

CHAPTER SIX

EMPIRICAL RESEARCH: MEASURING CORPORATE CITIZENSHIP

6.1 INTRODUCTION

A **best practice** is a technique or methodology that, through experience and research, has proven to consistently lead to a desired result. A commitment to using the best practices in any field is a commitment to using all the knowledge and technology at one's disposal to ensure success (SADDF, 2007). In the field of CSR, best practice would naturally involve the use of certain tools or measuring instruments that will serve as guidelines for companies and stakeholders to make informed decisions regarding performance issues and future directions. In order to serve the multiple needs of companies and their stakeholders, a good tool for measuring corporate citizenship must consist of the 'three Cs' of measurement, namely: *comparability*, *completeness* and *credibility* (Ranganathan, 1999). **Comparability** makes it possible to track performance over time and across firms; **completeness** is required both in the scope of the indicators and their application across firms, sectors and countries; and **credibility** means that businesses and others trust the indicators and make reliable decisions based on the information reported (or published results of the measure) (Ranganathan, 1999). For these reasons, it is important for an adequate CSR/CP measuring instrument to be developed in such a manner that it consists of items with a sufficient amount of validity and reliability. In order to achieve this, the right instrument development procedures need to be followed.

Subsequently, in line with the third and fourth research objectives of this study (see 1.4); the purpose of this chapter is to present a detailed overview of the phases and processes that were involved during the development of the '**Corporate Citizenship Measuring Instrument**.' As earlier indicated (see 1.3 & 1.4), the measuring instrument is based on an established CSR framework, namely the *Bench Marks* (see 4.11), which meant that the content of the instrument was largely pre-determined by the original document (see 6.2.2). Apart from measuring a company's performance in terms of the *Bench Marks*, the instrument was developed in such a way that it may also be used to measure a company's CSR-Personality (see 5.5).

The different sections of this chapter are structured according to the **phases of developing a measuring instrument** (Foxcroft & Roodt, 2005:47) as indicated in the first chapter (see 1.5.1.2).

6.2 THE PLANNING PHASE

6.2.1 Specifying the aim of the measure

The **general purpose** of this measuring tool is to be used as part of, specifically as a starting point, when doing a company's CSR evaluation. This type of evaluation will usually be conducted by an independent (typically research) organisation, such as the *Bench Marks Foundation* or by the *Bench Marks Centre for Corporate Social Responsibility* at the NWU or any similar Centre or Institute, during research on a particular theme or industry. The results obtained in the measure will be used to determine the areas in which a company performed *very well* or *very bad* with regard to CSR, as well as to identify areas of *discrepancy* – in terms of differences between company opinions about themselves and the opinions of stakeholders about the companies. These identified areas will then further be focused on during other forms of data gathering, such as interviews and focus groups between the researchers, representatives from the company as well as other company stakeholder groups.

The **specific purposes** of this *Corporate Citizenship Measuring Instrument* are to:

- Measure a company's *overall CSR Performance* in a variety of CSR fields/scales. These fields are the same as the sub-themes of the *Bench Marks* (2003) document.
- Measure a company's *CSR Personality* in terms of the balance of its activities across the dimensions of CSR and sustainable development.

The ultimate aim for a company is to have the personality of *Corporate Citizenship* – which implies that it has achieved:

- A **high score** for most of the items in the measure; and
- A **balance** between the dimensions of Corporate Social Responsibility and Sustainable Development.

There are **three main advantages** (Joyner & Raiborn, 2005:532) to having and utilising this measure:

- First, by reporting the score obtained on the measure, the public receives the information it needs to make **informed decisions** about the organisation.
- Second, members of the organisation join in the effort to develop and provide such information, leading to a stronger '**culture of responsible performance**' (i.e. a stronger sense of corporate citizenship).
- Finally, in setting up this kind of measurement and assessment system, organisations begin to **address their own performance issues** in these areas. By setting up a system that keeps longitudinal data, companies can identify trends in performance, compare their performance with other firms and set stretch goals for performance in these important areas.

The *Bench Marks* document as well as this measuring instrument which is based upon it, is offered to: groups working in the field of CSR (such as NGOs, academics, faith based organisations, etc.); to employees and other company stakeholders; and to companies seeking to respond to the challenges of doing business in the global economy in a socially responsible manner. In terms of effecting a CSR evaluation of a company, this instrument is specifically aimed for administering on a company's management personnel as well as on specifically affected (by the company's activities) stakeholder groups such as nearby communities. Applying the measure on a diverse as possible research sample/target group (e.g. including company owners, shareholders, management, other employees, nearby communities, NGOs and other stakeholder groups) will ensure that more accurate results

(data) will be obtained with regard to a truer representation of a company's actual CSR performance.

It must be emphasised that the results from this measure should **not be used on its own** when making important decisions or inferences about a company's CSR personality or performance. This measuring instrument must always be used in conjunction with other research techniques, when the investigation of a company or industry's CSR performance is to be truly objective and effective.

Applying the measure to only one stakeholder group will also not be sufficient or scientific enough to significantly inform any judgements in public (for instance through *publicised research reports* or *press releases*) on an organisation. For example, it is advised that companies that are self-administering the measure (i.e. on employees only), should use the results that were obtained **within its own structures and for its own purposes only** (e.g. keeping record and making comparisons with previous results) and not publish this as a true report of its overall CSR performance. In the same breath it should also be stated that independent users who are conducting a CSR evaluation of a certain company, must also seek to obtain participation from as many stakeholders as possible, **including company representatives**. Results obtained for publication (e.g. during independent users' publicity campaigns) should be sufficiently representative in order to qualify as actual indications of *Corporate Personality & CC achievement*. It is therefore very important, for the sake of objectivity, to take a **collaborative approach** that includes all relevant parties, when utilising the instrument.

6.2.2 Defining the content of the measure

The content of the measuring instrument was made up of a variety of scales concerning CSR policy and practice. As the measure is based on the *Bench Marks*, the original themes and sub-themes of the Bench Marks (2003) document were used. These **CSR themes** (*also see 4.11*) can briefly be outlined (ECCR, 2006) as follows:

THE WIDER COMMUNITY:

- **Ecosystems:** All activities of organisations have some impact on the environment; either directly as a result of production or indirectly through the use or disposal of products. Responsible companies are able to show how they are working to minimise their overall environmental impact. The 'precautionary principle' (i.e. proving that a process or action is safe before implementing it) underpins decision-making.
- **National Communities:** This section focuses on organisational impacts on economic, political and social life in each of the countries in which it operates. A responsible company will implement strategies that ensure its actions do not violate human rights and that it is not complicit in human rights abuses committed by others. Business is conducted in ways that do not cause or enflame political tensions or contribute to civil strife. National legislation will be upheld, including taxation laws.
- **Local Communities:** A company's primary impact is likely to be on the communities immediately neighbouring its operations. Although local communities are part of National Communities, their interests are not always fully aligned; due to local communities being more exposed to potentially negative company activities (such as pollution, noise, land degradation, etc.) and having to bear more risks. Responsible companies will seek to involve local communities in all aspects of their operations and will enable communities to influence their business plans. Corporate policies and practices will pay attention to the basic principle of social justice rather than be based on traditional 'philanthropic' approaches.
- **Indigenous Communities:** Indigenous peoples can be particularly vulnerable when a company operates on or near their traditional lands. An influx of workers, the expansion or development of towns and the introduction of money can have serious implications for indigenous societies. However, corporate activity could also help indigenous communities develop new skills and gain employment. The principle of prior rights requires companies to pursue economic development only if land claims have been resolved between indigenous peoples and governments. A responsible company will seek and receive approval from indigenous leadership before beginning business

activities and will work in partnership with indigenous communities to ensure that its activities provide benefit and do not cause harm.

- **Resource Use & Extraction:** Extractive industries have had an unhappy reputation for being associated with human rights abuses, environmental destruction, social upheaval and negative effects on indigenous people. However, all industries should be responsible in terms of their use of energy and natural resources. Effective consultation and environmental management systems, respect for human rights and financial transparency are essential if resource use/extraction is to contribute to long-lasting community benefits which outlive the life of projects.

THE CORPORATE BUSINESS COMMUNITY:

- **The Employed – Conditions:** The employer–employee relationship is one of the most fundamental to any company and it forms the basis of shaping a company's personality. A responsible company conducts this relationship in line with the principles of human rights and dignity. Employment policies will be guided by standards at least equivalent to those of the ILO (International Labour Organisation) and will safeguard the rights of employees to join trade unions, to bargain collectively and to work without fear of discrimination. Responsible companies ensure that all of their employees are treated respectfully and remunerated in a way that enables them to sustainably provide for themselves and their dependants. Work schedules will not prevent employees carrying out their family responsibilities.
- **The Employed - Health & Safety:** A key responsibility of employers towards their employees is the duty of promoting a safe and healthy working environment. A responsible company will ensure that workers are fully involved in developing health and safety policies and in the monitoring of health and safety performance. Where accidents occur, affected workers receive treatment and will be found suitable jobs if they cannot return to their original position. Companies also have a responsibility towards employees affected by HIV/AIDS, particularly where government initiatives on HIV/AIDS are lacking.

