A CRITICAL ASSESSMENT OF SOCIALLY RESPONSIBLE INVESTING IN SOUTH AFRICA

SUZETTE VIVIERS
A CRITICAL ASSESSMENT OF SOCIALLY RESPONSIBLE INVESTING IN SOUTH AFRICA

SUZETTE VIVIERS

Thesis submitted in fulfilment of the requirements for the degree of

DOCTOR COMMERCII

in the

Faculty of Business and Economic Sciences

at the

Nelson Mandela Metropolitan University

Promoter: PROF JK BOSCH Port Elizabeth
Co-promoters: PROF DR A BUIJS January 2007
PROF E SMIT

Copyright © Nelson Mandela Metropolitan University 2007
Met liefde opgedra aan my ouers en Ouma
I would like to thank the following people and institutions for their contributions to my thesis:

My Heavenly Father, for the talents, abilities and determination to complete my studies.

My Mother, for her ongoing prayers, encouragement, love and care. Without her I would never have been able to do it.

My Ouma, for all her prayers, words of encouragement and unshakeable confidence in me. Her intense desire to have had the opportunity to study constantly inspired me.

My promoter, Prof Bosch, for his dedication and support as well as for the valuable knowledge I learnt from him.

My international co-promoter, Prof Dr Arie Buijs, for his encouragement and valuable inputs.

My local co-promoter, Prof Eon Smit, for his prompt and meaningful recommendations.

Mr Mark Davids, Ms Angelique Kalam and Mr Nico Coetzee, for their assistance in providing me with primary data.

All the fund managers and industry experts in Cape Town and Johannesburg, for sharing their insights and concerns regarding the local SRI sector with me.

Prof Piet Naudé, for his encouragement and practical advice.

Mr Danie Venter, for his valuable assistance with the data analysis.

Prof Christo Boshoff, for his encouragement and laptop.

All my other colleagues, for their support during my studies, notably Prof Alwyn Du Plessis, Dr Elmarie Venter, Prof Madelé Tait and Ms Jackie Palframan.

My Thuthuka student assistants, Mr Ryno van Rooyen, Mr Mark Jucker, Ms Clair Gibbs, Ms Jenny Brink and Ms Jodé May, for the spade work they did for me over the years.

My family and friends, particularly my dance friends, for their continued support as well as accommodation and transport during my visits to Johannesburg, Stellenbosch, Cape Town and Palmerston North, New Zealand.
Ms Dawn Prinsloo, Ms Marlene Du Plessis and the other ladies in the library, for their efficient service.

Ms Erica Wagenaar, Ms Debbie Nedft, Ms Dedré Erasmus, Mr John Lucey and the Goldstones for their valuable help on the technical and language aspects of this thesis.

Ms Nasreen Adams, for her assistance with secretarial services.

The National Research Foundation and the Nelson Mandela Metropolitan University, for the necessary funding to successfully complete this research.
TABLE OF CONTENTS

ACKNOWLEDGEMENTS iv
TABLE OF CONTENTS vi
LIST OF TABLES xvi
LIST OF FIGURES xvii
LIST OF EXHIBITS xviii
LIST OF ACRONYMS xix
ABSTRACT xx

