000) study reveals that respondents to surveys of HRM practices in organisations may hold implicit theories that their firm's HRM practices are associated with the firm's performance. The respondents had no information about the HRM practices and thus the responses fully represented the implicit theories regarding the covariation between HRM practices and firm performance. Respondents to surveys may respond in a way consistent with the firms' performance, and as such those working for high (low) performing firms will exhibit a bias for over (under-) reporting the prevalence of HRM practices.

2.9.2 BCTWF and the halo effect

In 1984, an organisation called the Great Places to Work Institute published a book called The 100 Best Companies to Work For in America (Rosenzweig, 2007). The International Herald



Tribune (in 1998) claimed Work company leads to high performance, and noted that firms on the list would have a total market return substantially higher than that of other S&P organisations (Rosenzweig, 2007). The inference by the Tribune was that companies that care about creating a great place to work will attract good people and help them be more productive, leading to superior performance.

Rosenzweig (2007) is, however, sceptical of the claim made by the Tribune since the Great Places to Work Institute determines a firm's ratings from employees and this, he argues, undermines the overall rating process. Rosenzweig (2007) cites the example of Cisco, which debuted at the 25th position in 1998, moved up to 23rd position in 1999 and took a third spot in 2000 - a year in which the company was briefly the most valuable company in the world. When Cisco retrenched people and its share price fell in 2002, the company fell to 15th position in the Great Places to Work survey. Rosenzweig (2007) argues that Cisco only became a 'worse' company to work for after 2000 due to low employee morale and the reduced chances for employees to get rich. This was, therefore, a reflection on performance and not a cause of it. Rosenzweig (2007, p64) aptly sums up his observation in the following text: "So many things that we – managers, journalists, professors, consultants – commonly think contribute to company performance are often attributions based on performance. And even when we try to gather data in large-scale samples, like the Fortune survey or Great Places to Work study, we often do little more than multiply the Halo effect."

The research conducted and observations by the authors mentioned above suggest that the halo effect caused by various factors, such as popular management techniques and past financial performance, can influence a company's BCTWF survey score. The factors are subjective and **may** not reflect the **true** BCTWF score.



In his research, Dowling (2006) explains how good corporate reputations enhance corporate value, and how there is a relationship between good reputations and good financial performance. Boxall and Purcell (2008) state that the staunchest advocates of best practice believe that organisations will see performance improvements if they identify and implement best practices. Marchington and Grugulis (2000, p1) site Pfeffer (1998), who argued that "a particular set of HRM practices can increase a company's profits, and that the impact is more pronounced when complementary groups (or 'bundles') of HRM practices are used together, and that this conclusion holds true for all organisations, irrespective of their context."

Patterson, West, Lawthom and Nickell (1997) conducted a study of the manufacturing sector in the UK. Patterson et al.'s (1997) results reveal that acquisition and development of skills (selection, induction, training and appraisal) and job design (job variety and responsibility, skill flexibility and team working) are significant predictors of both change in profitability and change in productivity.

A number of authors thus agree that a set of HRM best practices can result in positive financial performance.

2.11 Conclusion

In the past, companies like Deloitte and CRF have been able to claim that participation in the BCTWF survey (derived from the best practices HRM approach) leads to superior financial performance. In fact, on their site, BCTWF promoters claim that participation leads to greater productivity and profitability. The literature indicates that there are academics and scholars that either agree or disagree with the conclusion. There are also individuals that guestion the order of



events (does the BCTWF lea

e, or is the reverse true?) and

what part does the halo effect play in the BCTWF surveys?



Chapter 3: Research hypotheses

Companies that run programmes like the BCTWF survey claim that being part of the survey leads to strong financial performance (www.deloitte.com). Huselid *et al.* (1997) agree with these companies and argue that best practices in HRM leads to good financial results. Academics like Rosenzweig (2007) and Hammond and Slocum (1997) disagree, and argue that the halo effect has a part to play when employees complete surveys like the BCTWF. Hammond and Slocum (1997) conclude that a good rating is due to an organisation's past financial performance and reputation, and that a BCTWF rating does not lead to strong financial position.

The research will investigate the impact that the financial performance has on the BCTWF survey ratings.

3.1 Hypotheses

Hypothesis 1

The first hypothesis will attempt to answer the questions raised by authors such as Schneider et al. (2003) and Koys (2001). Koys' (2001) study was conducted to establish whether positive employee attributes and behaviours influence business outcomes, or whether positive outcomes influence positive employee attitudes. In addition, hypothesis 1 attempts to check the causal conclusions reached by Wright et al. (2005), who claim that financial performance may lead to a positive BCTWF rating.

Does positive financial performance affect the BCTWF rating, or vice versa?
 Hypothesis 1_o: Positive financial performance leads to a high rating in the BCTWF survey.
 Hypothesis 1_a: Positive financial performance does not lead to a high rating in the BCTWF survey.

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Hypothesis 2

Pfeffer (1998) and BCTWF rating companies, through their support of the universalist HRM, imply that companies that employ best HRM practices perform better financially than those that do not. By further extending the conclusions of universalist advocates (like Pfeffer), it can be stated that companies that are ranked higher on the BCTWF survey will perform better than those companies ranked lower. Hypothesis 2 will attempt to prove or reject this notion.

2. Do higher ranked BCTWF participants perform financially better than lower ranked companies?

Hypothesis 2_o: The higher ranked BCTWF participants perform financially better than the lower ranked participants.

Hypothesis 2_a: The higher ranked BCTWF participants do not perform financially better than the lower ranked participants.

Hypothesis 3

Jennings et al. (2004) define a halo as the most easily remembered information about a person or performance. The most recent information thus carries more weight than older information. Gardner et al. (2000), citing Rush et al. (1977), state that respondents are subject to information processing demands. Respondents thus retrieve subjective and objective information about their organisations that correspond to an implicit theory of the firm's performance.

3. Does the previous year's financial performance have a better effect on BCTWF rankings than the three year performance?

Hypothesis 3_o: A company's one year performance is a better determinant of BCTWF ranking than its three year performance, due to the halo effect.

ranking than its three year performance, due to the halo effect.



Chapter 4: Research Methodology

4.1 Introduction

Chapter 4 will outline the methodology to be followed in conducting the research. Topics to be discussed will include the population, sample size and the unit of analysis.

Zickmund (2003) states that there are three types of research that can be used. Firstly, exploratory research can be used for initial studies to clarify and define the nature of a problem. Descriptive research is used to determine the 'who', 'what', 'where', 'when' and 'how' questions of a problem. Finally, causal research is conducted to identify cause-and-effect relationships between variables when the research problem has been narrowly defined. The research conducted in this paper will be causal.

The research was conducted over a period of eight years. The research was thus vulnerable to history effects due to population and economic patterns (Zickmund, 2003). For this reason, a causal research with a time series design was used (Zickmund, 2003). Since little can be done to influence factors such as population and economic patterns, a time series with quasi-experimental design was used (Zickmund, 2003). It was considered appropriate that causal research be used since this type of research is most appropriate when two variables will be analysed. The relationship between the two sets of variables was analysed.

4.2 Research approach

Zickmund (2003) states that research with the purpose of inferring causality should do the following:

- Establish the appropriate causal order of events;
- Be able to measure the concomitant variation between the presumed cause and the presumed effect; and

 Recognise the presence factors.

Zickmund (2003) further states that even if all of these are present, the researcher can never be certain that the causal explanation is adequate.

The causal research took the form of a quantitative study of financial data collected from Internet sources and the media.

4.3 Unit of analysis

The unit of analysis was companies that achieved ratings in the Deloitte BCTWF survey over the past eight years.

4.4 Population of relevance

There are listed and unlisted companies which participate in the BCTWF survey. The unlisted companies were excluded since gaining access to their financial information would be tough (and in some cases impossible). The population of relevance consisted of companies listed on the JSE. Since the complete group of companies to be used in the research is finite, the term 'population' and not 'universe' was used to describe the possible participants (Zickmund, 2003). This population was chosen since financial information of these companies is available on the Internet. Another reason for defining JSE companies as the population is that some of them participated in the BCTWF survey.

4.5 Sampling method

Zickmund (2003) outlines the major types of non-probability samples that can be used in research as:



- Convenience sampling VINIBESITHI YA PRETORIA aining units or people that are easily/conveniently available;
- Judgement or purposive sampling techniques in which an experienced individual selects
 the sample based on his/her judgement about some appropriate characteristics required
 of the sample; and
- Quota sampling technique that ensures that various subgroups in the population are represented on pertinent sample characteristics to the exact characteristics the researchers require.

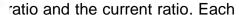
A non-probability judgement sample was used. The sample consisted of all JSE listed companies that have been rated on the BCTWF survey for the last eight years. The researcher was able (through the Deloitte website) to define which of these companies are participants of the BCTWF survey and which are not.

For the research to be objective, the financial performance of the BCTWF listed companies were evaluated and reported on. Since the annual results for the listed companies on the BCTWF surveys are publicly available, it was not difficult to calculate the measurements outlined above.

4.6 Research design

Information was not gathered via a questionnaire method since the information for the research is freely available in the public domain. Financial ratios about the various companies were collected from the list outlined in Appendix 1.

Schneider et al. (2003) used ROA and earnings per share (EPS) in their research, and Brown and Perry (1994) used ROA, sales, growth, etc. to measure financial performance. In this research different measures were used. As per Mkwanazi (2009), good financial performance is





of these ratios is defined below:

- EPS measures how much income was earned for each share of common stock outstanding (Fisher, 2005). According to Fisher (2005), a high EPS compared to other firms is required.
- ROE is the return on historically accumulated owner's investment (Fisher, 2005).
- A company's solvency and liquidity can be measured by analysing the debt to equity ratio and the current ratio (Fisher, 2005). The debt to equity ratio (solvency) compares the funds provided by the creditors to the funds provided by the debtors (Fisher, 2005). As more debt is used, the debt to equity ratio will increase. Since more fixed interest is incurred with debt, the risk increases. Debt can, however, also help to improve earnings.
- The current ratio (liquidity) establishes whether the company has enough short term assets to cover the short term debts (Fisher, 2005). The current ratio is simply the current assets divided by the current liabilities. Ideally it should exceed 1.