- **The Employed – Persons:** Certain sectors of the workforce may encounter particular problems or have particular vulnerabilities. These may include the following issues:
 - ***Women, Minority Groups and Persons with Disabilities:*** Even in countries with strict anti-discrimination laws, there are often challenges at work for women, members of minority groups, and persons with disabilities. Responsible companies will have clear non-discrimination policies as well as mechanisms to enforce and monitor these. The training of personnel, as well as physical adaptations to the workplace will be done in order to enable people with disabilities to function.
 - ***Child Labour:*** In many countries children have to work in order to live. These children's education and personal development can be severely hampered. Child workers are also particularly susceptible to accidents and industrial disease. A responsible company has systems to ensure that child workers are not exploited and does not offer full time work to children below the age of completion of compulsory schooling.
 - ***Forced Labour:*** Working from the principle of treating people with dignity and respect, responsible companies will only employ workers who choose to work for them. The recruitment of workers under the threat of violence or other penalties, bonded labour, slave labour and prison labour are forms of forced labour. Responsible companies adhere to International Labour Organization conventions dealing with forced labour and employ effective monitoring systems to detect if people are working under duress.
- **Suppliers:** Many companies are dependent on a complex network of suppliers that are often under considerable pressure to reduce their own costs, so there is a risk that goods may be produced in unsafe environments or that workers are paid low wages. Responsible companies recognise that they have a responsibility towards people they employ indirectly through supplier companies. They will work with suppliers to develop codes of conduct, monitoring systems and a plan of action to ensure that employees work in safe and healthy conditions.
- **Financial Integrity:** Corporate financial practices have come under scrutiny in the light of several high profile corporate collapses in recent years, including the global financial

downturn (since 2008). Payments made by transnational corporations may be a source of bribery and corruption in some countries. Responsible companies have clear mechanisms and monitoring systems to ensure that conflicts of interest are avoided and that all financial transactions are properly accounted for and made for legitimate purposes. They will also ensure that their investments respect the environment and support human and community needs.

- **Ethical Integrity:** If companies are to uphold high ethical standards, commitment is required at the highest level. Companies should always strive to perform beyond the mere adherence to legislation, but aim to reach goals consistent with society's highest ethical norms. On their own, codes of conduct are not sufficient. Training, awareness raising and mechanisms by which employees can report concerns without fear are some of the elements required for a company to develop a corporate culture that emphasises corporate responsibility.
- **Corporate Governance:** A responsible company has management structures in place that will respect and protect the long term interests of all stakeholders. Good corporate governance will ensure that a company is transparent about all major activities and its future prospects.
- **Shareholders:** Publicly listed companies have a number of legal obligations to their shareholders. Shareholder rights include access to certain information, attendance at Annual General Meetings (AGMs) and having the opportunity vote to approve (or disapprove) of the way the company is being run. In many cases shareholders also have the right to submit shareholder resolutions whereby proposals are voted on by other shareholders. A responsible company will uphold the letter and the spirit of regulations regarding shareholder responsibility.
- **Joint Ventures / Partnerships / Subsidiaries:** The *Bench Marks* recognise that companies have a responsibility for the actions of joint venture partners, subsidiaries and other close business partners. Responsible companies will promote the uptake of high ethical, social and environmental standards by partner organisations. They have mechanisms in place to monitor partners' activities and to take action when problems are identified.

- **Customers and Consumers:** Companies have a responsibility to deal honestly and fairly with their customers. Responsible companies must be able to demonstrate high standards and compliance with legislation (such honest advertising, avoidance of price fixing, maintenance of product quality, etc.) and will not produce or market goods that they believe might be harmful to health or the environment. Their products and services are likely to have received positive evaluations from independent consumer organisations.

All the above-mentioned CSR themes (or scales) are made up of a range of items that measure specific parts or areas related to each theme. All of these items are regarded as significant issues in the field of CSR. Consequently, the primary construct that can be measured by this instrument is **‘Corporate Social Responsibility (CSR)’** (see *Chapter Three for a thorough description of the CSR concept and its dimensions*). At the same time, underlying this general measure is also a secondary construct, namely **‘Corporate Personality’**⁶ (see *Chapter Five for a detailed explanation*) that can also be measured by this instrument. The content of this instrument is, therefore, also defined by certain items that provide a measurement of the dimensions of CSR and Sustainable Development (SD). The score(s) that a company obtain in terms of these dimensions will result in a certain combination or balance, which in turn will result in a different personality description (see *5.5 for a description of each type of personality that can be identified by this instrument*).

6.2.3 Developing the Test Plan

The test plan describes the specifications and format by which the instrument was developed: The measuring instrument was administered in the form of a questionnaire which participants had to complete. The questionnaire comprises of item sets in the form of specific **statements** with which a respondent may either agree or disagree, or be undecided on. The method of responding in the measure follows an objective format where values are assigned to items along a **rating scale**. The scale consists of a five point/option Likert-type item format. The range of the answering protocol is the following:

⁶ The term *Corporate Personality* in this instance only refers to those personalities or characteristics that are relevant to the field of CSR. Strictly speaking, the measuring instrument actually measures a company's CSR-personality which is interpreted by this study as its *Corporate Citizenship* – status.

Strongly Disagree – Disagree – Undecided – Agree – Strongly Agree



The answering choices are entirely dependent on respondents' **own opinions**. As such, there are no *right* or *wrong* answers to the statements and respondents exercise their own judgement about the company's performance regarding different CSR issues.

6.3 THE ITEM WRITING PHASE

As mentioned already (see 6.2.2), the main source that were consulted during the item writing phase was the *Bench Marks* document, which is the result of over 12 years of collaboration between ECCR (Ecumenical Council of Corporate Responsibility) and an international group of faith-based organisations, as well as consultation with business and non-governmental organisations (NGOs). The most recent version of the *Bench Marks* text, revised and published in 2003, was agreed by the "Global Principles Steering Group," composed of six organisations based in Australia, China (Hong Kong), the USA, South Africa, Colombia and the UK. In some instances the *Bench Marks* draw on existing codes such as those produced by the ILO and the UN; in others they define new measures.

Foxcroft and Roodt (2005:50) provide the following **guidelines for item writing**:

- Wording must be clear and concise, as clumsy wording and long and complex sentences could make it difficult for test-takers to understand what is required of them.
- Use vocabulary that is appropriate for the target audience.
- Avoid using negative expressions such as 'not' or 'never' and double negatives in particular.
- Cover only one central theme in an item.
- Avoid ambiguous items.
- The nature of the content covered should be relevant to the purpose of the measure.

The researcher tried to attentively adhere to the above-mentioned guidelines during the item writing phase.

As some of the items were to be discarded during *test development*, *item analysis* and *refinement phases*, provision for this was made by including more items in the experimental version than the final version of the measure. According to Foxcroft and Roodt (2005:51), at least one third of the items are usually discarded when the item analysis is performed. It was planned from the beginning of the research that the final version of the measure would consist of approximately 100 items. Therefore, for the experimental version of the measure, 140 items were included. The original *Bench Marks* document consists of approximately **340** different items or guidelines in the form of stated ***principles***, ***criteria*** and ***bench marks*** (see 4.11). Consequently, there were already **200 discarded items** that did not make it into the experimental version of the questionnaire. These were mostly items that are very industry-specific and do not relate to most types of business, as well as items that seem to be a repetition of items already included (i.e. items that share the same meaning but are stated differently).

6.4 ASSEMBLING AND PRE-TESTING THE EXPERIMENTAL VERSION

The general purpose of pre-testing the experimental version of the measuring instrument was to investigate the hypothesis of the existence of a construct named 'Corporate Social Responsibility'. Furthermore, the analysis of the experimental version intended to identify items which do not contribute significantly to the CSR measure and its sub-themes. These items were then proposed for removal from the final questionnaire. In line with the 'Test Plan' (see 6.2.3), a questionnaire with 140 questions measured on the likert-scale (*strongly disagree, disagree, undecided, agree and strongly agree*) was administered. None of the questions needed to be reverse scored. The items were arranged in a logical way in terms of the constructs being measured (*CSR and Corporate Personality*) and followed the basic structure of the original *Bench Marks* document (see 6.2.2). The instrument was administered to a **random sample of participants ($n = 350$)** from different sizes and types of businesses in the North-West and Gauteng provinces of South-Africa. 189 Questionnaires were completed, which gave a **response rate of 54%** (i.e. 189/350).

The following **administration instructions** were included in the test booklet (see **Appendix – A** for an example of the experimental version of the measure):

DIRECTIONS: Below are 140 statements with which you may either agree or disagree. Using the scale below, indicate your opinion of each item by marking/colouring the appropriate option below that item (see example below). There are no right or wrong answers to the questions and the only aim is to determine your judgement of the company's performance. Please be honest in your responding.

Scale:

SD = Strongly Disagree (If you believe the statement almost never applies to the company)

D = Disagree (If you believe the statement does not really apply to the company)

U = Undecided (Not sure if the statement applies to the company or not)

A = Agree (The statement applies to the company in some degree)

SA = Strongly Agree (The statement is highly applicable to the company)

Example:

6. The company has a strong commitment to reduce its energy consumption.

[SD] [D] [U] ☒ [SA]

These participants were all stakeholders to a particular organisation and consisted of different levels of employees, including management and the business owners themselves, as well as other stakeholders such as shareholders or members from nearby (affected) communities to certain organisations. The reason why the sample included such a wide range of participants is because the final version of the measure will be intended for use and application by/on a wide population. Just as the original *Bench Marks* is intended for a wide range of different groups and/or organisations (see 4.11), this *Corporate Citizenship Measuring Instrument* will also be used by and administered on a wide variety of business people and other stakeholders. For instance, when the CSR performance and personality of a mining company is to be determined, this measuring instrument will be administered on different stakeholders to the company, such as: management, employees, relevant NGOs,

nearby communities, and even some officials from local government. By obtaining or collecting as much information and opinions as possible (in terms of a wide range of measuring instrument respondents), from both within and outside the business organisation, a more balanced and holistic perspective on the company's overall performance can be achieved (*also see 5.2.2 & 6.2.1*).

6.5 ITEM ANALYSIS PHASE

6.5.1 Overview of the Statistical Analysis

Descriptive statistics and reliability statistics were calculated for the 19 CSR scales as well as the (overall) CSR scale. The number of items in each scale ranges from 4 to 15, with the overall CSR scale having 140 items. The majority of the scales reveal a positive response to the questions asked, with means ranging from 3.642 (*for 'Minority Groups' and 'Persons with Disabilities'*) to 4.098 (*for 'Financial Integrity'*). The variances are very similar in each of the scales. All the inter-item correlations seem to be in a good range, not too low to suggest that there is no correlation while not being too high to cause multi-collinearity (ranging from $r=0.315$ to $r=0.484$). All items seem to correlate well with the total for the scale, i.e. all the correlations are more than 0.3, which is encouraging.