CHAPTER ONE

INTRODUCTION TO THE RESEARCH

1.1 INTRODUCTION AND BACKGROUND TO THE RESEARCH 1
1.1.1 Definition of SRI 1
1.1.2 SRI strategies 2
1.1.3 Historical development of SRI 7
1.2 PROBLEM STATEMENT 8
1.3 MODELS UNDERPINNING THE RESEARCH 9
1.3.1 The comprehensive conceptual model 9
1.3.2 The hypothetical model underpinning the research 15
1.4 PURPOSE OF THE RESEARCH 18
1.5 RESEARCH OBJECTIVES 19
1.5.1 Primary research objectives 19
1.5.2 Secondary research objectives 19
1.6 RESEARCH QUESTIONS AND HYPOTHESES 20
1.6.1 Research questions 20
1.6.2 Research hypotheses 21
(a) Hypotheses associated with the first benchmark category (the SRI funds’ respective benchmark indices) 21
(b) Hypotheses associated with the second benchmark category (a matched sample of conventional (non-SRI) funds) 22
(c) Hypotheses associated with the third benchmark category (the general equity market in South Africa) 23
1.7 RESEARCH DESIGN AND METHODOLOGY 24
1.8 DATA COLLECTION AND ANALYSIS 24
1.9 SCOPE OF THE RESEARCH 25
1.10 PRIOR RESEARCH 26
1.11 STRUCTURE OF THE THESIS 28
# CHAPTER TWO

## RESEARCH DESIGN AND METHODOLOGY

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.1 INTRODUCTION</td>
<td>30</td>
</tr>
<tr>
<td>2.2 THE NATURE AND PURPOSE OF RESEARCH</td>
<td>30</td>
</tr>
<tr>
<td>2.2.1 The world of everyday life and lay knowledge</td>
<td>31</td>
</tr>
<tr>
<td>2.2.2 The world of science and scientific research</td>
<td>33</td>
</tr>
<tr>
<td>2.2.3 The world of meta-science</td>
<td>33</td>
</tr>
<tr>
<td>2.2.4 Theory development as an outcome of phenomenological research</td>
<td>34</td>
</tr>
<tr>
<td>2.2.5 Business ethics research</td>
<td>36</td>
</tr>
<tr>
<td>2.3 RESEARCH DESIGN OF THE STUDY</td>
<td>37</td>
</tr>
<tr>
<td>2.4 TYPES OF RESEARCH</td>
<td>39</td>
</tr>
<tr>
<td>2.4.1 Qualitative and quantitative research</td>
<td>40</td>
</tr>
<tr>
<td>2.4.2 Exploratory, descriptive, analytical and predictive research</td>
<td>41</td>
</tr>
<tr>
<td>2.4.3 Inductive and deductive research</td>
<td>43</td>
</tr>
<tr>
<td>2.4.4 Applied and basic research</td>
<td>44</td>
</tr>
<tr>
<td>2.4.5 Conclusions on the different types of research</td>
<td>45</td>
</tr>
<tr>
<td>2.5 RESEARCH PARADIGMS</td>
<td>45</td>
</tr>
<tr>
<td>2.5.1 A phenomenological (qualitative) research paradigm</td>
<td>46</td>
</tr>
<tr>
<td>2.5.2 A positivistic (quantitative) research paradigm</td>
<td>47</td>
</tr>
<tr>
<td>2.5.3 A comparison between phenomenological and positivistic paradigms</td>
<td>48</td>
</tr>
<tr>
<td>2.5.4 Conclusion: motivation for the adopted research paradigm</td>
<td>49</td>
</tr>
<tr>
<td>2.6 CRITERIA FOR A WELL-DESIGNED RESEARCH PROJECT</td>
<td>50</td>
</tr>
<tr>
<td>2.6.1 Reliability</td>
<td>51</td>
</tr>
<tr>
<td>2.6.2 Validity (internal validity)</td>
<td>52</td>
</tr>
<tr>
<td>2.6.3 Generalisability (external validity)</td>
<td>54</td>
</tr>
<tr>
<td>2.6.4 Other criteria for good research</td>
<td>54</td>
</tr>
<tr>
<td>2.7 METHODS OF DATA SOURCING AND ANALYSIS</td>
<td>58</td>
</tr>
<tr>
<td>2.7.1 Data sourcing</td>
<td>58</td>
</tr>
<tr>
<td>2.7.2 Data analysis</td>
<td>60</td>
</tr>
<tr>
<td>2.8 SUMMARY AND CONCLUSIONS</td>
<td>61</td>
</tr>
</tbody>
</table>