4.7 Data collection process

The data that was collected and analysed consisted of the following:

- Financial statements (Income statement and Balance sheet) of 80 JSE listed companies that participated in the BCTWF survey.
- BCTWF ratings over eight years (www.bestcompany.co.za).

The information was sourced from the company websites, the McGregor website and the Osiris database (http://www.gibs.co.za/information-centre.aspx). To ensure that the lag effect (of financial performance) was catered for, all the ratios for the three preceding years of the BCTWF rated companies were evaluated. Only evaluating one or two years' financial performance was too short a period to accommodate for the lag effect.



4.8 Data analysis approach

The financial data for the various JSE listed companies was obtained from Mcgregor BFA (https://secure.mcgbfa.com/Default.aspx). McGregor BFA is the pre-eminent provider of stock market fundamental research data and news to the financial sector and the corporate market at large (www.mcgregorbfa.com).

Through the testing of the hypothesis, conclusions will be made by evaluating the financial performance of the companies and their BCTWF rating.



Chapter 5: Results

5.1 Introduction

As per Chapter 1, the aim of the research is to establish if a relationship exists between the BCTWF survey and financial performance. This chapter will outline the results of the research that was conducted on JSE listed companies participating in the BCTWF survey.

5.2 Population and sample

Appendix 2 outlines the results of ratios that were used for the various companies included in the analysis. In Appendix 2, headings such as 'gem', 'normal' and 'lag' are mentioned. 'Gem' refers to the average of the three previous years; 'normal' means the average of the previous three years after normalisation; and 'lag' is the previous year's data.

Figure 5.1 (supported by Table 5.1), compiled using the SAS JMP statistical package, shows that there was a total of 137 responses from different years of financial data from different companies. However, not all of the 137 data points could be used. Only the companies that had adequate information to demonstrate the lag effect and the average over a three year period could be used.



Figure 5.1

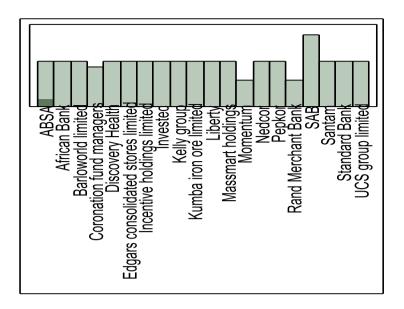


Table 5.1

Company name	Frequency
Absa	7
African Bank	7
Barloworld Limited	7
Coronation Fund Managers	6
Discovery Health	7
Edgars Consolidated Stores Limited	7
Incentive Holdings Limited	7
Investec	7
Kelly Group	7
Kumba Iron Ore Limited	7
Liberty	7
Massmart Holdings	7
Momentum	4
Nedcor	7
Pepkor	7
Rand Merchant Bank	4
SAB	11
Santam	7
Standard Bank	7
UCS Group Limited	7
Total	137



Thirty two companies were ev YUNIBESITHI YA PRETORIA /. Some of the companies were included over a number of years. Absa, for example, appears four times over an eight year period. Table 5.2 outlines the companies that were included in the survey and the number of times each firm was included over the eight year period (when these companies were ranked).

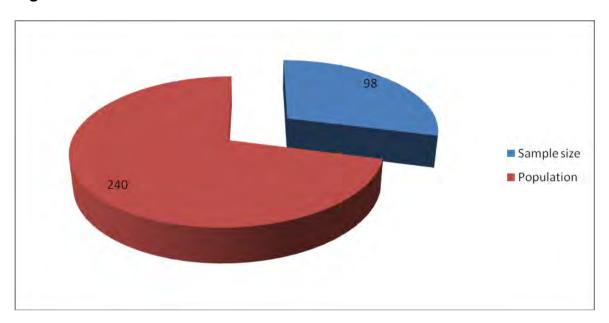
Table 5.2

Company name	Number of repeats
Absa	4
African Bank	1
Barloworld Limited	1
Coronation Fund Managers	1
Discovery Health	2
Edgars Consolidated Stores Limited	2
Incentive Holdings Limited	1
Investec	1
Kelly Group	2
Kumba Iron Ore Limited	1
Liberty	1
Massmart Holdings	1
Momentum	1
Nedcor	1
Pepkor	1
Rand Merchant Bank	1
SAB	6
Santam	1
Standard Bank	1
UCS Group Limited	2

Figure 5.2 below illustrates the breakdown of companies that were included in the research. All the companies that were excluded are those that either are not listed on the JSE or only

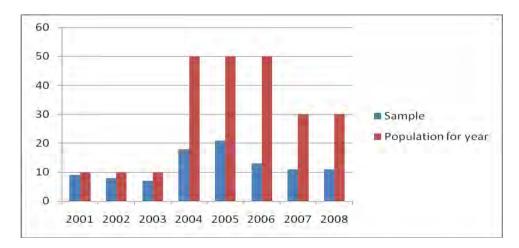
a three year pattern was required for the research.

Figure 5.2



The information for 2007 and 2008 was divided into small, medium and large categories and, therefore, there existed some repeats in the various categories (especially where companies were part of a bigger holding company). Due to this, 2007 and 2008 has a smaller sample in these years, as illustrated in Figure 5.3. As can be seen in Figure 5.3, the results of only the Top 10 ranked companies were used between 2001 and 2003.

Figure 5.3





The companies' information or website, available through www.gibs.co.za. The research specifically focused on the following ratios: current ratio, EPS, debt to equity ratio and ROE.

5.3 Multivariate correlations

Table 5.3 shows the multivariate correlations that were conducted on the rank and financial ratios. Table 5.3 outlines the companies' previous year's financial ratios (lag). The first column illustrates that there are positive correlations between the rank and ROE (0.55) and current ratio (0.32); and negative correlations between the rank and the debt to equity ratio (-0.43) and EPS (-0.53).

Table 5.3

	Rank	Return On Equity lag	Debt / Equity lag	Earnings / Share (C) lag	Current Ratio lag	
Rank	1	0.5484	-0.4316	-0.5301	0.3188	
Return On Equity lag	0.5484	1	-0.0803	-0.2084	0.3545	
Debt / Equity lag	-0.4316	-0.0803	1	0.2257	-0.5258	
Earnings/ Share (C) lag	-0.5301	-0.2084	0.2257	1	-0.2131	
Current Ratio lag	0.3188	0.3545	-0.5258	-0.2131	1	

For all the previous years' financial ratios there is, therefore, either a weak or a negative relationship between rank and BCTWF ranking for all the ratios.

A multivariate correlation was further conducted on the rank, the debt to equity ratio, current ratio, EPS and ROE variables. Table 5.4 outlines the average financial ratios of the previous three years' performance of the companies. The first column illustrates that there is a positive correlation between the rank and ROE (0.58), and virtually no correlation with EPS (0.01); and a negative correlation between the rank and the debt to equity ratio (-0.21), and virtually no correlation with current ratio (-0.02).



Table 5.4

	Rank	Debt / Equity gem	Current Ratio gem	Earnings / Share (C) gem	Return On Equity % gem
Rank	1	-0.2067	-0.0245	0.0068	0.5813
Debt / Equity gem	-0.2067	1	-0.3549	0.0405	-0.0585
Current Ratio gem	-0.0245	-0.3549	1	-0.1435	-0.0313
Earnings/ Share (C) gem	0.0068	0.0405	-0.1435	1	0.2245
Return On Equity % gem	0.5813	-0.0585	-0.0313	0.2245	1

5.4 Fit model

To establish an exploratory relationship between the rank and financial ratios, a stepwise linear multiple regression was fitted.

Table 5.5 Parameter estimates

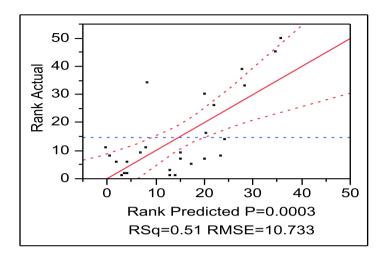
Term	Estimate	Std Error	t Ratio	Prob> t
Intercept	41.778487	15.10199	2.77	0.0110*
ROE lag	10.097144	4.712627	2.14	0.0430*
ES lag	-15.05942	4.757099	-3.17	0.0043*

The overall fit of the model was significant with a p-value of 0.0003 (F2,23=11.92). The explanatory variables EPS and ROE were significant in the model, with p-values of 0.043 and 0.0043 respectively.

To establish the favourability of the fit, R squared or the coefficient of determination was used. R squared is the percentage of variation of the dependent variable explained by the regression (Albright, Winston and Zappe, 2006). The better the linear fit is, the closer R squared is to one. Inspecting the adjusted R squared value, it was established (see figure 5.4) that the regression produced an average fit, since R squared is 0.47. ROE and EPS can, therefore, explain 47% of

the variation in ranking. The overy insignificant.

Figure 5.4

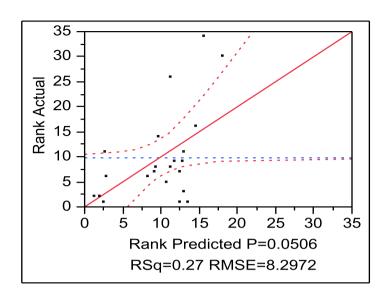


Adjusted R squared = 0.47

To obtain a more homogeneous group of companies, it was decided to break down the sample into categories of smaller and larger companies. Larger companies were defined as those whose turnover exceeded R1bn. An analysis was, therefore, conducted on these large companies. Figure 5.5, shows that only the results of the large companies were worse, since the adjusted R squared was only 0.19.