Cronbach's alpha was used to measure the reliability of the scales in this analysis. The calculation of Cronbach's alpha is a general test reliability technique that requires only a single test administration to provide a unique estimate of the reliability for a given test. It determines the average value of the reliability coefficients one would obtain for all possible combinations of items when split into two half-tests (Gliem & Gliem, 2003:84).

All the alpha values ranged between 0.7 and 0.8, which are relatively high values. However, *ceteris paribus*, the higher the number of items in a scale, the higher the Cronbach's alpha coefficient. **Table 5** indicates that indigenous communities, local communities and the employed conditions' scales have the highest alphas (≥ 0.9), indicating good reliability. Although women in the workforce, forced labour and child labour have the lowest reliability among all the scales, their reliability coefficients are still acceptably high

(>0.7). Thus, in general, each of the 19 scales indicates good reliability. The overall CSR scale has the highest reliability ($\alpha=0.978$), attributable to both high reliability and the high number of items in the scale (140).

For all scales, results (*not shown in **Table 5** below*) reveal that all items appear to be worthy of retention, that is, deleting any item does not seem to have a dramatic effect on alpha. In fact, deletion of any item decreases the reliability coefficient for most of the scales (partly due to the design of the reliability coefficient).

Table 5*Descriptive Statistics and Reliability Statistics*

SCALE	No of items	Mean	Variances	Inter-item Correlation	Lowest item to total correlation	Cronbach's alpha
Indigenous communities	9	3.717	0.948	0.442	0.46	0.877
Local communities	11	3.834	0.966	0.391	0.43	0.875
The Employed-Conditions	15	3.821	1.127	0.315	0.39	0.875
Ecosystems	11	3.748	1.048	0.380	0.42	0.872
Resource use/extraction	10	3.671	0.900	0.377	0.48	0.857
Customers and Consumers	8	4.063	0.854	0.423	0.46	0.855
The Employed - Persons with Disabilities	6	3.642	1.117	0.486	0.59	0.850
Corporate Governance	7	3.875	0.898	0.424	0.53	0.837
Financial Integrity	6	4.098	0.977	0.465	0.46	0.836
Suppliers	7	3.885	0.865	0.418	0.51	0.834
National communities	10	3.878	0.939	0.328	0.46	0.826
The Employed – Health and Safety	10	3.863	1.067	0.318	0.42	0.819
The shareholders	5	3.850	0.899	0.473	0.58	0.817
The Employed - Minority groups	4	3.642	1.038	0.484	0.57	0.790
Joint ventures/ Partnerships/ Subsidiaries	4	3.868	0.916	0.470	0.52	0.780
Ethical integrity	5	3.944	0.859	0.417	0.47	0.779
Women in the Workforce	4	3.934	0.896	0.415	0.49	0.738
The Employed - Forced Labour	4	3.980	0.895	0.381	0.44	0.711
The Employed - Child labour	4	4.053	1.180	0.380	0.48	0.708
Corporate Social Responsibility	140	3.852	0.975	*	*	0.978

**Except for Corporate Social Responsibility, the subscales are arranged in order of decreasing reliability*

The following section presents the statistical scores as well as an interpretation for each of the scales of the CSR measuring instrument, as obtained from the survey.

6.5.2 Item Analysis

6.5.2.1 Wider Community Scales

Table 6

The Ecosystems Scale

KMO	0.860	Rotated Component matrix		Communalities			
Bartlett			Component			Initial	Extraction
			1	2			
Approx. Chi-Square	782.716	Question 1	0.099	0.685	Question 1	1	0.479
Df	55	Question 2	0.323	0.762	Question 2	1	0.686
Sig.	0.000	Question 3	0.080	0.759	Question 3	1	0.582
		Question 4	0.520	0.529	Question 4	1	0.550
Determinant	0.014	Question 5	0.574	0.557	Question 5	1	0.640
Total Variance explained		Question 6	0.596	0.371	Question 6	1	0.492
		Question 7	0.728	0.050	Question 7	1	0.533
Component 1	44.3	Question 8	0.763	0.073	Question 8	1	0.588
Component 2	10.6	Question 9	0.728	0.234	Question 9	1	0.585
		Question 10	0.634	0.223	Question 10	1	0.452
		Question 11	0.547	0.391	Question 11	1	0.452

The Kaiser-Meyer-Olkin (KMO) value in the table suggests that 86% of the variance in the variables might be caused by the underlying factors. In addition, Bartlett's test is significant, thus factor analysis might be useful with this data. Analysis suggests that the two underlying factors cumulatively explain 55% of the variance in all the variables. The first factor is most highly correlated with questions 7, 8, 9 and 10 while the second factor is most highly correlated with questions 1, 2 and 3. Save for questions 2 and 5, the communalities in this table are not very high, suggesting that relatively low variances in each variable are explained by the factors. Questions 4, 5, 6 and 11 are candidates for removal because they load on both factors and they have low communalities.

Table 7*The National Communities Scale*

KMO	0.836	Rotated Component matrix		Communalities			
			Component				
Bartlett			1	2		Initial	Extraction
Approx. Chi-Square	515.875	Question 12	0.530	0.304	Question 12	1	0.374
df	45	Question 13	0.569	0.171	Question 13	1	0.353
Sig.	0.000	Question 14	0.634	0.101	Question 14	1	0.412
		Question 15	0.766	0.099	Question 15	1	0.596
Determinant	0.06	Question 16	0.690	0.095	Question 16	1	0.485
Total Variance explained		Question 17	0.617	0.244	Question 17	1	0.440
		Question 18	0.611	0.293	Question 18	1	0.459
Component 1	39.7	Question 19	0.175	0.808	Question 19	1	0.684
Component 2	10.7	Question 20	0.147	0.844	Question 20	1	0.734
		Question 21	0.526	0.475	Question 21	1	0.503

The KMO statistic ($KMO=0.86>0.5$) and Bartlett's test ($p=0.000<0.05$) suggest that factor analysis might yield distinct and reliable factors. Analysis suggests that the two extracted factors cumulatively explain 50% of the total variance in all the variables. The first factor is most highly correlated with questions 12 to 18 while the second factor is most highly correlated with questions 19 and 20. Neither of the two factors is highly correlated with Question 12 and Question 21. In addition, removal of these questions from the scale does not significantly affect the reliability of the scale. Thus, the questions might be removed from the scale.

Table 8*The Local Communities Scale*

KMO	0.891	Rotated Component matrix		Communalities			
				Component			
Bartlett			1	2		Initial	Extraction
Approx. Chi-Square	771.533	Question 22	0.507	0.393	Question 22	1	0.411
df	55	Question 23	0.006	0.765	Question 23	1	0.586
Sig.	0.000	Question 24	0.198	0.698	Question 24	1	0.527
		Question 25	0.280	0.600	Question 25	1	0.439
Determinant	0.015	Question 26	0.375	0.612	Question 26	1	0.514
Total Variance explained		Question 27	0.457	0.579	Question 27	1	0.544
		Question 28	0.681	0.191	Question 28	1	0.500
Component 1	45.1	Question 29	0.795	0.182	Question 29	1	0.665
Component 2	10.2	Question 30	0.823	0.091	Question 30	1	0.686
		Question 31	0.654	0.340	Question 31	1	0.543
		Question 32	0.631	0.517	Question 32	1	0.666

At least 89% of the variance in the variables below might be explained by the underlying factors ($KMO=0.891>0.5$). Furthermore, Bartlett's test ($p=0.000<0.05$) indicates that factor analysis is appropriate for this data. Two underlying factors, which cumulatively explain 55% of the total variance in all the variables, were extracted. Factor 1 is highly correlated with questions 28 to 32 while factor 2 is highly correlated with questions 23, 24, 25 and 26. The variances in question 22 and 27 that are explained by the extracted factors are relatively low and they are not highly correlated with any of the extracted factors. Thus, the questions might be removed without having a dramatic effect on the scale.

Table 9*The Indigenous Communities Scale*

KMO	0.9	Communalities		
Bartlett			Initial	Extraction
Approx. Chi-Square	666.143	Question 33	1	0.485
df	36	Question 34	1	0.306
Sig.	5E-117	Question 35	1	0.440
		Question 36	1	0.485
Determinant	0.027	Question 37	1	0.554
Total Variance explained		Question 38	1	0.552
		Question 39	1	0.569
Component 1	50.756	Question 40	1	0.618
		Question 41	1	0.557

The table above shows that factor analysis should yield distinct and reliable factors (KMO=0.90>0.5 and Bartlett's $p<0.05$). The analysis suggests one underlying factor which explains 51% of the total variance in all the 9 variables. Question 34 is a candidate for elimination because of its low communality i.e. only 31% of the variance in this variable is explained by the extracted factor. In addition, removal of the question from the scale leaves the reliability coefficient unchanged.