---

# CHAPTER THREE

## INTRODUCTION TO SOCALLY RESPONSIBLE INVESTING

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.1 INTRODUCTION</td>
<td>63</td>
</tr>
<tr>
<td>3.2 THE HISTORY OF SRI</td>
<td>62</td>
</tr>
<tr>
<td>3.2.1 The development of stock exchanges and collective investment</td>
<td>64</td>
</tr>
<tr>
<td>schemes</td>
<td></td>
</tr>
<tr>
<td>3.2.2 Changing societal views on morality and wealth</td>
<td>66</td>
</tr>
<tr>
<td>3.3 SCREENING AS AN SRI STRATEGY</td>
<td>71</td>
</tr>
<tr>
<td>3.3.1 Negative (exclusionary) screening</td>
<td>72</td>
</tr>
</tbody>
</table>
4.5.2 Moral investing 122
4.5.3 Amoral (ethically indifferent) investing 122
4.6 THE ETHICAL DECISION MAKING PROCESS 123
4.7 APPROACHES TO ETHICAL REASONING 126
4.7.1 Ethical egoism 127
(a) Background to ethical egoism 127
(b) Ethical egoism and SRI 128
4.7.2 Utilitarianism 128
(a) Background to utilitarianism 128
(b) Utilitarianism and SRI 130
4.7.3 Deontological ethics 130
(a) Background to deontological or duty-based ethics 130
(b) Deontological ethics and SRI 134
4.7.4 The ethics of care 134
(a) Background to the ethics of care 134
(b) The principle of care and SRI 136
4.7.5 Virtue ethics 136
(a) Background to virtue ethics 136
(b) Virtue ethics and SRI 137
4.7.6 The conventional approach to ethics 138
(a) Background to the conventional approach to ethics 138
(b) The conventional approach and SRI 140
4.7.7 Emotivism 140
(a) Background to emotivism 140
(b) Emotivism and SRI 141
4.7.8 Summary of ethical approaches and their applicability to SRI 141
4.8 SUMMARY AND CONCLUSIONS 143

CHAPTER FIVE

VARIABLES INFLUENCING THE DEMAND FOR SRI FUNDS

5.1 INTRODUCTION 145
5.2 THE GLOBAL SRI SECTOR 145
5.2.1 Current size of the international SRI sector 145
5.2.2 Variables driving SRI internationally 148
(a) Historic performance of SRI funds 148
(b) Growing consumerism among investors 148
(c) Changes in the profile of the investment community 149
(d) The far-reaching consequences of corporate scandals 150
(e) Changing views on the role of business in society 151
(f) Improved triple bottom line reporting 152
(g) SRI research and information 153
(h) The development of stock market indices dealing with moral and ESG considerations 153
(i) Pension fund legislation 155
Greater stakeholder advocacy 156