Figure 5.5

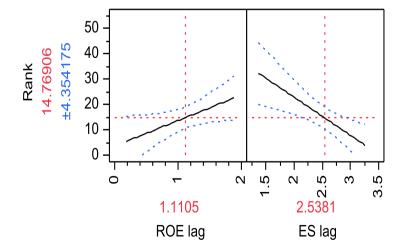




Adjusted R squared = 0.19

The model outlined in Figure 5.6 indicates that lower ranks in the BCTWF survey are associated with higher ROE and with lower EPS ratios.

Figure 5.6





5.5 Pairwise correlati

Pairwise correlations were done between the rank and the previous year's financial ratios. The correlation between rank and the debt to equity ratio, rank and EPS, and rank and ROE was significant at a 95% level of confidence, since the p-value is below 0.05 (See table 5.5 below).

Table 5.5

Variable	By Variable	Correlation	Count	Lower 95%	Upper 95%	Signif Prob
ROE lag	Rank	0.5155	27	0.1685	0.7488	0.0059*
D/E lag	Rank	-0.3955	27	-0.6742	-0.0183	0.0411*
D/E lag	ROE lag	-0.0932	110	-0.2756	0.0957	0.333
ES lag	Rank	-0.641	26	-0.8238	-0.3374	0.0004*
ES lag	ROE lag	-0.2152	108	-0.3883	-0.0273	0.0253*
ES lag	D/E lag	0.2288	112	0.0452	0.3975	0.0152*
CR lag	Rank	0.3258	27	-0.0618	0.6281	0.0972
CR lag	ROE lag	0.3481	110	0.172	0.5026	0.0002*
CR lag	D/E lag	-0.527	117	-0.6467	-0.3821	<.0001*
CR lag	ES lag	-0.2175	112	-0.3874	-0.0333	0.0212*

Further, pairwise correlations were conducted between the ranking and the average of the previous three years' ratios. Only the correlation between rank and ROE was significant, at a 95% level of confidence, since the p-value is below 0.05 (see table 5.6 below).

Table 5.6

Variable	By Variable	Correlation	Count	Lower 95%	Upper 95%	Signif Prob
Debt / Equity gem	Rank	-0.2988	29	-0.5996	0.0761	0.1154
Current Ratio gem	Rank	0.0654	29	-0.3085	0.4218	0.736
Current Ratio gem	Debt / Equity gem	-0.3548	128	-0.4977	-0.1931	<.0001*
Earnings/ Share (C) gem	Rank	-0.1462	29	-0.4866	0.2328	0.4492
Earnings/ Share (C) gem	Debt / Equity gem	0.0404	128	-0.134	0.2125	0.6505
Earnings/ Share (C) gem	Current Ratio gem	-0.1435	128	-0.3093	0.0308	0.1061

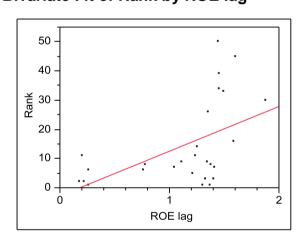
		UNIVERSITE	IT VAN PR	ETORIA		
Return On Equity % gem	Rank	YUNIBESIT	HI YA PRI	TORIA	0.6616	0.0367*
Return On Equity % gem	Debt / Equity gem	-0.0596	128	-0.2307	0.1152	0.5042
Return On Equity % gem	Current Ratio gem	-0.0314	128	-0.2038	0.1429	0.725
Return On Equity % gem	Earnings/ Share (C) gem	0.2241	128	0.0527	0.3828	0.0110*

5.6 Scatterplots

The scatterplot outlined in Figure 5.7 seems to indicate that there is a positive relationship between ROE and rank, since data points rise from bottom left to top right.

Figure 5.7

Bivariate Fit of Rank by ROE lag



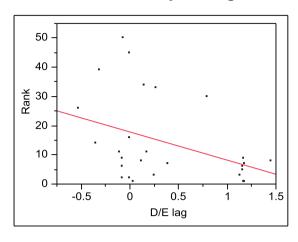
— Linear Fit

The scatterplot outlined in Figure 5.8 seems to indicate that there is a negative relationship between the debt to equity ratio and rank, since data points rise from bottom left to top right.



Figure 5.8

Bivariate Fit of Rank by D/E lag

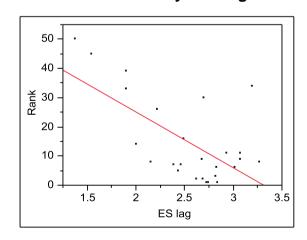


—— Linear Fit

The scatterplot outlined in Figure 5.9 indicates that the relationship between the two variables (EPS and rank) is negative.

Figure 5.9

Bivariate Fit of Rank by EPS lag



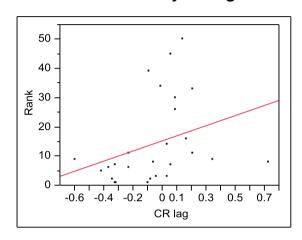
— Linear Fit

The final scatterplot was done

is a positive relationship between the two variables (see Figure 5.10).

Figure 5.10

Bivariate Fit of Rank by CR lag



— Linear Fit



Chapter 6: Discussion of Results

6.1 Introduction

In Chapter 6, the results outlined in Chapter 5 are discussed in the context of the hypotheses. The hypotheses and results will be discussed in the context of the Literature Review outlined in Chapter 2. An analysis of 137 data points has led to the determination that 32 companies' financial ratios could be used.

A brief explanation of the statistical analysis should be highlighted at this stage. The ranking in the BCTWF works in the order where position number 1 is the best position and position 50 is the worst. All the ratios, except the current ratio, however works in the opposite manner, where a low ratio is financially unfavourable for an organisation and a high ratio is highly favourable. The statistics were arranged in an inverse manner and, therefore, if the BCTWF position decreases and the EPS, ROE and debt to equity ratios increase, there is a negative correlation, but this is favourable for a company. For example:

Variable	By Variable	Correlation	Correlation type	Result
ROE lag	Rank	0.5155	Positive correlation	Not favourable
EPS lag	Rank	-0.3955	Negative correlation	Favourable

The current ratio is different, however. A current ratio close to 1 is favorable for any organisation, therefore the inverse relationship rule (stated above) does not hold. For example:

Variable	By Variable	Correlation	Correlation type	Result
CR lag	Rank	0.3258	Positive correlation	Favourable



6.2 Hypothesis 1

Hypothesis 1 is as follows:

1. Does positive financial performance affect the BCTWF rating, or vice versa?

Hypothesis 1_o: Positive financial performance leads to a high rating in the BCTWF survey.

Hypothesis 1_a: Positive financial performance does not lead to a high rating in the BCTWF survey.

Hypothesis 1 sought to establish if financial performance affects the BCTWF rating (i.o.w. does financial performance lead to a positive rating in the BCTWF rating, or vice versa). Through the collection of data from McGregor (www.gibs.co.za), the task required the calculation of the average (referred to as 'gem' in Appendix 2) ROE, EPS, current ratio and debt to equity ratios for the various companies for the previous three years. Table 6.1 depicts the relationship between ranking and the average ratios over a three year period.

Table 6.1

Variable	By Variable	Correlation	Count	Lower 95%	Upper 95%	Signif Prob
Debt / Equity gem	Rank	-0.2988	29	-0.5996	0.0761	0.1154
Current Ratio gem	Rank	0.0654	29	-0.3085	0.4218	0.736
Current Ratio gem	Debt / Equity gem	-0.3548	128	-0.4977	-0.1931	<.0001*
Earnings/ Share (C) gem	Rank	-0.1462	29	-0.4866	0.2328	0.4492
Earnings/ Share (C) gem	Debt / Equity gem	0.0404	128	-0.134	0.2125	0.6505
Earnings/ Share (C) gem	Current Ratio gem	-0.1435	128	-0.3093	0.0308	0.1061
Return On Equity % gem	Rank	0.3896	29	0.0269	0.6616	0.0367*
Return On Equity % gem	Debt / Equity gem	-0.0596	128	-0.2307	0.1152	0.5042
Return On Equity % gem	Current Ratio gem	-0.0314	128	-0.2038	0.1429	0.725

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Variable	By Variable	TUNIBEST	HI YA PRI	95%	Upper 95%	Signif Prob
Return On Equity % gem	Earnings/ Share (C) gem	0.2241	128	0.0527	0.3828	0.0110*

From a financial perspective, an increase in the ROE and EPS, a stable current ratio (i.e. current ratio close to 1) and a debt to equity ratio in line with competitors is a sign a of a financially prosperous company (Mkwanazi, 2009).

The relationship between the rank and the ROE is positive. This implies that as the ROE of the company increases over the three year period, the ranking decreases. At this juncture one may be tempted to disagree with Dowling (2006), who explains that there is a relationship between good reputations and good financial performance. The relationship between ROE and ranking is thus unfavourable, and the correlation is an average 0.58. One will have to consider the other ratios before reaching such a conclusion about hypothesis 1. It should be noted that the ROE was significant since the p-value was 0.038.

A high EPS is financially desirable for any listed organisation. From the results it can be observed that EPS has a negative correlation with rank. The relationship between EPS and rank is, however, very weak at a mere 0.14. This negative relationship (as explained in section 6.1) means that as EPS increases, the ranking of the companies improve. By examining the EPS and rank it would appear that authors like Huselid et al. (1997), who argues that best practice HRM leads to good financial performance, may be correct in their views. However, the other two factors, current ratio and debt to equity ratio, should be considered before such a conclusion can be reached. The p-value for the EPS and rank relationship is 0.44, which implies that the explanatory variable, EPS, is not significant.