Table 10*The Resource Use/Extraction Scale*

KMO	0.864	Rotated Component matrix		Communalities			
			Component			Initial	Extraction
Bartlett			1	2			
Approx. Chi-Square	617.750	Question 42	0.591	0.429	Question 42	1	0.533
df	45	Question 43	0.332	0.600	Question 43	1	0.470
Sig.	0.000	Question 44	0.229	0.732	Question 44	1	0.589
		Question 45	0.079	0.856	Question 45	1	0.739
Determinant	0.034	Question 46	0.740	0.240	Question 46	1	0.605
Total Variance explained		Question 47	0.539	0.378	Question 47	1	0.434
		Question 48	0.827	0.090	Question 48	1	0.692
Component 1	44.1	Question 49	0.660	0.186	Question 49	1	0.470
Component 2	10.4	Question 50	0.278	0.560	Question 50	1	0.390
		Question 51	0.561	0.456	Question 51	1	0.523

Table 10 shows that factor analysis is suitable for this data ($KMO=0.86>0.5$, Bartlett's $p<0.05$). Two factors were extracted (they cumulatively explain 54% of the total variance in all the variables). Factor 1 is most highly correlated with questions 46, 48 and 49 while factor 2 is most highly correlated with questions 43, 44 and 45. Both factor 1 and 2 are moderately correlated with questions 42, 47, 50 and 51. Question 47 and Question 50 also have low communalities (43% and 39% respectively) and do not have a significant impact on the reliability of the scale, thus might be removed.

6.5.2.2 Corporate Business Community Scales

Table 11

The Employed – Conditions Scale

KMO	0.900	Rotated Component matrix				Communalities		
Bartlett			Component				Initial	Extraction
			1	2	3			
Approx. Chi-Square	846.905	Question 52	0.091	0.680	0.004	Question 52	1	0.470
Df	105	Question 53	0.659	0.427	-0.040	Question 53	1	0.619
Sig.	0.000	Question 54	0.714	0.270	-0.070	Question 54	1	0.588
		Question 55	0.566	0.065	0.355	Question 55	1	0.451
Determinant	0.01	Question 56	0.635	0.198	0.260	Question 56	1	0.510
Total Variance explained		Question 57	0.362	0.619	0.246	Question 57	1	0.575
		Question 58	0.426	0.527	0.351	Question 58	1	0.583
Component 1	36.635	Question 59	0.467	0.144	0.573	Question 59	1	0.566
Component 2	7.604	Question 60	0.576	0.109	0.252	Question 60	1	0.407
Component 3	6.752	Question 61	0.091	0.456	0.497	Question 61	1	0.464
		Question 62	0.128	0.676	0.269	Question 62	1	0.546
		Question 63	0.296	0.585	0.217	Question 63	1	0.477
		Question 64	0.215	0.223	0.624	Question 64	1	0.486
		Question 65	0.014	0.127	0.748	Question 65	1	0.576
		Question 66	0.395	0.109	0.406	Question 66	1	0.332

Factor analysis should yield distinct and reliable factors (KMO=0.900>0.5, Bartlett's $p<0.05$). Analysis suggests three underlying factors which cumulatively explain 51% of the total variance in all the variables. Factor 1 loads relatively highly on questions 53, 54, 56 and 60; factor 2 is most highly correlated with questions 52, 57, 62 and 63 while factor 3 is most highly correlated with questions 64 and 65. Questions 55, 59 and 66 are moderately correlated with both factor 1 and 3. Question 61 loads moderately on factors 2 and 3. Question 53 is moderately correlated with all the 3 factors. Thus, the most suitable candidates for elimination in this scale are questions 55, 61 and 66 (these items have relatively low communalities and will not have a dramatic impact on alpha if deleted).

Table 12*The Employed – Health and Safety Scale*

KMO	0.835	Rotated Component matrix			Communalities		
				Component			
Bartlett			1	2		Initial	Extraction
Approx. Chi-Square	504.392	Question 67	0.690	0.273	Question 67	1	0.551
df	45	Question 68	0.522	0.540	Question 68	1	0.563
Sig.	0.000	Question 69	0.663	0.132	Question 69	1	0.457
		Question 70	0.729	-	Question 70	1	0.533
				0.026			
Determinant	0.064	Question 71	0.476	0.353	Question 71	1	0.351
Total Variance explained		Question 72	0.125	0.756	Question 72	1	0.588
		Question 73	0.087	0.847	Question 73	1	0.725
Component 1	39.0	Question 74	0.562	0.281	Question 74	1	0.395
Component 2	11.5	Question 75	0.610	0.302	Question 75	1	0.463
		Question 76	0.655	0.061	Question 76	1	0.433

The statistics in the table below suggest that factor analysis is suitable for this data ($KMO=0.84>0.5$). Two factors were extracted; they cumulatively explain 51% of the total variance in all the 10 variables. Factor 1 is most highly correlated with questions 67, 69, 70, 75 and 76 while factor 2 is most highly correlated with questions 72 and 73. Questions 68, 71 and 74 are moderately correlated with both factors. The most suitable questions for elimination in this scale are questions 71 and 74 (these items have low communalities).

Table 13*Women in the workforce Scale*

KMO	0.690	Communalities		
Bartlett			Initial	Extraction
Approx. Chi-Square	170.754	Question 77	1	0.513
Df	6	Question 78	1	0.675
Sig.	0.000	Question 79	1	0.544
		Question 80	1	0.519
Total Variance explained				
Component 1	56.3	Determinant	0.399	

Factor analysis should yield distinct and reliable factors for this data ($KMO=0.69>0.5$, Bartlett's $p<0.05$). One factor was extracted in this analysis; the factor explains 56% of the total variance in the 4 variables below. Question 77 has the lowest communality and does not adversely affect the reliability of the scale if deleted. Thus, it could be removed from the scale.

Table 14*Minority Groups Scale*

KMO	0.785	Communalities		
Bartlett			Initial	Extraction
Approx. Chi-Square	205.490	Question 81	1	0.583
df	6	Question 82	1	0.642
Sig.	0.000	Question 83	1	0.627
		Question 84	1	0.601
Total Variance explained				
Component 1	61.3	Determinant	0.331	

Factor analysis is suitable for this data ($KMO=0.785>0.50$). One factor, which explains 61% of the total variance in the four variables, was extracted. Question 81 has the lowest communality and the lowest relative effect on the reliability of the scale, thus might be removed from the scale.

Table 15*Persons with Disabilities Scale*

KMO	0.852	Communalities		
Bartlett			Initial	Extraction
Approx. Chi-Square	419.577	Question 85	1	0.513
df	15	Question 86	1	0.551
Sig.	0.000	Question 87	1	0.603
		Question 88	1	0.550
Total Variance explained		Question 89	1	0.588
Component 1	57.2	Question 90	1	0.629
Determinant	0.104			

Factor analysis should yield distinct and reliable factors for this analysis ($KMO=0.852>0.5$). The analysis extracted one factor, which explains 57% of the total variance in the 5 variables. Due to its low communality and lowest relative effect on the reliability of the scale, question 85 might be deleted from the scale.

Table 16*Child Labour Scale*

KMO	0.635	Communalities		
Bartlett			Initial	Extraction
Approx. Chi-Square	181.656	Question 91	1	0.540
Df	6	Question 92	1	0.647
Sig.	0.000	Question 93	1	0.689
		Question 94	1	0.298
Total Variance explained				
Component 1	54.4	Determinant	0.376	

Factor analysis seems to be suitable for this data ($KMO=0.635>0.5$, Bartlett's $p<0.05$). Analysis suggests one factor, which explains 54% of the total variance in the 4 variables. Question 94 has a very communality of 30%. Moreover, elimination of question 94 increases the reliability of the scale from 0.71 to 0.75. Thus, the question might be eliminated from the scale.

Table 17*Forced Labour Scale*

KMO	0.661	Communalities		
Bartlett			Initial	Extraction
Approx. Chi-Square	157.704	Question 95	1	0.455
df	6	Question 96	1	0.543
Sig.	0.000	Question 97	1	0.593
		Question 98	1	0.555
Total Variance explained				
Component 1	53.7	Determinant	0.428	

Factor analysis should yield distinct and reliable factors for this analysis ($KMO=0.661>0.5$). One factor was extracted, accounting for 54% of the total variance in the 4 variables. Due to a low communality of 46%, question 95 might be removed without having a dramatic effect on the scale.

Table 18*Suppliers Scale*

KMO	0.868	Communalities		
Bartlett			Initial	Extraction
Approx. Chi-Square	403.382	Question 99	1	0.478
df	21	Question 100	1	0.577
Sig.	0.000	Question 101	1	0.499
		Question 102	1	0.588
Total Variance explained		Question 103	1	0.495
Component 1	50.3	Question 104	1	0.474
		Question 105	1	0.408
Determinant	0.113			

Statistics in the table below suggest that factor analysis is suitable for this data (KMO=0.868>0.5, Bartlett's $p=0.000<0.05$). Analysis shows that one factor which explains 50% of the total variance in the 7 variables was extracted. Question 105 has the lowest communality in this scale, 41% and the lowest relative effect on the reliability of the scale, thus might be removed.

Table 19*Financial Integrity Scale*

KMO	0.797	Communalities		
Bartlett			Initial	Extraction
Approx. Chi-Square	444.216	Question 106	1	0.498
df	15	Question 107	1	0.363
Sig.	0.000	Question 108	1	0.541
		Question 109	1	0.709
Total Variance explained		Question 110	1	0.705
Component 1	56.0	Question 111	1	0.545
Determinant	0.09			

Factor analysis should yield distinct and reliable factors ($KMO=0.797>0.5$). According to the results, one factor was extracted, accounting for 56% of the total variance in the 6 variables. Question 107 the lowest communality in this scale, 36%. In addition, removal of question 107 slightly increases the reliability from 0.836 to 0.840. Thus, the item might be removed without having a dramatic effect on the reliability of the scale.

Table 20*Ethical Integrity Scale*

KMO	0.805	Communalities		
Bartlett			Initial	Extraction
Approx. Chi-Square	237.540	Question 112	1	0.424
df	10	Question 113	1	0.633
Sig.	0.000	Question 114	1	0.565
		Question 115	1	0.544
Total Variance explained		Question 116	1	0.512
Component 1	53.6			
Determinant	0.278			

Factor analysis appears to be suitable for this data ($KMO=0.805>0.5$). One factor, which explains 54% of the total variance in the 5 variables, was extracted. The most suitable candidate for elimination in this scale is question 112 (this item has the lowest communality in this scale, 42% and the smallest effect on the reliability of the scale if deleted).