The development of global SRI investment guidelines 156

Variables impeding the growth of SRI internationally 158

The use of short-term performance benchmarks 158

Trustees' fiduciary duties 159

A lack of skills among global investment analysts and fund managers 160

Other impediments 161

THE SRI SECTOR IN SOUTH AFRICA 162

Current size of the local SRI sector 162

Drivers of SRI in South Africa 164

The launch of the FTSE/JSE SRI Index 164

Broad-based BEE legislation, sector charters and scorecards 166

Improved triple bottom line reporting 167

Stakeholder advocacy 168

Changes in the profile of the local investment community 169

Increasing incidents of fraud in South Africa 169

Changing views on the role of business in society 170

Variables impeding the growth of SRI in South Africa 171

The historic performance of local SRI funds 172

The lack of a proper definition of SRI in the South African context 173

The lack of clarity regarding proposed amendments to the Pension Funds Act 175

A shortage of new SRI opportunities, asset classes and funds 178

The lack of skills among local investment analysts and fund managers 179

The lack of appropriate SRI benchmarks 179

Other impediments 179

Macro-economic conditions in South Africa over the research period 181

Sub-period one: 1 June 1992 to 31 August 1998 181

Sub-period two: 1 September 1998 to 31 March 2002 182

Sub-period three: 1 April 2002 to 31 March 2006 184

SUMMARY AND CONCLUSIONS 187

CHAPTER SIX

PORTFOLIO PERFORMANCE EVALUATION

INTRODUCTION 189

MEASURING HISTORIC INVESTMENT RETURNS AND RISK 190

Calculating a portfolio’s historic (ex post) rate of return 190

Calculating a portfolio’s historic (ex post) standard deviation 194

MEASURES OF RISK-ADJUSTED PORTFOLIO PERFORMANCE 195

The Sharpe ratio 195
6.3.2 The M² measure
6.3.3 The Sortino ratio
6.3.4 The Upside-potential patio
6.3.5 The single-factor CAPM Jensen’s alpha
6.3.6 The Information ratio
6.3.7 The Treynor ratio
6.3.8 The multi-factor APT Jensen’s alpha
6.4 THE RISK-ADJUSTED PERFORMANCE OF SRI FUNDS
6.4.1 Studies comparing the performance of artificially constructed SRI funds vis-à-vis market and conventional indices
6.4.2 Studies investigating the performance of ESG stock market indices vis-à-vis market and conventional indices
6.4.3 Studies evaluating the performance of actual SRI funds vis-à-vis market indices, other benchmark indices and conventional (non-SRI) funds
   (a) Studies on the performance of SRI funds in the UK
   (b) Studies on the performance of SRI funds in the USA
   (c) Studies on the performance of SRI funds in Australia
   (d) Cross-country studies on SRI fund performance
6.5 SUMMARY AND CONCLUSIONS

CHAPTER SEVEN
SAMPLE SELECTION AND PRIMARY DATA SOURCING
7.1 INTRODUCTION
7.2 COLLECTIVE INVESTMENT SCHEMES (CISs) IN SOUTH AFRICA
   7.2.1 History and definition
       (a) Pooled or unitised CISs
       (b) Segregated CISs
   7.2.2 Classification of CISs
7.3 SAMPLING PROCEDURE
7.3.1 Population of SRI funds in South Africa
7.3.2 Sampling frame of SRI funds in South Africa
7.3.3 Sample of SRI funds in South Africa
7.4 PRIMARY DATA SOURCING
   7.4.1 Data providers
       (a) Primary data sourcing with regard to the SRI funds contained in the sample
       (b) Primary data sourcing with regard to the SRI funds’ respective benchmark indices
       (c) Primary data sourcing with regard to the matched sample of conventional (non-SRI) unit trusts
       (d) Primary data sourcing with regard to the risk-free asset
       (e) Primary data sourcing with regard to the proxies used for the
market index in South Africa

7.4.2 Types of primary quantitative data sourced 256
(a) Nominal data 257
(b) Ordinal data 258
(c) Interval data 259
(d) Ratio data 260
7.5 SUMMARY AND CONCLUSIONS 260

CHAPTER EIGHT
QUANTITATIVE DATA ANALYSIS AND EMPIRICAL FINDINGS

8.1 INTRODUCTION 262
8.2 CALCULATING MONTHLY RETURNS 262
8.3 UNADJUSTED (RAW) SRI FUND RETURNS 264
8.4 RISK-ADJUSTED SRI FUND RETURNS 266
8.4.1 The Sharpe ratio 267
8.4.2 The Sortino ratio 269
8.4.3 The Upside-potential ratio 272
8.4.4 The single-factor CAPM Jensen’s alpha 275
8.4.5 The two-factor Van Rensburg and Slaney APT Jensen’s alpha 278
8.5 HYPOTHESIS TESTING 282
8.5.1 Introductory remarks 282
8.5.2 Testing the null and alternative hypotheses associated with the first benchmark category 289
8.5.3 Testing the null and alternative hypotheses associated with the second benchmark category 298
8.5.4 Testing the null and alternative hypotheses associated with the third benchmark category 303
8.6 SUMMARY AND CONCLUSIONS 313