Current ratio and debt to equal value of the relation of the ROE and EPS. Whereas higher EPS and ROE are favourable for an organisation, a current ratio closer to 1 and a debt to equity ratio that is comparable to its competitors is favourable. If the debt to equity and current ratios have a positive relationship with ranking, this may not be financially favourable for the organisation.

From Table 6.1 it can be observed that the current ratio has a positive relationship with the companies' rankings. By examining the 'current ratio gem' column of Appendix 2 it can be observed that most of the sampled organisations (except the financial institutions) have a current ratio above 1. The current ratio (which is above 1) and ranking have a positive relationship and are, therefore, financially unfavourable. Since these ratios are above the threshold and there appears to be a downward trend towards one, having a positive relationship is advantageous for the company. It should be noted that the correlation between rank and the current ratio is extremely weak, and the explanatory variable significance is also weak.

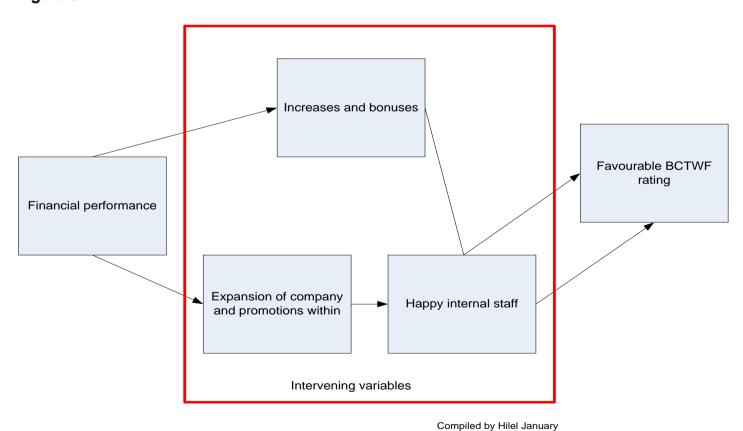
According to Fisher (2005), as more debt is used the debt to equity ratio increases. The use of debt, however, improves earnings since interest can be deducted on tax returns (Fisher, 2005). There should, therefore, be a balance in the use of debt and equity to maximise profits (Fisher, 2005). The debt to equity ratio in the research analysis has a negative relationship with the rating. No conclusion, however, can be drawn from this relationship since the companies' debt to equity ratio is judged to be positive or negative on the industry ratio, and it is a complex balancing act that companies have to consider. The BCTWF participants are from a number of different industries and, therefore, no conclusion could be reached.

Wright et al. (2005) disagrees with Simon and Devaro (2006) by arguing that the best practice HRM does not necessarily lead to strong financial performance. Wright et al. (2005) argue that

appears to agree with Wright et al.'s (2005) assertion that financial performance leads to positive ratings in the BCTWF survey. This conclusion can be reached since two of the four ratios measured seem to suggest that there is a favourable relationship between the current ratio, EPS and rank.

The results indicate that positive financial performance does lead to a good rating in the BCTWF survey. Due to this the null hypothesis can be accepted. It should, however, be pointed out that the relationship between financial performance and the BCTWF survey is not very strong from a statistical perspective. Further to this, it is worthwhile to highlight an issue raised by Gardner et al. (2000) in Chapter 2. Gardner et al. (2000) question the linear thinking which states that one variable leads to another. According to these writers, there may be a number of intervening variables between financial performance and a BCTWF rating. As an example, Figure 6.1 illustrates how the intervening variables below could affect the BCTWF rating.

Figure 6.1





dependent and independent variables.

6.3 Hypothesis 2

Hypothesis 2 states as follows:

2. Do higher ranked BCTWF participants perform financially better than lower ranked companies?

Hypothesis 2_o: The higher ranked BCTWF participants perform financially better than the lower ranked participants.

Hypothesis 2_a : The higher ranked BCTWF participants do not perform financially better than the lower ranked participants.

The second hypothesis was formulated to establish if a higher ranking affects financial performance. Telfer (2008) states that BCTWF benchmarks all companies against the same criteria. From this statement it is evident that BCTWF follows the universalist (or best practice) approach to HRM. By evaluating all the companies against the same criteria, the assertion by Telfer (2008) implies that the companies that occupy a higher ranking on the BCTWF survey follow the universalist approach more strictly than those companies that do not occupy higher rankings. This should result in these highly ranked companies performing better financially than the lower ranked companies.

Figure 6.2 attempts to depict the phenomenon that stricter implementation of universalist HRM practices leads to higher financial returns. Organisations that follow the contingent HRM practices feature at the lowest end of the scale. Linking Figure 6.2 to our hypothesis, it should stand to reason that lower ranked companies do not follow the universalist approach strictly, and thus do not have exceptional financial returns. Following the hypothesis and linking it to Figure

6.2, it can also be estimated with the universalist approach very strictly and thus perform better financially than those ranked lower.

Figure 6.2

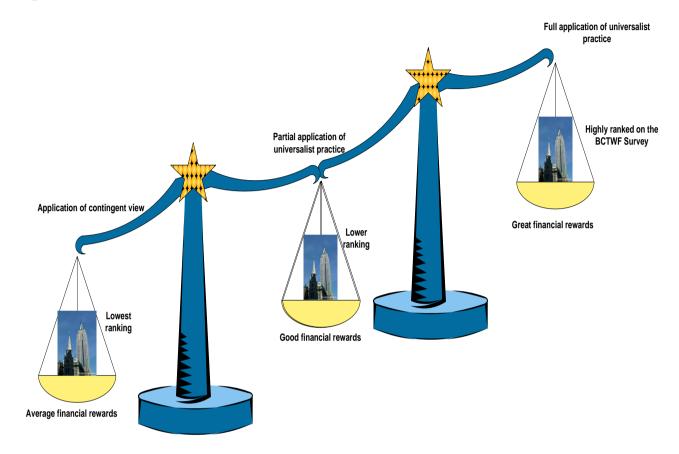
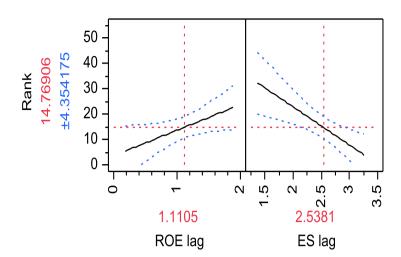


Figure 6.3 depicts the relationship between the ranking of the various organisations and the ROE, as well as the EPS for the years preceding the BCTWF survey.







The diagram illustrates that there is a positive relationship between ROE and BCTWF ranking. In terms of the hypothesis being discussed and the explanation outlined in section 6.1, this means that lower ranks are associated with higher ROE ratios. The examination of the first ratio seems to indicate that the second hypothesis can be rejected; however, three other ratios need to be considered.

When focussing on the right hand side of Figure 6.3 it can be observed that rank and EPS have a negative relationship. This implies that companies with higher rankings have higher EPS ratios when compared to lower ranked companies with lower EPS ratios. This is in direct contradiction to the left hand side of Figure 6.3.

By fitting the rank to the current and debt to equity ratios, no significant pattern could be determined in order to reach any firm conclusions. For this reason, the analysis of these ratios and the relationships they have with rank has been omitted.

In the absence of other ratios that could be used to break the stalemate between the negative and positive relationship EPS and ROE (respectively) has with ranking, level of significance will have to be used to determine

it can be observed that explanatory variable EPS has a greater significance than ROE.

Table 6.2

Variable	by Variable	Correlation	Count	Lower 95%	Upper 95%	Signif Prob
Return On Equity % lag	Rank	0.5155	27	0.1685	0.7488	0.0059*
Earnings/ Share (C) lag	Rank	-0.641	26	-0.8238	-0.3374	0.0004*

This fact makes the relationship between EPS and rank stronger than ROE and rank. Due to this observation, the null hypothesis that higher ranked BCTWF participants perform financially better than the lower ranked participants can be rejected. It should, however, be highlighted that the difference between the two determinant factors (ROE and EPS) is minimal.

6.4 Hypothesis 3

Hypothesis 3 states the following:

3. Does the previous year's financial performance have a better effect on BCTWF rankings than the three year performance?

Hypothesis 3_o: A company's one year performance is a better determinant of BCTWF ranking than its three year performance, due to the halo effect.

Hypothesis 3_a: A company's one year performance is not a better determinant of BCTWF ranking than its three year performance, due to the halo effect.

Jennings, Palmer and Thomas (2004) cited Feldman (1981) in defining a halo as the most easily remembered information about a person or performance. Jennings et al. (2004) state that when individuals are asked what they think of a person or performance, the first thing that comes to mind is usually whether they like or dislike the person or performance. The BCTWF rankings are



determined by employees and

he statement by Jennings et al.

(2004) it can be deduced that those employees who complete the BCTWF survey will rate their companies favourably if their financial performance is good, and bad if the company does not perform well financially. The final hypothesis sought to establish whether the previous year's financial performance (the most recent memory of the employee) will result in a higher BCTWF ranking than the financial performance over a three year period.

Pairwise correlations were conducted between the rank and the previous year's financial ratios. The correlation between rank and the debt to equity ratio, rank and EPS and rank and ROE was significant at a 95% level of confidence, since the p-value is below 0.05 (see table 6.3 below).