Table 21*Corporate Governance Scale*

KMO	0.804	Communalities		
Bartlett			Initial	Extraction
Approx. Chi-Square	470.980	Question 117	1	0.558
df	21	Question 118	1	0.488
Sig.	0.000	Question 119	1	0.559
		Question 120	1	0.490
Total Variance explained		Question 121	1	0.476
Component 1	50.7	Question 122	1	0.551
		Question 123	1	0.428
Determinant	0.078			

Factor analysis should yield distinct and reliable factors (KMO=0.804>0.5, Bartlett's test is significant). Analysis suggests one underlying factor which explains 51% of the total variance in the 7 variables. The most suitable candidate for elimination in this scale is question 123 (this item has the lowest communality in this scale, 43% and the smallest effect on the reliability of the scale if deleted).

Table 22*Shareholders Scale*

KMO	0.800	Communalities		
Bartlett			Initial	Extraction
Approx. Chi-Square	305.554	Question 124	1	0.571
df	10	Question 125	1	0.544
Sig.	0.000	Question 126	1	0.632
		Question 127	1	0.576
Total Variance explained		Question 128	1	0.572
Component 1	57.9			
Determinant	0.193			

Bartlett's test is significant and $KMO=0.800>0.5$, thus, factor analysis should yield distinct and reliable factors. One factor, accounting for 58% of the total variance in the 5 variables was extracted. Question 125 has the lowest communality in this scale, 54% and the smallest effect on the reliability of the scale if deleted. Thus, the item might be removed from the scale.

Table 23*Joint Ventures Scale*

KMO	0.762	Communalities		
Bartlett			Initial	Extraction
Approx. Chi-Square	201.777	Question 129	1	0.596
df	6	Question 130	1	0.609
Sig.	0.000	Question 131	1	0.680
		Question 132	1	0.528
Total Variance explained				
Component 1	60.3			
Determinant	0.338			

Factor analysis should yield distinct and reliable factors ($KMO=0.762>0.5$). Analysis suggests one underlying factor which explains 60% of the total variance in the 4 variables was extracted. The most suitable candidate for elimination in this scale is question 132 (this item has the lowest communality in this scale, 53% and the smallest effect on the reliability of the scale if deleted).

Table 24*Customers and Consumers Scale*

KMO		0.846			Communalities	
Bartlett					Initial	Extraction
Approx. Chi-Square	547.182		Question 133	1	0.326	
df	28		Question 134	1	0.398	
Sig.	0.000		Question 135	1	0.486	
			Question 136	1	0.541	
Total Variance explained			Question 137	1	0.641	
Component 1	49.9		Question 138	1	0.517	
			Question 139	1	0.580	
Determinant	0.052		Question 140	1	0.504	

The statistics in the table above ($KMO=0.846>0.5$ and Bartlett's $p<0.05$) suggest that factor analysis is appropriate. The results suggest that one factor, which explains 50% of the total variance in the 8 variables was extracted. The most suitable candidates for elimination in this scale are question 133 and 134 (these items have the lowest communalities in this scale, 33% and 40% respectively as well as the smallest effect on the reliability of the scale if deleted).

Table 25
Corporate Social Responsibility Scale

Component	Variable 1	Variable 2	Variable 3	Variable 4	Variable 5
Q1	Question 27	Question 35	Question 37	Question 46	Question 48
Q2	Question 4	Question 5	Question 6		
Q3	Question 107	Question 108	Question 109	Question 110	
Q4	Question 138	Question 140			
Q5	Question 57	Question 58	Question 63		
Q6	Question 88	Question 89	Question 90		
Q7	Question 117	Question 118			
Q8	Question 91	Question 92	Question 93		
Q9	Question 129	Question 130	Question 131		
Q10	Question 97				
Q11	Question 67				
Q12	Question 44	Question 45	Question 50		
Q13	Question 77				
Q14	Question 104				
Q15	Question 82				
Q16	Question 28				
Q17	Question 3				
Q18	Question 14				
Q19	Question 116				
Q20	Question 22	Question 133			
Q21	Question 19				
Q22	Question 65				
Q23	Question 52				
Q24	Question 49				
Q25	Question 76				
Q26	Question 23				
Q27	Question 55				
Q28	Question 85	Question 86			
Q29	Question 54				
Q30	Question 112				
Q31	Question 120				
Q32	Question 24				
Q33	Question 8				
Q34	Question 79				
Q35	Question 13				
Q36	Question 60				
Q37	Question 34	Question 61	Question 75		

The existence of correlation suggested that data can be analysed using **factor analysis**. All the item-item correlations are less than 0.7, suggesting that there are no highly correlated items in this data. The following pairs of items have relatively high correlations: (question 4; question 5, $r=0.628$), (question 109; question 110, $r=0.683$), (question 109; question 111, $r=0.621$), (question 122; question 123, $r=0.625$) and (question 136; question 137, $r=0.634$).

KMO= $0.718 > 0.50$ and Bartlett's test ($p=0.000 < 0.05$), which implies that factor analysis was suitable for this data. For most of the variables, the proportion of variance that is explained by the underlying factors (communalities) ranges from 71.4% (question 52) to 85.9% (question 118). Thus, the extracted components represent the variables well.

Using an eigenvalue of at least 1 as the cut-off, 37 components were extracted. The first component explains at least 25% of the variance in the original variables, with the subsequent components explaining less variance. The first 11 components explain at least 50% of the variance in the original variables.

Analysis of the Rotated Component Matrix (not shown) indicates that the first component is most highly correlated with question 27, 35, 37, 46 and 48 (as summarised in the table). The second component is most highly correlated with question 4, 5 and 6. The third component is most highly correlated with question 107, 108, 109 and 110. The fourth component is most highly correlated with question 138 and 140. The fifth component is most highly correlated with question 57, 58 and 63. The sixth component is most highly correlated with question 88, 89 and 90. The seventh component is most highly correlated with question 117 and 118. The eighth component is most highly correlated with question 91, 92 and 93. The ninth component is most highly correlated with question 129, 130 and 131. The tenth component is most highly correlated with question 97.

6.5.3 Conclusion of Item Analysis

The main purpose of the statistical analysis was to help determine which items might be removed from the measuring instrument in order to help reduce the total length of the final version, without impacting negatively on its overall effectiveness and reliability as a CSR measuring instrument.

Reliability and factor analysis results suggest that the following variables might be deleted from their scales without significantly affecting their scales' reliability:

- Question 11; Question 12 ; Question 21; Question 22; Question 47 ; Question 55; Question 61; Question 66; Question 71; Question 74; Question 81; Question 94; Question 95; Question 105; Question 123; Question 125; Question 132 and Question 134.

Subsequently, these identified 'statistically less relevant' items have been **proposed for removal** from the instrument during the next phase.

6.6 REVISING PHASE

During the *revision phase*, certain questions identified above (during the *item analysis phase*) were **removed** from the instrument. It is important to note here that the statistical analysis in the previous phase (*section 6.5*) was only used as a '**guideline**' for reduction of length and quality improvement of the final instrument and that the statistical findings did not necessarily constitute the final decision regarding the inclusion or removal of all items. The reason for this is because the notion of CSR is already an idea that is largely subjective and therefore its sub-themes, including the specific items that measure these sub-themes, cannot truly be verified by statistical analysis alone. However, the mere theorising of CSR and its sub-themes and items is also not sufficient on its own. This has been found from the previous chapters which have shown that there is no universal consensus regarding even the definition of CSR, let alone its specific 'building blocks'. All the prominent codes

and guidelines for CSR differ quite heftily in terms of their subdivisions and items. A balanced approach was therefore required in conducting the 'Revision Phase'.

This meant that the final decision regarding both the removal and inclusion of items; relied on both the **statistical findings**, as well as the **subjective opinion** of the researcher (i.e. the 'face validity' of items). An important factor that influenced the researcher's decisions has been the objective of keeping the final version of the measure as closely based as possible on the original *Bench Marks* document. Items that have been identified as 'statistically insignificant' would not necessarily be insignificant in terms of resembling the sub-scales of the *Bench Marks*. Nonetheless, after applying this balanced approach it has been decided that all the items identified in the statistical analysis could still be removed from the final version. Another important factor taken into consideration has been the underlying score of the items towards the dimensions of CSR and SD. In other words, despite some items appearing less significant in terms of their direct CSR scale/theme, they might be more significant because of their potentially strong load on one or more of the dimensions of CSR and/or SD. These underlying scores of items towards the CSR and SD dimension plays an important part in shaping the personality profiles (see section 5.5) that are to be identified by the final version of the measuring instrument.

Another important step taken during this phase - has been the **coding** of the questions as they relate to the different dimensions of *Sustainable Development (SD)* and *Corporate Social Responsibility (CSR)*. The following image (**Figure 7**) illustrates some of the actions taken during this phase.