CHAPTER NINE
SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

9.1 INTRODUCTION 316
9.2 OVERVIEW OF THE RESEARCH 316
9.2.1 Purpose of the research 316
9.2.2 Research objectives 317
9.2.3 Research design and methodology 318
9.3 PERTINENT FINDINGS AND CONCLUSIONS 320
9.3.1 Definition of SRI 320
9.3.2 Status of the SRI sector internationally 321
9.3.3 Status of the SRI sector in South Africa 321
9.3.4 Ethical foundation of SRI 324
9.3.5 SRI fund performance 325
9.4  STRATEGIC IMPLICATIONS AND RECOMMENDATIONS EMANATING FROM THE RESEARCH 328
9.4.1 Strategic implications and recommendations for investors 328
9.4.2 Strategic implications and recommendations for local asset managers 329
9.4.3 Sundry recommendations 332
9.5 CONTRIBUTIONS OF THE RESEARCH 333
9.6 LIMITATIONS OF THE STUDY 334
9.7 FUTURE RESEARCH 335
9.8 FINAL CONCLUDING REMARKS 336

REFERENCES 337

ANNEXURE A: DETAILS ON THE INTERVIEWS CONDUCTED WITH LOCAL SRI FUND MANAGERS AND INDUSTRY EXPERTS

ANNEXURE B: DETAILS ON THE SAMPLE OF LOCAL SRI FUNDS
# LIST OF TABLES

<table>
<thead>
<tr>
<th>Table</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.1</td>
<td>Classification of the main types of empirical research</td>
<td>39</td>
</tr>
<tr>
<td>2.2</td>
<td>Exploratory, descriptive, analytical and predictive research as pertaining</td>
<td>46</td>
</tr>
<tr>
<td></td>
<td>to SRI in South Africa</td>
<td></td>
</tr>
<tr>
<td>2.3</td>
<td>Comparison between phenomenological and positivistic research paradigms</td>
<td>49</td>
</tr>
<tr>
<td>3.1</td>
<td>Relevance of ESG factors to investment analysis in 2005 and 2010</td>
<td>79</td>
</tr>
<tr>
<td>3.2</td>
<td>SRI strategies employed by South African SRI fund managers</td>
<td>91</td>
</tr>
<tr>
<td>3.3</td>
<td>Fund objectives of local cause-based SRI funds</td>
<td>93</td>
</tr>
<tr>
<td>3.4</td>
<td>Fund objectives of local SRI funds employing a positive screening strategy</td>
<td>97</td>
</tr>
<tr>
<td>3.5</td>
<td>Fund objectives of local SRI funds which combine a cause-based investing</td>
<td>98</td>
</tr>
<tr>
<td></td>
<td>strategy with a positive screening approach</td>
<td></td>
</tr>
<tr>
<td>3.6</td>
<td>Negative screens employed by local Shari'ah compliant SRI funds</td>
<td>100</td>
</tr>
<tr>
<td>4.1</td>
<td>Three types of investment ethics</td>
<td>120</td>
</tr>
<tr>
<td>4.2</td>
<td>Summary of ethical approaches to ethical decision making and their</td>
<td>141</td>
</tr>
<tr>
<td></td>
<td>application to SRI</td>
<td></td>
</tr>
<tr>
<td>5.1</td>
<td>Prominent international ESG stock market indices</td>
<td>153</td>
</tr>
<tr>
<td>5.2</td>
<td>Recommendations to mainstream SRI</td>
<td>160</td>
</tr>
<tr>
<td>5.3</td>
<td>Sustainable reporting trends of the top 100 South African companies</td>
<td>166</td>
</tr>
<tr>
<td>5.4</td>
<td>The performance of equities versus bonds during sub-period one</td>
<td>180</td>
</tr>
<tr>
<td>5.5</td>
<td>The performance of equities versus bonds during sub-period two</td>
<td>181</td>
</tr>
<tr>
<td>5.6</td>
<td>The performance of equities versus bonds during sub-period three</td>
<td>183</td>