Table 6.3

Variable	By Variable	Correlation	Count	Lower 95%	Upper 95%	Signif Prob
Return On Equity % lag	Rank	0.5155	27	0.1685	0.7488	0.0059*
Debt / Equity lag	Rank	-0.3955	27	-0.6742	-0.0183	0.0411*
Debt / Equity lag	ROE lag	-0.0932	110	-0.2756	0.0957	0.333
Earnings/ Share (C) lag	Rank	-0.641	26	-0.8238	-0.3374	0.0004*
Earnings/ Share (C) lag	ROE lag	-0.2152	108	-0.3883	-0.0273	0.0253*
Earnings/ Share (C) lag	D/E lag	0.2288	112	0.0452	0.3975	0.0152*
Current Ratio lag	Rank	0.3258	27	-0.0618	0.6281	0.0972
Current Ratio lag	ROE lag	0.3481	110	0.172	0.5026	0.0002*
Current Ratio lag	D/E lag	-0.527	117	-0.6467	-0.3821	<.0001*
Current Ratio lag	ES lag	-0.2175	112	-0.3874	-0.0333	0.0212*

The output of the table illustrates that there is a strong correlation between ROE and rank and EPS and rank. The relationship between EPS and rank is negative and the relationship with ROE is positive. The relationship with debt to equity and rank is negative and mediocre.



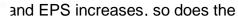
Since the correlation is negative, it implies that as EPS and the debt to equity ratios increases, so does the ranking of the companies. The current ratio has a positive relationship and hence an increase in the ratio leads to a better BCTWF position for the company.

Pairwise correlations were further conducted between the BCTWF ranking and the average of the previous three years' ratios. Only the correlation between rank and ROE was significant, at a 95% level of confidence, since the p-value is below 0.05 (see Table 6.4 below).

Table 6.4

Variable	By Variable	Correlation	Count	Lower 95%	Upper 95%	Signif Prob
Debt / Equity gem	Rank	-0.2988	29	-0.5996	0.0761	0.1154
Current Ratio gem	Rank	0.0654	29	-0.3085	0.4218	0.736
Current Ratio gem	Debt / Equity gem	-0.3548	128	-0.4977	-0.1931	<.0001*
Earnings/ Share (C) gem	Rank	-0.1462	29	-0.4866	0.2328	0.4492
Earnings/ Share (C) gem	Debt / Equity gem	0.0404	128	-0.134	0.2125	0.6505
Earnings/ Share (C) gem	Current Ratio gem	-0.1435	128	-0.3093	0.0308	0.1061
Return On Equity % gem	Rank	0.3896	29	0.0269	0.6616	0.0367*
Return On Equity % gem	Debt / Equity gem	-0.0596	128	-0.2307	0.1152	0.5042
Return On Equity % gem	Current Ratio gem	-0.0314	128	-0.2038	0.1429	0.725
Return On Equity % gem	Earnings/ Share (C) gem	0.2241	128	0.0527	0.3828	0.0110*

The positive correlation between the ROE and BCTWF ranking means that as the ROE increases, the rankings decrease for the various participants. The debt to equity and EPS ratios





company ranking. The current ratio's correlation is positive and this implies that as the current ratio improves, so does the position of the company.

Table 6.5 outlines how the strength of the correlation has dropped when comparing the lag (previous year) results and the 'gem' (average of three previous years) results.

Table 6.5

Ratio	Lag	Gem	Percentage change
Return On Equity	0.5155	0.3896	- 13%
Debt / Equity	-0.3955	-0.2988	- 10%
EPS	-0.641	-0.1462	- 50%
Current ratio	0.3258	0.0654	- 26%

The fact that one year's performance seems to have a stronger correlation than the average three years' performance implies that Jennings et al (2004) may have been correct in their assertion that most easily remembered recent performance affects 'like or dislike.' This 'like or dislike' in the context of the research could be factors that affect the ranking of participants in the BCTWF survey. Gardner et al. (2000) appear to agree with Jennings et al. (2004) and state that survey participants behave in a certain manner when given questionnaires. These participants are subject to information processing demands and, in order to reduce these demands, they rely on implicit theories to cue the salient information and fill gaps of information. The salient information that may be available to the survey participants is the most recent information (one year's results) and not necessarily the information over a period of time (average three years' results). Due to this argument, hypothesis 3 can be accepted.



6.5 Conclusion

The results outlined in Chapter 5 have been expanded and discussed in this chapter. This chapter has tested some of the research objectives that were set out in Chapter 1. Though Chapter 6 discusses the results, the implications for management, recommended actions, limitations and aspects for future research are discussed in the following chapter.



Chapter 7: Conclusion

7.1 Introduction

In Chapter 7, the findings in Chapter 5 and the previous discussions are pulled together. These findings are discussed and recommendations are presented to academics and company management. The research limitations and recommendations for further research are also discussed in this chapter.

7.2 Research highlights

By assessing universalist and contingency literature, and combining this with topics such as causality, the halo effect and financial performance, the research attempted to draw some conclusions on the BCTWF survey conducted by various organisations every year. The research thus used the hypotheses outlined in Chapter 3 to reach a firm conclusion on the following topics:

- BCTWF, financial performance and causality;
- BCTWF, financial performance and placing on the survey ranking; and
- BCTWF, financial performance and the halo effect.

The topics link back to issues raised in the literature. The findings discussed in the previous chapter, however, are not totally congruent with the literature presented in the second chapter.

7.3 Research contributions

7.3.1 Hypothesis 1 - BCTWF, financial performance and causality

The research demonstrates that good financial performance does lead to a positive (high) rating in the BCTWF survey. The relationship between the financial variables and the ranking is, however, very weak. In terms of one particular variable (namely, debt to



equity ratio), the relationship and revert back relationship of the causality of the BCTWF rating-financial performance and revert back to the question posed by Gardner et al. (2000) with regards to intervening variables and the part it plays in determining rankings.

Future research can, therefore, address the issue of intervening variables. Further to this, future research can seek to include more financial ratios that will provide a stronger relationship with the rankings.

7.3.2 Hypothesis 2 – BCTWF rank placing and financial performance

The testing of hypothesis 2 illustrates that companies that are ranked higher do not necessarily perform better financially than lower ranked companies. In reaching this conclusion, however, it should be noted that two of the four ratios were not used due to the weak relationships with ranking. Of the two that were used, only one leaned slightly toward the alternative hypothesis, which states that companies that are ranked higher do not necessarily perform better financially than lower ranked companies.

The topic of ranking and financial performance should definitely be researched further, since the result reached by the research is very questionable. More financial ratios should be used on a bigger sample in order to reach an unquestionable result.

7.3.3 Hypothesis 3 – BCTWF rank, the halo effect and financial performance

The final hypothesis demonstrated that a company's most recent financial performance is a better determinant of ranking on the BCTWF survey than its long term average performance. Of the three hypotheses, this one shows the strongest relationship with the BCTWF rankings. The output of Table 6.5 in the previous chapter clearly illustrates this.

survev.

7.4 Research implications

The research results do not empirically prove that the BCTWF survey and financial performance impact each other. The small sample used and the limited ratios cast question marks on the results that were obtained. Management can, however, use the results and Literature Review to question some of the statements made by organisations that promote the BCTWF survey. Management can raise questions such as causality, methodology used by these organisations, the halo effect and the financial performance of participants.

Further to this, management can start questioning the contingency and universalist HRM approaches used in their organisations. Most importantly, organisations can use the research and evaluate whether it makes financial sense to spend money to participate in the BCTWF survey.

7.5 Research limitations and recommendations

7.5.1 Population and sample

As per Chapter 4, the research population consisted of only JSE listed companies. This severely affected the sample size and the results. Due to the narrowly defined population, some companies that are listed on the BCTWF survey but are privately owned could not be included in the sample.

Future research could address this shortfall by identifying privately owned companies that would be willing to share their financial information. The company would, however, feel more comfortable doing this if a non-disclosure agreement is signed with the researcher, as well as the academic institution.

7.5.2 Ratios



Only four ratios were used in the research. This negatively affected the research since, in some cases, absolute conclusions about the hypotheses could not be reached. This was due to either weak or no relationships between the ratios, as well as the BCTWF rankings.

In future, research could include at least six or more ratios in the research. All the ratios should, however, be used across all industries included in the survey sample. Ratios such as operating profit margin and cost to income ratios are not used across all industries and should thus be avoided in future research.

7.5.3 Inclusion of a control group

The research was limited to companies that were listed on the BCTWF survey. A comparison on financial performance was done on companies that featured high on the BCTWF rankings and those lower down. However, the research excluded competitor companies that are listed on the JSE but do not participate in the BCTWF survey.

Further research could be conducted in this area by comparing companies that are in the same industry but do not participate in the BCTWF survey, to organisations that are participants. For example, Absa's (participant) financial performance could be compared to that of Nedcor (non participant).

7.5.4 Longitudinal research

The current research evaluates participants over an eight year period. This negatively affected the sample size, evaluation of issues such as causality and changes that occur over time.



Future research could consider conducting the research over a longer period of time, maybe over 12 years, to obtain more meaningful results.

7.5.5 Causal relationship

The causal relationship between various variables and the BCTWF survey should be investigated further. In their research Wright et. al. (2005) state that to truly demonstrate the causal impact of HR practices on firm performance, one would need to see how they impact both proximal outcomes (e.g. organisational outcomes) and more distal outcomes (e.g. profits). This type of research will take time and effort to execute though.

7.6 Conclusion

Though not very conclusive, the research does place doubt on some of the statements made by the BCTWF promoters and advocates of the universalist view. The research does add to the current body of knowledge with regards to the relationship between the BCTWF surveys and a firm's financial performance.

The recommendations made in section 7.5 should be used in future research in order to reach a more irrefutable and concrete conclusion.



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Appendix 1

Please note that the table below only lists the companies included in the research and not all the companies in the BCTWF survey.