Figure 7

Actions taken during the revision phase - coding, item selection & removal

Wider Community	
The company:	
1.	ensures that its actions do not damage the environment SD- Environment
2.	places issues such as climate change, bio-diversity and pollution prevention central to its environmental policy and practices SD- Environment, CSR- Ethical
3.	implements internationally recognised environmental standards, regardless of any legal enforcement or lack thereof in any jurisdiction worldwide SD- Environment, CSR- Ethical
4.	continually seeks to improve on its environmental performance SD- Environment
5.	demonstrates a responsibility for the environmental impact of its production processes throughout the life-cycle of its products and services SD- Environment
6.	provides to the public regular reports on its environmental performance SD- Environment, CSR- Ethical
7.	reports are based on a pattern of environmental auditing and reporting according to, at a minimum, internationally recognised standards, including data for each facility SD- Environment, CSR- Ethical
8.	makes every effort, where environmental damage has occurred, to reduce its impact immediately by restoring the damaged ecosystem SD- Environment
9.	has policies or procedures to prevent pollution in all its activities SD- Environment, CSR- Ethical
10.	aims to reduce resource and energy use in each stage of the product or service life-cycle SD- Environment
11.	sets and applies environmental performance standards on a comparable basis throughout its operations SD- Environment, CSR- Ethical
12.	makes a commitment to internationally recognised standards of performance in each and every country in which it operates SD- Environment, CSR- Legal
13.	contributes in a responsible and transparent way to each society's efforts to promote full human development for all its members SD- Social; CSR- Philanthropic
14.	subscribes to the principle that every person has the right of access to health care, including access to affordable therapies and medicines SD- Social; CSR- Ethical
15.	adopts a comprehensive and verifiable human rights policy which includes an explicit commitment to secure the principles and values contained in the Universal Declaration of Human Rights SD- Social; CSR- Ethical
16.	carefully considers the international human rights implications of entering into business relationships in a country recognised or known for its widespread violations of international human rights standards SD- Social; CSR- Ethical; CSR- Legal
17.	pays appropriate taxes and uses no covert means for removing profits from a host jurisdiction SD- Social; SD- Economic; CSR- Ethical; CSR- Legal
18.	ensures that its activities respect all life on the Planet SD- Social, SD-Environmental;
19.	is committed not to involve itself in military or war activities SD- Social,
20.	refuses to commit or engage in any activity which leads to the abuse and violation of internationally recognised human rights standards SD- Social; CSR- Ethical; CSR- Legal
21.	reviews and records all contraventions of public health and safety laws, and takes corrective action where necessary SD- Social; CSR- Legal
22.	recognises its political and economic impact on local communities especially where it is the principal or key employer SD- Social; SD- Economic; CSR- Economic
23.	takes account of local culture in its decision-making processes while not condoning cultural patterns, which denigrate human beings on the basis of gender, class, racial/ethnic origin, culture, ethnicity, religion, sexual orientation, caste, tribe or disability SD- Social,

The tables below indicate the numbers of the items which have been ‘coded’ under their respective theoretical dimensions. See **Appendix D** for a different outline of the item’s codes within their sub-scales.

Table 26

Item numbers that designate CSR Dimensions

Corporate Social Responsibility (CSR) - Items		
Economic Dimension	Legal Dimension	Ethical Dimension
17, 18, 23, 36, 37, 47, 54, 55, 65, 77, 79, 82, 83, 84, 87, 91, 92, 93, 94, 95	10, 11, 13, 22, 27, 28, 29, 33, 34, 35, 36, 37, 38, 39, 64, 86	2, 3, 4, 5, 7, 10, 11, 13, 15, 18, 19, 20, 24, 25, 26, 27, 28, 29, 31, 32, 33, 34, 35, 37, 38, 40, 41, 44, 45, 46, 48, 49, 50, 51, 52, 53, 54, 56, 57, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90
Total: 20 Items	Total: 16 Items	Total: 70 Items

Table 27*Item numbers that designate SD Dimensions*

Sustainable Development (SD) - Items		
Environmental Dimension	Economic Dimension	Social Dimension
1, 2, 3, 4, 5, 6, 7, 8, 15, 16, 28, 29, 30, 33, 65, 73, 77, 90	11, 15, 18, 23, 25, 26, 27, 31, 32, 37, 40, 41, 48, 49, 50, 51, 52, 54, 55, 56, 64, 65, 66, 68, 69, 70, 71, 73, 77, 79, 81, 82, 83, 84, 87, 88, 89, 90, 91, 93, 94	9, 10, 11, 12, 13, 14, 15, 16, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 32, 33, 34, 35, 36, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 95
		(All except 1-8, 37, 65, 94)
Total: 18 Items	Total: 41 Items	Total: 82 Items

In addition to the coding as well as removal of certain items, a set of **new items were also proposed for inclusion** in the final version in order to include indicators that will primarily measure the *Economic Dimension of CSR*. These additional items have been proposed because the original *Bench Marks* document (2003) does not contain any items that ‘load’ or contribute toward the CSR Economic dimension (see 3.10). Subsequently, the items which have been proposed for inclusion in the final version of the instrument are the following:

1. The company pays its employees, suppliers and other creditors on time
2. The company has an efficient business model, based on sound financial principles
3. The company has a stable source of income
4. The company’s financial future (immediate and long-term) looks secure

5. The company does not have any bad debt
6. The company can sustain its current employee base for a long time
7. The company manages its finances well and in a sustainable manner (does not waste money)
8. The company maintains a strong competitive position
9. The company maintains a high level of operating efficiency
10. The company produces quality products or services (highly valued by consumers)
11. The company can be described as a successful firm that is consistently profitable (maximise earnings per share)

These 'CSR Economic Dimension-items' are directly based on the theoretical foundations of the CSR concept as identified in Chapter 3 of this research (*referring specifically to section 3.6.1*). After thorough revision and deliberation, it has been decided that **five of these items** would be included in the final version of the instrument (see **Appendix C – items 91-95**).

Many significant actions have therefore been applied during this phase in terms of the final construction of the instrument. Nevertheless, the nature of test development is such that all the decisions regarding item selection is still reasonably provisional, as the development of an efficient and relevant measuring instrument is a continuing process, with items consistently being refined in order to achieve optimal reliability and validity.

6.7 ON-GOING REVISION AND REFINEMENT

As the purpose of the final 'measuring tool' is to form part of an evaluation process of a company's CSR performance, the specifics in terms of which or the amount of persons in a company who will be responsible for participating in the measuring process, will be largely dependent on the particular research project and its aims. Therefore, the instructions on the instrument itself have been kept as simple and generic as possible in order to avoid any possible confusion with any particular project aims and instructions. One of the overall aims has been that the instrument must be suitable for **any type of organisation**, as well as for

any stakeholder relevant to that organisation. For instance, for a mining company, the instrument might be completed by management, shareholders, mine workers, as well as residents from surrounding communities on which the mine has an impact. It would therefore not suffice to include too many or complicated administration instructions which could later hamper any research efforts. There is no definite minimum or maximum limit in terms of the number of people who need to complete the questionnaire in order to achieve the best results; but it should be stated that it is always better to have as many participants as possible. It is also advised that participants represent a broad range of different stakeholders as possible (e.g. from nearby community members, to management, to company shareholder or directors, etc.) in order to achieve a balanced score.

The final measuring instrument has been made available for use in *hard copy* as well as two different *electronic formats*, namely:

- an **Internet/online server based** -format (**See Appendix B**), where an online survey software has been set up with the instrument, which will store responses on an independent server; as well as
- an **Email** -format, consisting of a (.pdf) file attachment (**See Appendix C**) which can be completed on a computer, saved and sent back to the researcher for analysis of the CSR-scores and Corporate Personality profiles.

Instructions for the completion of the test as well as certain relevant definitions have been included on the front page of the instrument (**See Appendix A or C**). In particular, the CSR definition which has been developed in this study (see 3.2) has also been included in the final instrument version instead of the one used in the preliminary version. In terms of **scoring and analysis**, a different approach will (logically) need to be followed for the *hard copy format*, than for the *electronic versions* of the instrument:

- For the **paper version**, CSR-performance results can easily be calculated manually, by assigning values to the answering options.⁷ For instance: *Strongly Disagree* = 0; *Disagree* = 1; *Undecided* = 2; *Agree* = 3; *Strongly Agree* = 4. There are a total of **95**

⁷ Users and administrators are free to decide which values they want to assign to the answering options. For example, apart from only using positive values, a user might decide to assign scores/values as follows: *Strongly Disagree* = -2; *Disagree* = -1; *Undecided* = 0; *Agree* = 1; *Strongly Agree* = 2

items in the final version of the instrument, which means that the highest CSR score which can be obtained is 380 (i.e. 95×4), with 0 being the lowest possible score. Average scores for each of the sub-scales (or CSR themes) of the instrument can also easily be calculated by dividing the total score achieved for a specific sub-scale (e.g. *Resource Extraction, Suppliers, Women in the Workforce, Ethical Integrity, etc...*) with the total of items of that scale and then converting that to a percentage score. There are no standardised scores (yet) when it comes to measuring CSR performance; and companies are therefore encouraged to continually (on multiple occasions) measure their performance against themselves (previous scores) over time. The most important contribution of this measuring instrument, when using it for the first time, is that it serves as an effective way of determining the specific areas of CSR on which a company is underperforming in relation to other CSR areas. For the overall CSR evaluation process of a company, this would mean the **identification of 'problem areas'** which should further be investigated through more qualitative research techniques such as interviews. For instance, if a company achieves a much lower average-percentage score for one (or more) sub-scale(s) than for the other sub-scales, the company or researcher will be directed into finding out exactly which items are the 'problematic issues' that should be focused on in terms of company behaviour modification.

Corporate Personality profiles can also easily be calculated by using the CSR and SD – dimensions 'Coding Tables' as indicated in section 6.6 of this study. This is again done by calculating the average percentage scores obtained in each dimension, after which a Pie Chart (or similar graph) can be drawn to illustrate the relation of the dimensions to each other. The descriptions for each of the prominent combinations of these dimensions (see *point 5.5*) will be applied here as the Corporate Personality profiles.

- For the **electronic version** (*the Web-based as well as Email-based formats*) of the instrument, a much easier process of scoring and even interpreting of results have been created. The calculation process in terms of the individual CSR items have been automated to a large extent, as it is included in the features of the electronic instrument formats. The electronic versions of the instrument also allows for the 'exportation' of the data into user friendly reports or into spread sheets (*such as MS Excel format*).

This makes the calculation of the Corporate Personality profiles also much easier and quicker.

Subsequently, the following section will provide an example of a company's CSR/CP profile, as calculated via the completion of the final version of the instrument.