</tr>
<tr>
<td>6.1</td>
<td>Market capitalisation of JSE sectors on 31 December 2005</td>
<td>207</td>
</tr>
<tr>
<td>6.2</td>
<td>Overview of pertinent international SRI studies</td>
<td>210</td>
</tr>
<tr>
<td>7.1</td>
<td>Growth in South African CISs' assets from December 1995 to December 2005</td>
<td>229</td>
</tr>
<tr>
<td>7.2</td>
<td>Salient features of SRI unit trusts</td>
<td>240</td>
</tr>
<tr>
<td>7.3</td>
<td>Salient features of other pooled (non-unit trust) and segregated SRI funds</td>
<td>242</td>
</tr>
<tr>
<td>7.4</td>
<td>Second-tier classification of SRI funds in the population</td>
<td>248</td>
</tr>
<tr>
<td>7.5</td>
<td>Sample of matched conventional (non-SRI) unit trusts</td>
<td>254</td>
</tr>
<tr>
<td>7.6</td>
<td>Types of data, their measurement characteristics and appropriate</td>
<td>257</td>
</tr>
<tr>
<td></td>
<td>statistical procedures</td>
<td></td>
</tr>
<tr>
<td>8.1</td>
<td>Unadjusted (raw) SRI fund returns</td>
<td>265</td>
</tr>
<tr>
<td>8.2</td>
<td>Overview of the Sharpe ratios of local SRI funds</td>
<td>268</td>
</tr>
<tr>
<td>8.3</td>
<td>Overview of the Sortino ratios of local SRI funds</td>
<td>271</td>
</tr>
<tr>
<td>8.4</td>
<td>Overview of the Upside-potential ratios of local SRI funds</td>
<td>274</td>
</tr>
<tr>
<td>8.5</td>
<td>Overview of the single-factor CAPM Jensen's alphas of local SRI funds</td>
<td>277</td>
</tr>
<tr>
<td>8.6</td>
<td>Overview of the two-factor Van Rensburg and Slaney APT Jensen's alphas of</td>
<td>280</td>
</tr>
<tr>
<td></td>
<td>SRI funds</td>
<td></td>
</tr>
<tr>
<td>8.7</td>
<td>Calculating the difference of paired observations</td>
<td>285</td>
</tr>
<tr>
<td>Section</td>
<td>Description</td>
<td>Page</td>
</tr>
<tr>
<td>---------</td>
<td>-----------------------------------------------------------------------------</td>
<td>------</td>
</tr>
<tr>
<td>8.8</td>
<td>SRI funds <em>vis-à-vis</em> benchmark indices in sub-period one (1 June 1992 – 31 August 1998)</td>
<td>292</td>
</tr>
<tr>
<td>8.9</td>
<td>SRI funds <em>vis-à-vis</em> benchmark indices in sub-period two (1 September 1998 – 31 March 2002)</td>
<td>293</td>
</tr>
<tr>
<td>8.10</td>
<td>SRI funds <em>vis-à-vis</em> benchmark indices in sub-period three (1 April 2002 – 31 March 2006)</td>
<td>296</td>
</tr>
<tr>
<td>8.11</td>
<td>SRI funds <em>vis-à-vis</em> matched conventional (non-SRI) funds in sub-period two (1 September 1998 – 31 March 2002)</td>
<td>301</td>
</tr>
<tr>
<td>8.12</td>
<td>SRI funds <em>vis-à-vis</em> matched conventional (non-SRI) funds in sub-period three (1 April 2002 – 31 March 2006)</td>
<td>302</td>
</tr>
<tr>
<td>8.13</td>
<td>SRI funds <em>vis-à-vis</em> the FTSE/JSE All Share Index in sub-period one (1 June 1992 – 31 August 1998)</td>
<td>306</td>
</tr>
<tr>
<td>8.14</td>
<td>SRI funds <em>vis-à-vis</em> the FTSE/JSE All Share Index in sub-period two (1 September 1998 – 31 March 2002)</td>
<td>307</td>
</tr>
<tr>
<td>8.15</td>
<td>SRI funds <em>vis-à-vis</em> the FTSE/JSE All Share Index in sub-period three (1 April 2002 – 31 March 2006)</td>
<td>310</td>
</tr>
</tbody>
</table>
LIST OF FIGURES