2001	2002	2003	2004	2005	2006	2007	2008
South African Breweries	Absa Group	Absa Group	Pretoria Portland Cement Co Limited	Pretoria Portland Cement Company Ltd	Pretoria Portland Cement Company Ltd	Pretoria Portland Cement Co Ltd	WesBank
Rand Merchant Bank	South African Breweries	South African Breweries	South African Breweries	Rand Merchant Bank (A division of Firstrand Bank Ltd)	WesBank	Cadiz Holdings Limited	Santam Limited
Discovery Health	Wesbank	WesBank	Absa Merchant Bank	WesBank (A division of Firstrand Bank Ltd)	Pretoria Portland Cement Company Ltd	Kelly	ABSA Bank Ltd
Momentum	Rand Merchant Bank	Pretoria Portland Cement Company	Rand Merchant Bank	South African Breweries Limited	WesBank	WesBank	Old Mutual South Africa
Nedcor Bank	FNB Corporate	Rand Merchant Bank	Wesbank	Kelly (A division of Logical Options) (Pty) Ltd	The South African Breweries Ltd	Santam Limited	Kumba Iron Ore
Absa Group	Massmart Holdings Limited	FNB Corporate	Edgars Cosolidated Stores	Pretoria Portland Cement Company Ltd (Part of the greater Barloworld Group)	Barloworld Limited (Part of the Barloworld Group) (Pty) Ltd	Anglo Coal	Netcare Limited
Investec Group	African Bank	Pep SA	Discovery Holdings	Rand Merchant Bank (A division of Firstrand Bank Ltd)	Discovery Holdings Ltd	Old Mutual South Africa	Anglo Coal
The Liberty Group	Standard Corporate & Merchant Bank		AVIS Southern Africa	WesBank (A division of Firstrand Bank Ltd)	Edgars Consolidate d Stores Ltd	Harmony Gold Mining Company Ltd	Harmony Gold Mining Company Ltd

Wesbank



	Y OF PRETO		New	
Pepcor Retail Ltd	Amcan Breweries Limited	Logical Options Staffing (Pty) Ltd)	Clicks SA Pty Ltd	Santam Limited
FNB Retail Bank	Kelly (A division of Logical Options) (Pty) Ltd	Coronation Fund Managers Ltd	Kelly Industrial	TWP Consulting (Pty) Ltd
Kumba Resources	Barloworld Limited	UCS Solutions (Pty) Ltd	Cadiz Holdings Limited	Kelly, a division of the Kelly Group Limited
Ackermans, A division of Pepcor Ltd	Discovery Holdings Ltd	Edcon Financial Services		
Massmart Holdings	Edgars Consolidat ed Stores Limited (Edcon)	RS Component s SA Ltd		
Standard Bank	Investment Solutions			
Ince	Ince (Pty) Ltd			
Barloworld	Kumba Resources Limited			
Liberty Life	Barloworld Logistics (Part of the Barloworld Group)			
UCS Solutions	Barloworld Motor (Part of the Barloworld Group)			
	Barloworld Equipment (Part of the Barloworld Group)			
	Ackermans a division of Pepkor Retail Ltd			
	UCS Solutions (Pty) Ltd			



Appendix 2

The table below outlines the consolidated results of the ratios for all the companies over an eight year period.

Company	Rank	Year	Current Ratio	Debt / Equity	EPS	Return On Equity %	Debt / Equity gem	Current Ratio gem	EPS gem	Return On Equity % gem	Return On Equity % normal	Debt / Equity normal	Current ratio normal	EPS (C) normal	ROE lag	D/E lag	EPS lag	CR lag
ABSA		2000	0.39	13.77	310.30	7.90												
ABSA		1999	0.44	13.54	309.70	16.64	13.77	0.39	310.30	7.90	0.90	1.14	-0.41	2.49	0.90	1.14	2.49	-0.41
ABSA		1998	0.38	14.31	271.30	16.24	13.66	0.42	310.00	12.27	1.09	1.14	-0.38	2.49	1.22	1.13	2.49	-0.36
ABSA	5	2004	0.48	14.49	688.50	23.28	13.87	0.40	297.10	13.59	1.13	1.14	-0.39	2.47	1.21	1.16	2.43	-0.42
ABSA	1	2003	0.47	14.72	528.00	20.11	14.11	0.43	423.17	18.72	1.27	1.15	-0.36	2.63	1.37	1.16	2.84	-0.32
ABSA	1	2002	0.47	14.88	291.10	10.99	14.51	0.44	495.93	19.88	1.30	1.16	-0.35	2.70	1.30	1.17	2.72	-0.33
ABSA	7	2001	0.37	13.14	378.70	17.81	14.70	0.47	502.53	18.13	1.26	1.17	-0.32	2.70	1.04	1.17	2.46	-0.33
African Bank		2001	2.32	1.53	130.10	36.75	14.25	0.44	399.27	16.30	1.21	1.15	-0.36	2.60	1.25	1.12	2.58	-0.43
African Bank		2000	4.96	1.13	121.90	15.19	9.85	1.05	266.63	21.85	1.34	0.99	0.02	2.43	1.57	0.18	2.11	0.37
African Bank		1999	6.96	2.86	94.30	-49.92	5.27	2.55	210.23	23.25	1.37	0.72	0.41	2.32	1.18	0.05	2.09	0.70
African Bank		2005	6.89	2.02	202.70	42.20	1.84	4.75	115.43	0.67	-0.17	0.26	0.68	2.06		0.46	1.97	0.84
African Bank		2004	7.99	1.74	161.60	28.63	2.00	6.27	139.63	2.49	0.40	0.30	0.80	2.14	1.63	0.31	2.31	0.84
African Bank		2003	5.33	1.29	140.40	23.66	2.21	7.28	152.87	6.97	0.84	0.34	0.86	2.18	1.46	0.24	2.21	0.90
African Bank	8	2002	5.25	1.82	104.40	20.50	1.68	6.74	168.23	31.50	1.50	0.23	0.83	2.23	1.37	0.11	2.15	0.73
Barloworld limited		2008	1.41	1.58	614.00	8.47	1.62	6.19	135.47	24.26	1.38	0.21	0.79	2.13	1.31	0.26	2.02	0.72
Barloworld limited		2007	1.46	1.66	1181.30	19.89	1.56	4.00	286.27	17.54	1.24	0.19	0.60	2.46	0.93	0.20	2.79	0.15
Barloworld limited		2006	1.60	1.46	1170.80	17.24	1.69	2.71	633.23	16.29	1.21	0.23	0.43	2.80	1.30	0.22	3.07	0.16
Barloworld limited	11	2005	1.66	1.21	893.60	15.41	1.57	1.49	988.70	15.20	1.18	0.19	0.17	3.00	1.24	0.16	3.07	0.20
Barloworld limited		2004	1.53	1.36	857.20	13.60	1.44	1.57	1081.90	17.51	1.24	0.16	0.20	3.03	1.19	0.08	2.95	0.22
Barloworld limited		2003	1.37	1.33	592.80	11.92	1.34	1.60	973.87	15.42	1.19	0.13	0.20	2.99	1.13	0.13	2.93	0.18



Company	Rank	Year	Current Ratio	Debt / Equity	EPS	Return On Equity %	Debt / Equity gem	Current Ratio gem	EPS gem	Return On Equity % gem	Return On Equity % normal	Debt / Equity normal	Current ratio normal	EPS (C) normal	ROE lag	D/E lag	EPS lag	CR lag
Barloworld limited		2002	1.34	1.29	621.70	13.42	1.30	1.52	781.20	13.64	1.13	0.11	0.18	2.89	1.08	0.12	2.77	0.14
Coronation fund managers		2008	0.70	0.43	52.90	17.47	1.33	1.41	690.57	12.98	1.11	0.12	0.15	2.84	1.13	0.11	2.79	0.13
Coronation fund managers		2007	0.81	0.48	79.60	28.17	1.02	1.14	422.47	14.27	1.15	0.01	0.06	2.63	1.24	0.37	1.72	-0.15
Coronation fund managers	39	2006	1.60	0.29	51.90	15.72	0.73	0.95	251.40	19.69	1.29	-0.13	-0.02	2.40	1.45	0.32	1.90	-0.09
Coronation fund managers		2005	2.71	1.31	47.60	84.66	0.40	1.04	61.47	20.45	1.31	-0.40	0.02	1.79	1.20	- 0.54	1.72	0.20
Coronation fund managers		2004	2.35	0.65	33.90	56.06	0.69	1.71	59.70	42.85	1.63	-0.16	0.23	1.78	1.93	0.12	1.68	0.43
Coronation fund managers		2003	2.72	1.38	38.16	40.52	0.75	2.22	44.47	52.15	1.72	-0.12	0.35	1.65	1.75	0.19	1.53	0.37
Discovery Health		2008	1.39	0.34	172.00	20.02	1.11	2.59	39.89	60.41	1.78	0.05	0.41	1.60	1.61	0.14	1.58	0.43
Discovery Health		2007	1.23	0.29	165.20	22.39	0.79	2.15	81.35	38.87	1.59	-0.10	0.33	1.91	1.30	- 0.47	2.24	0.14
Discovery Health	26	2006	1.08	0.44	100.40	17.82	0.67	1.78	125.12	27.64	1.44	-0.17	0.25	2.10	1.35	- 0.54	2.22	0.09
Discovery Health	14	2005	1.57	0.32	103.30	20.45	0.36	1.23	145.87	20.08	1.30	-0.45	0.09	2.16	1.25	0.36	2.00	0.03
Discovery Health		2004	2.10	0.39	80.50	24.01	0.35	1.29	122.97	20.22	1.31	-0.46	0.11	2.09	1.31	- 0.49	2.01	0.20
Discovery Health		2003	1.05	1.71	94.10	34.76	0.38	1.58	94.73	20.76	1.32	-0.42	0.20	1.98	1.38	- 0.41	1.91	0.32