6.8 EXAMPLE OF A COMPANY CSR AND PERSONALITY PROFILE

The final version of the instrument was applied on a company by means of administering the electronic version (*Email format*) on some of its personnel. Due to the fact that this section is **not intended as a 'case study'**, but merely an **example** of how the measuring instrument works, the identity of this company is not revealed.⁸ The results shown here can also not be generalised as a true representation of the company's Corporate Citizenship status, as the amount of stakeholders who participated would not have been sufficient for doing so (see 6.2.1). Subsequently, future users of the '*Corporate Citizenship Measuring Instrument*' can use this section (6.11) of the current study as a **template/model** on which they can base their 'results and discussion' segments of their written reports on a company's CSR evaluation.

The illustration below (see **Figure 8**) presents the results that were obtained for all the different CSR scales of the instrument. In general, this company achieved high scores for most of the CSR scales, with an average of 4.21 points (or 84.2%) across all 20 scales.

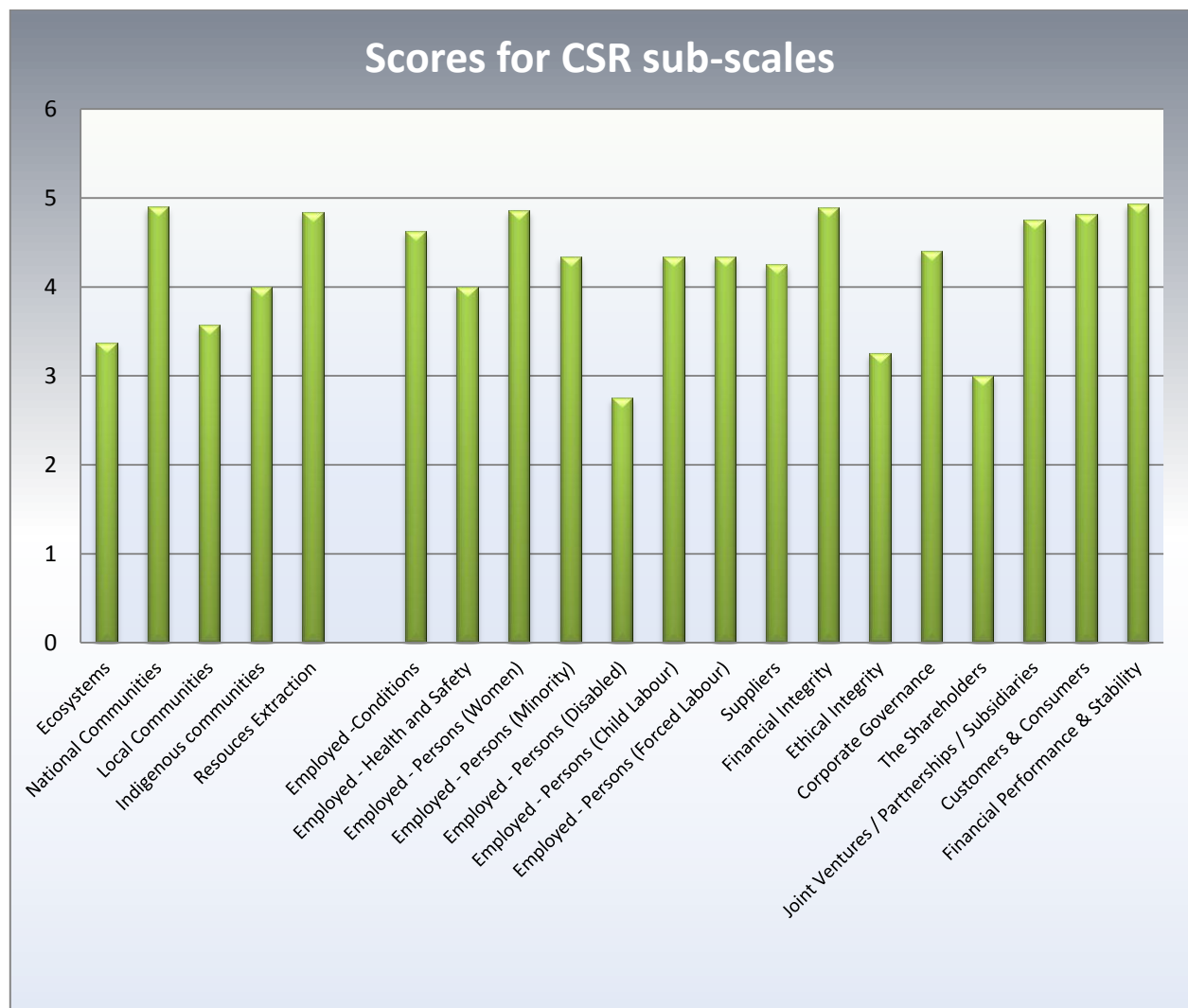
The **highest scores** were obtained for the 'Local Communities', 'Resource Use/Extraction', 'Employed Persons (Women in the Workforce)', 'Financial Integrity', 'Customers & Consumers' and 'Financial Performance & Stability' scales – all scoring above 4.8 points (or 96%). Subsequently, these identified high performing areas can be further explored by means of qualitative investigations to determine the reasons and inspirations for achieving these high scores, so that these 'drivers of performance' might also be applied to the other areas, such as the low scoring areas in particular.

⁸ It can, however, be mentioned that it is a fast expanding company operating in the financial sector of South Africa, as well as many other African countries.

The **lowest scores** were obtained for the ‘Ecosystems’, ‘Employed Persons (Disabled Persons)’, ‘Ethical Integrity’ and ‘The Shareholders’ scales – all scoring below 3.5 points (or 70%). Consequently, these identified low performance themes, can be seen as the **‘problematic areas’** that need to be further investigated (through qualitative techniques) in order to determine the reasons for achieving lower scores – in order for accurate corrective action to be taken.

Figure 8

Average scores obtained for main CSR themes



The following two sets of graphs (see **Figures 9 & 10**), present the scores that were obtained for the Corporate Social Responsibility (CSR) dimensions (Economic, Legal and Ethical), as well as the Sustainable Development (SD) dimensions (Economic, Social and Environmental). The combination of both these sets of results, were used to determine the Corporate Personality profile of the company.

Although a high score was achieved for all three CSR dimensions with an average of 4.37 points (or 87%), there was a clear discernable difference between: the highest scoring dimension, namely 'Legal' - with 4.9 points (or 98%); and the lowest scoring dimension namely 'Economic' – with 3.84 points (or 77%). Therefore, in order for the company to achieve a better Corporate Citizenship (CC) status, more focus will need to be given to efforts that will enhance its performance on the Economic and Ethical CSR dimensions, to bring it up to the level of performance on the Legal CSR dimension.

In terms of the SD results, the highest performance was achieved on the 'Social' dimension – with 4.45 points (or 89%); while the lowest score was achieved for the 'Environmental' dimension – with 3.52 points (70.4%). Subsequently, in order for the company to improve on its CC status, more work should be done in its 'Economic' and especially its 'Environmental' SD performance areas, to bring their scores up to the 'Social' SD performance level. Still, the company achieved a quite high average for the general SD performance – with 4.01 points (or 80.2%).

When all these results are taken into account, the following CSR/SD combinations 'formula' can be applied, to determine the company's Corporate Personality profile, namely: **High Legal and Ethical CSR – with high Social SD**, which awards the company with the profile name of **'The Prudent Humanist'** (see 5.5.10 for a detailed Personality Description). It is important to remember that the description provided for this personality type (the same as with all the other Personality Descriptions – see 5.5) should only be used as a guideline of framework for customising a company's full Corporate Personality and CSR performance description; as there might be findings from other investigations that certain characteristics are not really applicable to the company at hand.