1.1 Stages in the socially responsible investment process 3
1.2 Prominent SRI strategies 5
1.3 Comprehensive conceptual model underlying this research 10
1.4 Hypothetical model underpinning this research 16
2.1 A “Three Worlds Framework” of knowledge creation 32
2.2 Research design framework 38
2.3 Illustration of the joint use of phenomenological and positivistic research paradigms in this research 52
3.1 Prominent SRI strategies 72
3.2 The nexus of relationships between CFP, CSP and triple bottom line reporting 80
3.3 Multiple influencing roles of NGOs in the SRI process 89
4.1 Elements contained in the definition of ethics 106
4.2 Kohlberg’s model of moral development 112
4.3 Carroll’s pyramid of corporate social responsibility 118
4.4 Decision-making continuum 123
4.5 A generic model of ethical decision making 124
4.6 The conventional approach to ethics 138
5.1 Number of SRI funds established and discontinued over the research period (1 June 1992 – 31 March 2006) 161
5.2 Prime interest rate over the research period 179
5.3 The ZAR (in cents) per US Dollar over the research period 182
5.4 Total value of the FTSE/JSE All Share Index over the research period 183
6.1 Graphic illustration of the M² measure 198
7.1 Three-tier classification system 234
7.2 Stages in selecting the sample of SRI funds in South Africa 236
7.3 SRI population, sampling frame and sampling units 251
8.1 Hypothetical model underpinning the positivistic dimension of this research 283
8.2 Empirical model of SRI fund performance in South Africa 315
9.1 Empirical model of SRI fund performance in South Africa 327
9.2 Five business-level strategies 329
## LIST OF EXHIBITS

<table>
<thead>
<tr>
<th>Exhibit</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.1</td>
<td>Extracts from the Qur’an regarding usury</td>
<td>74</td>
</tr>
<tr>
<td>4.1</td>
<td>The Investment Analysts Society of South Africa’s code of ethics</td>
<td>119</td>
</tr>
<tr>
<td>5.1</td>
<td>The UN Principles for Responsible Investment</td>
<td>155</td>
</tr>
</tbody>
</table>
LIST OF ACRONYMS

AD  - Anno Domini
AFAC - Alexander Forbes Asset Consultants Targeted Development Investment Vehicles
APT  - Arbitrage Pricing Theory
AIDS  - Acquired Immune Deficiency Syndrome
BC   - Before Christ
BEE  - Black Economic Empowerment
CAL  - Capital Allocation Line
CAPM - Capital Asset Pricing Model
CFP  - Corporate Financial Performance
CIS  - Collective Investment Scheme
CML  - Capital Market Line
CPI  - Consumer Price Index
CSP  - Corporate Social Performance
DSI  - Domini 400 Social Index
DTI  - Department of Trade and Industry
ESG  - Environmental, Social and Governance
FTSE - Financial Times and the London Stock Exchange
GDP  - Gross Domestic Product
GEPF - Government Employees Pension Fund
GRI  - Global Reporting Initiative
HIV  - Human Immunodeficiency Virus
HPR  - Holding Period Return
HPY  - Holding Period Yield
JSE  - Johannesburg Stock Exchange
KLD  - Kinder Lynderberg and Domini
MAR  - Minimum Acceptable Return
NAV  - Net Asset Value
NCD  - Negotiable Certificate of Deposit
NGO  - Non-Governmental Organisation
PUT  - Property Unit Trusts
RDP  - Reconstruction and Development Plan
SIF  - Social Investment Forum
SML  - Security Market Line
SPV  - Special Purpose Vehicle
SMMME - Small, Medium and Micro Enterprise
SRI  - Socially Responsible Investing
UK   - United Kingdom
UN   - United Nations
USA  - United States of America
WEF  - World Economic Forum
ABSTRACT