Company	Rank	Year	Current Ratio	Debt / Equity	EPS	Return On Equity %	Debt / Equity gem	Current Ratio gem	EPS gem	Return On Equity % gem	Return On Equity % normal	Debt / Equity normal	Current ratio normal	EPS (C) normal	ROE lag	D/E lag	EPS lag	CR lag
Discovery Health		2002	1.45	0.59	53.00	27.55	0.81	1.57	92.63	26.41	1.42	-0.09	0.20	1.97	1.54	0.23	1.97	0.02
Edgars consolidated stores limited		2008					0.90	1.53	75.87	28.77	1.46	-0.05	0.19	1.88	1.44	0.23	1.72	0.16
Edgars consolidated stores limited		2007					1.15	1.25	73.55	31.16	1.49	0.06	0.10	1.87				
Edgars consolidated stores limited	27	2006	1.46	0.98	307.00	38.54	0.59	1.45	53.00	27.55	1.44	-0.23	0.16	1.72				
Edgars consolidated stores limited	16	2005	1.61	0.91	2661.00	35.89	0.98	1.46	307.00	38.54	1.59	-0.01	0.16	2.49	1.59	0.01	2.49	0.16
Edgars consolidated stores limited		2004	1.65	0.89	1597.00	25.52	0.95	1.54	1484.00	37.22	1.57	-0.02	0.19	3.17	1.55	- 0.04	3.43	0.21
Edgars consolidated stores limited		2003	1.47	0.93	752.60	15.88	0.93	1.57	1521.67	33.32	1.52	-0.03	0.20	3.18	1.41	0.05	3.20	0.22
Edgars consolidated stores limited		2002	2.16	0.73	304.00	7.48	0.91	1.58	1670.20	25.76	1.41	-0.04	0.20	3.22	1.20	0.03	2.88	0.17



Company	Rank	Year	Current Ratio	Debt / Equity	EPS	Return On Equity %	Debt / Equity gem	Current Ratio gem	EPS gem	Return On Equity % gem	Return On Equity % normal	Debt / Equity normal	Current ratio normal	EPS (C) normal	ROE lag	D/E lag	EPS lag	CR lag
Incentive holdings limited		2008					0.85	1.76	884.53	16.29	1.21	-0.07	0.25	2.95	0.87	0.14	2.48	0.33
Incentive holdings limited		2007					0.83	1.82	528.30	11.68	1.07	-0.08	0.26	2.72				
Incentive holdings limited		2006					0.73	2.16	304.00	7.48	0.87	-0.14	0.33	2.48				
Incentive holdings limited	26	2005																
Incentive holdings limited		2004	2.13	5.52	-2.60	- 253.01												
Incentive holdings limited		2003	2.08	1.62	-4.60	110.38	5.52	2.13	-2.60	- 253.01		0.74	0.33			0.74		0.33
Incentive holdings limited		2002	0.81	1.47	-1.50	-19.09	3.57	2.11	-3.60	- 181.70		0.55	0.32			0.21		0.32
Investec		2000	0.90	26.70	1300.90	14.80	2.87	1.67	-2.90	- 127.49		0.46	0.22			0.17		-0.09
Investec		1999	0.51	16.32	1077.50	12.88	9.93	1.26	431.60	-38.22		1.00	0.10	2.64	1.17	1.43	3.11	-0.05
Investee		1998	0.60	12.81	790.10	9.59	14.83	0.74	792.30 1056.17	2.86	0.46 1.09	1.17 1.27	-0.13	2.90 3.02	1.11 0.98	1.21	3.03 2.90	-0.29
Investec	1	2004	0.69	17.19	1202.33	0.87	18.61	0.67	1006.17	12.42	1.09	1.27	-0.17	3.02	0.98	1.11	2.90	-0.22
Investec		2003	0.77	20.57	1499.00	0.22	15.44	0.60	1023.31	7.78	0.89	1.19	-0.22	3.01	0.06	1.24	3.08	-0.16
Investec		2002	0.86	27.77	1840.40	5.95	16.86	0.69	1163.81	3.56	0.55	1.23	-0.16	3.07	0.66	1.31	3.18	-0.11
Investec	8	2001	0.85	31.50	1628.20	14.18	21.84	0.77	1513.91	2.35	0.37	1.34	-0.11	3.18	0.77	1.44	3.26	-0.07
Kelly group		2008	1.84	1.89	102.30	48.01	26.61	0.83	1655.87	6.78	0.83	1.43	-0.08	3.22	1.15	1.50	3.21	-0.07
Kelly group		2007	1.61	1.82	78.50	30.99	20.39	1.18	1190.30	22.71	1.36	1.31	0.07	3.08	1.68	0.28	2.01	0.26



Company	Rank	Year	Current Ratio	Debt / Equity	EPS	Return On Equity %	Debt / Equity gem	Current Ratio gem	EPS gem	Return On Equity % gem	Return On Equity % normal	Debt / Equity normal	Current ratio normal	EPS (C) normal	ROE lag	D/E lag	EPS lag	CR lag
Kelly group	33	2006					11.74	1.43	603.00	31.06	1.49	1.07	0.16	2.78	1.49	0.26	1.89	0.21
Kelly group	9	2005					1.86	1.73	90.40	39.50	1.60	0.27	0.24	1.96				
Kelly group		2004					1.82	1.61	78.50	30.99	1.49	0.26	0.21	1.89				
Kelly group		2003																
Kelly group		2002																
Kumba iron ore limited		2008	1.75	0.85	2302.00	105.09												
Kumba iron ore limited		2007	1.05	1.75	974.00	116.80	0.85	1.75	2302.00	105.09	2.02	-0.07	0.24	3.36	2.02	0.07	3.36	0.24
Kumba iron ore limited		2006	1.22	6.17	498.00	75.69	1.30	1.40	1638.00	110.95	2.05	0.11	0.15	3.21	2.07	0.24	2.99	0.02
Kumba iron ore limited	30	2005					2.92	1.34	1258.00	99.19	2.00	0.47	0.13	3.10	1.88	0.79	2.70	0.09
Kumba iron ore limited		2004					3.96	1.14	736.00	96.25	1.98	0.60	0.05	2.87				
Kumba iron ore limited		2003					6.17	1.22	498.00	75.69	1.88	0.79	0.09	2.70				
Kumba iron ore limited		2002																
Liberty		2000	0.67	2.23	1691.00	5.77												
Liberty		1999	1.83	0.74	1817.30	28.32	2.23	0.67	1691.00	5.77	0.76	0.35	-0.17	3.23	0.76	0.35	3.23	-0.17
Liberty		1998	2.01	1.51	2509.90	9.42	1.49	1.25	1754.15	17.05	1.23	0.17	0.10	3.24	1.45	0.13	3.26	0.26
Liberty		2004	2.03	0.47	1348.00	20.06	1.49	1.50	2006.07	14.50	1.16	0.17	0.18	3.30	0.97	0.18	3.40	0.30
Liberty		2003	1.97	0.75	1038.30	13.32	0.91	1.96	1891.73	19.27	1.28	-0.04	0.29	3.28	1.30	0.33	3.13	0.31
Liberty		2002	2.22	0.82	1169.50	12.85	0.91	2.00	1632.07	14.27	1.15	-0.04	0.30	3.21	1.12	0.12	3.02	0.29
Liberty	9	2001	1.61	1.07	1698.00	25.22	0.68	2.07	1185.27	15.41	1.19	-0.17	0.32	3.07	1.11	0.09	3.07	0.35
Massmart holdings		2001	1.02	2.39	109.90	14.92	0.88	1.93	1301.93	17.13	1.23	-0.06	0.29	3.11	1.40	0.03	3.23	0.21



Company	Rank	Year	Current Ratio	Debt / Equity	EPS	Return On Equity %	Debt / Equity gem	Current Ratio gem	EPS gem	Return On Equity % gem	Return On Equity % normal	Debt / Equity normal	Current ratio normal	EPS (C) normal	ROE lag	D/E lag	EPS lag	CR lag
Massmart holdings		2000	0.98	4.39	79.50	-0.20	1.43	1.62	992.47	17.66	1.25	0.15	0.21	3.00	1.17	0.38	2.04	0.01
Massmart holdings		1999					2.62	1.20	629.13	13.31	1.12	0.42	0.08	2.80		0.64	1.90	-0.01
Massmart holdings		2005	0.94	3.90	341.00	37.54	3.39	1.00	94.70	7.36	0.87	0.53	0.00	1.98				
Massmart holdings		2004	1.12	2.73	318.80	30.39	4.15	0.96	210.25	18.67	1.27	0.62	-0.02	2.32	1.57	0.59	2.53	-0.03
Massmart holdings		2003	1.14	2.43	242.40	25.56	3.32	1.03	329.90	33.97	1.53	0.52	0.01	2.52	1.48	0.44	2.50	0.05
Massmart holdings	7	2002	1.15	2.46	183.20	23.17	3.02	1.07	300.73	31.16	1.49	0.48	0.03	2.48	1.41	0.39	2.38	0.06
Momentum		2008	2.16	26.17	184.50	29.00	2.54	1.14	248.13	26.37	1.42	0.40	0.06	2.39	1.36	0.39	2.26	0.06
Momentum		2007	2.26	27.44	200.70	32.00	10.35	1.48	203.37	25.91	1.41	1.02	0.17	2.31	1.46	1.42	2.27	0.33
Momentum		2006	0.36	21.78		27.00	18.69	1.86	189.47	28.06	1.45	1.27	0.27	2.28	1.51	1.44	2.30	0.35
Momentum		2005	0.47	19.00	137.25	23.00	25.13	1.59	192.60	29.33	1.47	1.40	0.20	2.28	1.43	1.34		-0.44
Nedcor		2000	0.47	9.07	1267.00	41.05	22.74	1.03	168.98	27.33	1.44	1.36	0.01	2.23	1.36	1.28	2.14	-0.33
Nedcor		1999	0.53	12.20	1024.00	10.89	16.62	0.43	702.13	30.35	1.48	1.22	-0.36	2.85	1.61	0.96	3.10	-0.33
Nedcor		1998	0.58	11.79	787.20	24.81	13.42	0.49	809.42	24.98	1.40	1.13	-0.31	2.91	1.04	1.09	3.01	-0.28
Nedcor		2004	0.38	16.66	401.00	5.38	11.02	0.53	1026.07	25.58	1.41	1.04	-0.28	3.01	1.39	1.07	2.90	-0.24
Nedcor		2003	0.42	22.44	20.00	-13.96	13.55	0.50	737.40	13.69	1.14	1.13	-0.30	2.87	0.73	1.22	2.60	-0.42
Nedcor		2002	0.43	14.33	1022.00	5.77	16.96	0.46	402.73	5.41	0.73	1.23	-0.34	2.61		1.35	1.30	-0.38
Nedcor	6	2001	0.40	12.14	1576.00	0.12	17.81	0.41	481.00	-0.94		1.25	-0.39	2.68	0.76	1.16	3.01	-0.37
Pepkor		2002	1.27	1.24	124.70	26.64	16.30	0.42	872.67	-2.69		1.21	-0.38	2.94	0.92	1.08	3.20	-0.40
Pepkor		2001	1.41	1.38	52.00	-9.95	9.24	0.70	907.57	10.84	1.04	0.97	-0.15	2.96	1.43	0.09	2.10	0.10
Pepkor		2000	1.14	2.43	281.60	14.03	4.92	1.03	584.23	5.60	0.75	0.69	0.01	2.77		0.14	1.72	0.15
Pepkor		2006					1.68	1.27	152.77	10.24	1.01	0.23	0.10	2.18	1.15	0.39	2.45	0.06
Pepkor		2005					1.91	1.28	166.80	2.04	0.31	0.28	0.11	2.22				
Pepkor		2004					2.43	1.14	281.60	14.03	1.15	0.39	0.06	2.45				
Pepkor	10	2003	1.17	1.64	54.00	0.64												