Figure 9

Average scores obtained for items measuring CSR Dimensions

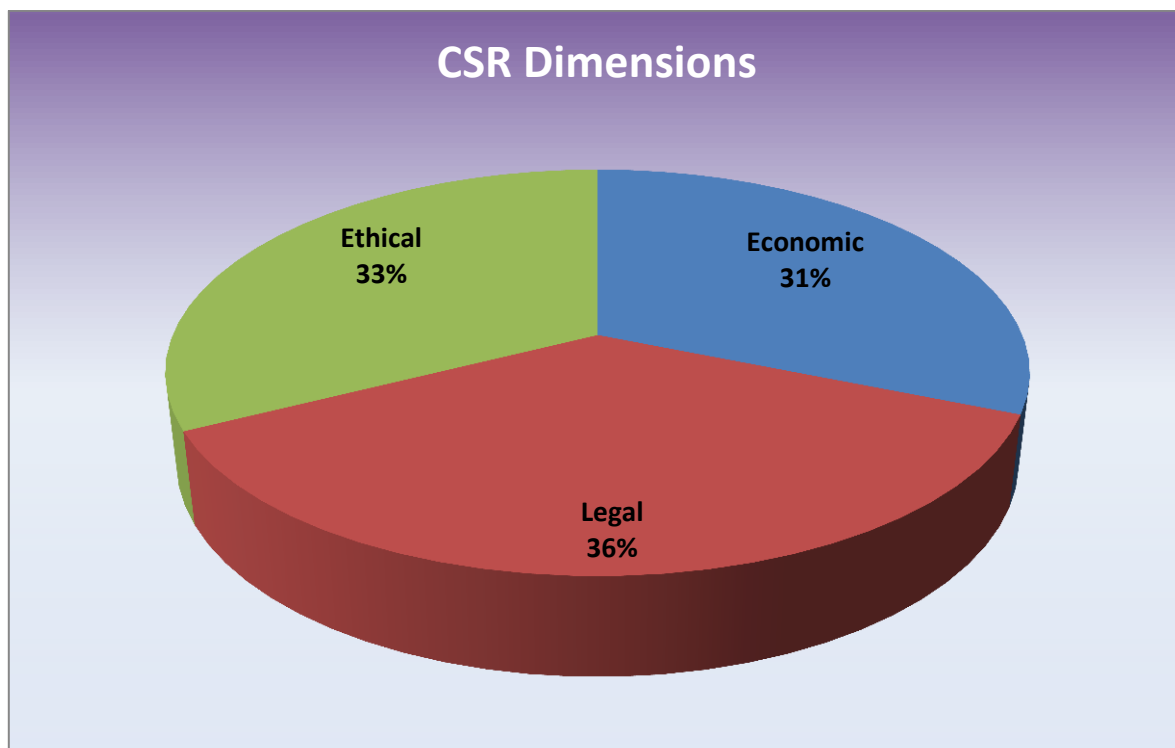
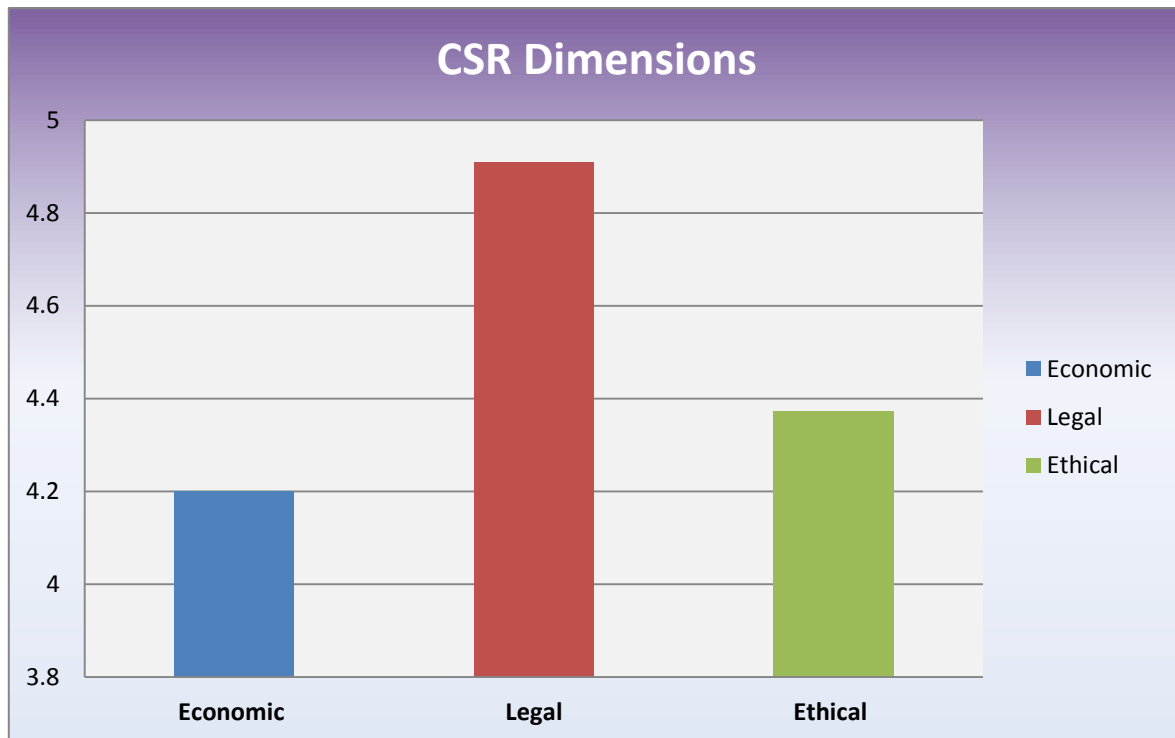
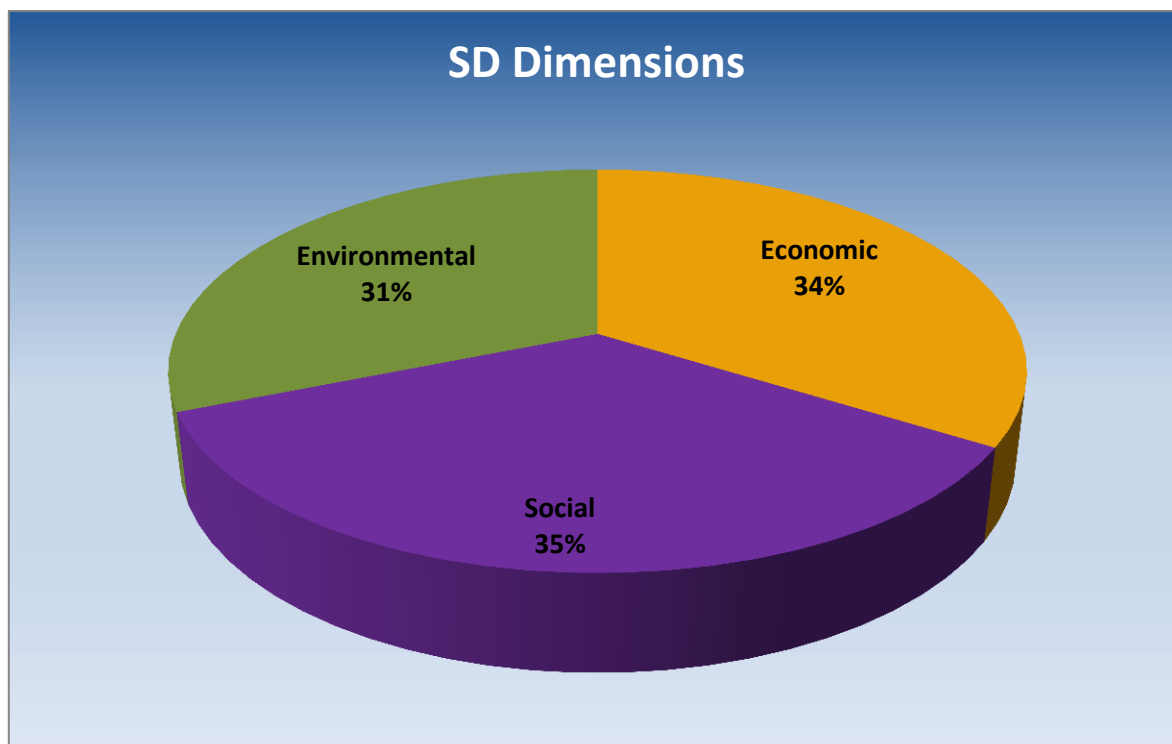
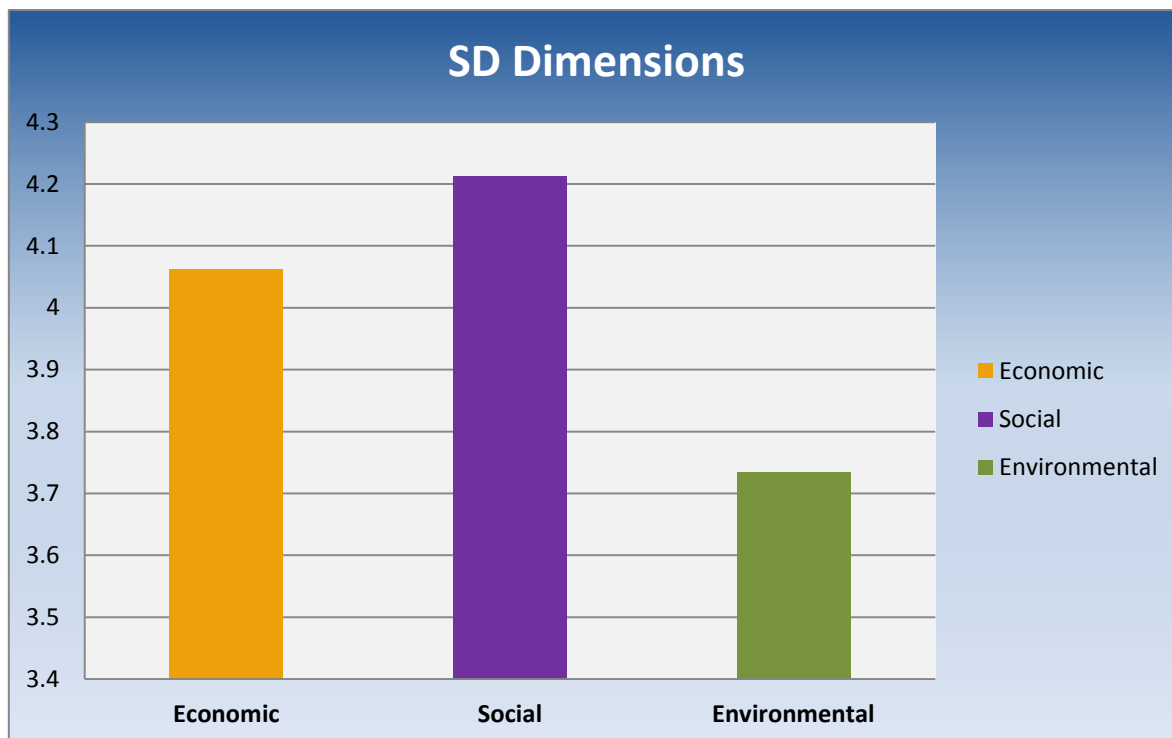


Figure 10

Average scores obtained for items measuring SD Dimensions



6.9 CONCLUSION

The main purpose of this chapter was to describe the procedures that were implemented during the actual development of the CSR/CP measuring instrument, namely the '*Corporate Citizenship Measuring Instrument*'. As such, this chapter also presented the results obtained during the empirical part of the research (*see the 'Item Analysis Phase' - point 6.5*). In doing so, the current chapter represents the most fundamental part of addressing the research question identified in *Chapter One* (*see 1.3*) by performing certain physical steps of instrument development, which included a statistical data analysis. This chapter also presented a verification of the effectiveness of these steps, by presenting an actual example of the instrument's workability (i.e. from successfully applying the instrument to measure a company's CSR/CP profiles – *see 6.11*).

Subsequently, the next and final chapter of this research will summarise and conclude the overall findings of this study.