Company	Rank	Year	Current Ratio	Debt / Equity	EPS	Return On Equity %	Debt / Equity gem	Current Ratio gem	EPS gem	Return On Equity % gem	Return On Equity % normal	Debt / Equity normal	Current ratio normal	EPS (C) normal	ROE lag	D/E lag	EPS lag	CR lag
Rand Merchant Bank		2008	0.91	12.28	184.50	21.00	1.64	1.17	54.00	0.64	-0.19	0.21	0.07	1.73	0.19	0.21	1.73	0.07
Rand Merchant Bank		2007	0.91	12.39	200.70	26.00	6.96	1.04	119.25	10.82	1.03	0.84	0.02	2.08	1.32	1.09	2.27	-0.04
Rand Merchant Bank		2006	0.91	13.29		25.00	8.77	1.00	146.40	15.88	1.20	0.94	0.00	2.17	1.41	1.09	2.30	-0.04
Rand Merchant Bank	3	2005	0.92	11.10	137.25	21.00	12.65	0.91	192.60	24.00	1.38	1.10	-0.04	2.28	1.40	1.12		-0.04
SAB		2008	0.67	0.83	1083.95	1.51	12.26	0.91	168.98	24.00	1.38	1.09	-0.04	2.23	1.32	1.05	2.14	-0.04
SAB		2007	0.59	0.78	846.81	1.60	8.41	0.83	610.60	15.84	1.20	0.92	-0.08	2.79	0.18	0.08	3.04	-0.17
SAB	11	2006	0.59	0.82	672.67	1.83	4.24	0.73	689.34	8.04	0.91	0.63	-0.14	2.84	0.20	0.11	2.93	-0.23
SAB	6	2005	0.83	0.80	605.59	2.81	0.81	0.62	867.81	1.65	0.22	-0.09	-0.21	2.94	0.26	0.09	2.83	-0.23
SAB		2000	0.62	0.79	348.40	33.56	0.80	0.67	708.36	2.08	0.32	-0.10	-0.17	2.85	0.45	0.10	2.78	-0.08
SAB		1999	1.35	1.17	315.90	28.76	0.80	0.68	542.22	12.73	1.10	-0.10	-0.17	2.73	1.53	0.10	2.54	-0.21
SAB		1998	1.08	1.77	653.50	21.11	0.92	0.93	423.30	21.71	1.34	-0.04	-0.03	2.63	1.46	0.07	2.50	0.13
SAB	3	2004	0.83	0.97	485.44	1.65	1.24	1.02	439.27	27.81	1.44	0.09	0.01	2.64	1.32	0.25	2.82	0.03
SAB	2	2003	0.45	0.83	414.17	1.51	1.30	1.09	484.95	17.17	1.23	0.12	0.04	2.69	0.22	0.01	2.69	-0.08
SAB	2	2002	0.80	1.07	553.41	1.82	1.19	0.79	517.70	8.09	0.91	0.08	-0.10	2.71	0.18	0.08	2.62	-0.35
SAB	1	2001	0.69	0.91	435.20	0.65	0.96	0.69	484.34	1.66	0.22	-0.02	-0.16	2.69	0.26	0.03	2.74	-0.10
Santam		2008	0.99	2.60	586.00	16.35	0.94	0.65	467.59	1.33	0.12	-0.03	-0.19	2.67	- 0.19	0.04	2.64	-0.16
Santam		2007	0.78	2.66	906.00	26.30	1.53	0.83	524.87	6.27	0.80	0.18	-0.08	2.72	1.21	0.41	2.77	0.00
Santam		2006	0.97	1.38	1555.00	28.02	2.06	0.82	642.40	14.43	1.16	0.31	-0.09	2.81	1.42	0.42	2.96	-0.11



Company	Rank	Year	Current Ratio	Debt / Equity	EPS	Return On Equity %	Debt / Equity gem	Current Ratio gem	EPS gem	Return On Equity % gem	Return On Equity % normal	Debt / Equity normal	Current ratio normal	EPS (C) normal	ROE lag	D/E lag	EPS lag	CR lag
Santam	34	2005	1.04	1.44	1540.00	31.22	2.21	0.91	1015.67	23.56	1.37	0.35	-0.04	3.01	1.45	0.14	3.19	-0.01
Santam		2004	3.03	0.31	1556.00	32.08	1.83	0.93	1333.67	28.51	1.46	0.26	-0.03	3.13	1.49	0.16	3.19	0.02
Santam		2003	3.11	0.36	751.00	20.38	1.04	1.68	1550.33	30.44	1.48	0.02	0.23	3.19	1.51	0.51	3.19	0.48
Santam		2002	2.86	0.37	274.00	8.95	0.70	2.39	1282.33	27.89	1.45	-0.15	0.38	3.11	1.31	0.44	2.88	0.49
Standard Bank		2001	0.80	10.90	336.50	17.45	0.35	3.00	860.33	20.47	1.31	-0.46	0.48	2.93	0.95	0.43	2.44	0.46
Standard Bank		2000	0.80	11.27	284.80	18.85	3.88	2.26	453.83	15.59	1.19	0.59	0.35	2.66	1.24	1.04	2.53	-0.10
Standard Bank		1999	0.44	12.53	241.70	4.98	7.51	1.49	298.43	15.08	1.18	0.88	0.17	2.47	1.28	1.05	2.45	-0.10
Standard Bank		2005	0.68	17.31	702.30	25.61	11.57	0.68	287.67	13.76	1.14	1.06	-0.17	2.46	0.70	1.10	2.38	-0.36
Standard Bank		2004	0.62	16.25	578.70	26.42	13.70	0.64	409.60	16.48	1.22	1.14	-0.19	2.61	1.41	1.24	2.85	-0.17
Standard Bank		2003	0.25	14.52	468.30	22.14	15.36	0.58	507.57	19.00	1.28	1.19	-0.24	2.71	1.42	1.21	2.76	-0.21
Standard Bank	9	2002	0.63	10.81	396.30	19.18	16.03	0.52	583.10	24.72	1.39	1.20	-0.29	2.77	1.35	1.16	2.67	-0.60
UCS group limited		2008	1.28	0.99	31.90	20.01	13.86	0.50	481.10	22.58	1.35	1.14	-0.30	2.68	1.28	1.03	2.60	-0.20
UCS group limited		2007	1.14	0.98	34.70	39.56	8.77	0.72	298.83	20.44	1.31	0.94	-0.14	2.48	1.30	0.00	1.50	0.11
UCS group limited	45	2006	1.37	0.85	23.40	27.73	4.26	1.02	154.30	26.25	1.42	0.63	0.01	2.19	1.60	0.01	1.54	0.06
UCS group limited	50	2005	1.31	0.50	14.50	15.54	0.94	1.26	30.00	29.10	1.46	-0.03	0.10	1.48	1.44	0.07	1.37	0.14
UCS group limited		2004	1.44	0.50	11.90	12.43	0.78	1.27	24.20	27.61	1.44	-0.11	0.10	1.38	1.19	0.30	1.16	0.12
UCS group limited		2003	1.38	0.64	10.30	11.24	0.62	1.37	16.60	18.57	1.27	-0.21	0.14	1.22	1.09	0.30	1.08	0.16



Company	Rank	Year	Current Ratio	Debt / Equity	EPS	Return On Equity %	Debt / Equity gem	Current Ratio gem	EPS gem	Return On Equity % gem	Return On Equity % normal	Debt / Equity normal	Current ratio	EPS (C) normal	ROE lag	D/E lag	EPS lag	CR lag
UCS group limited		2002	3.95	0.18	10.90	10.14	0.55	1.38	12.23	13.07	1.12	-0.26	0.14	1.09	1.05	0.19	1.01	0.14