This research deals with socially responsible investing (SRI) in its broadest context in South Africa and includes an analysis of the risk-adjusted performance of local SRI funds. SRI refers to an investment strategy whereby investors integrate moral as well as environmental, social and governance (ESG) considerations alongside conventional financial criteria in evaluating investment opportunities. Typical SRI strategies include screening, shareholder activism and cause-based (targeted) investing.

The primary objective of this research was to obtain a deeper understanding of SRI in South Africa as it represents a powerful means whereby private sector capital can be channelled into areas of national priority. Data and methodological triangulation strategies were adopted to investigate the research problem, respond to the research questions and test the research hypotheses of this study.

The phenomenological component of the research consisted of an extensive literature review as well as in-depth, face-to-face interviews conducted with twelve SRI fund managers and industry experts. The positivistic dimension of this research centred on the construction of the first complete database of SRI funds in South Africa, the sourcing of quantitative primary data and the testing of eight pairs of null and alternative hypotheses. Risk-adjusted performance was evaluated by means of the Sharpe, Sortino and Upside-potential ratios during three sub-periods, namely 1 June 1992 to 31 August 1998, 1 September 1998 to 31 March 2002 and 1 April 2002 to 31 March 2006.

Forty-three SRI funds have been launched in South Africa since June 1992 and it is estimated that SRIs constitute approximately 0.7 percent of the total investment capacity in the country. It was found that most local SRI funds combine a cause-based investment strategy with a positive or best-of-sector screening approach. ESG screens were found to focus on the promotion of
broad-based Black Economic Empowerment and the development of social infrastructure in South Africa. The FTSE/JSE SRI Index and the Financial Sector Charter were identified as the most prominent drivers of SRI in South Africa, whereas a lack of skills and a shortage of new SRI opportunities, asset classes and funds were seen as impediments to the growth of the local SRI sector.

The empirical evidence shows that:
- local SRI funds underperformed relative to their respective benchmark indices during the first two sub-periods but significantly outperformed them during sub-period three (the resurgence period of SRI in South Africa);
- local SRI fund performance is not significantly different from that of a matched sample of conventional (non-SRI) funds; and
- local SRI funds significantly underperformed relative to the general equity market in South Africa during sub-period two (the decline period of SRI in South Africa) but performed on a par with the FTSE/JSE All Share Index during sub-periods one and two.

The findings of this research therefore suggest that investors can consider SRI funds as part of a well-diversified investment strategy.

It is strongly recommended that a Social Investment Forum be established in South Africa to address the educational needs of stakeholders in the local SRI sector. It is also recommended that local asset managers adopt a focused differentiation strategy to take advantage of the growing SRI sector in South Africa.

**KEY WORDS**: socially responsible investing, risk-adjusted portfolio performance, Sharpe ratio, Sortino ratio, Upside-potential ratio, screening, shareholder activism, cause-based (targeted) investing, deontology, the ethics of care.
CHAPTER ONE

INTRODUCTION TO THE RESEARCH

1.1 INTRODUCTION AND BACKGROUND TO THE RESEARCH

“There are three steps in the revelation of any truth: in the first it is ridiculed; in the second, resisted; in the third it is considered self-evident.”

This statement by German philosopher Arthur Schopenhauer (1788-1860) is particularly apt in the light of increasing calls from a new generation of investors, so-called socially responsible investors, to integrate moral principles as well as environmental, social and governance (ESG) considerations into investment decision making. Although many investors still question the rationale and effectiveness of such an approach, empirical evidence shows that socially responsible investing (SRI) in developed economies is gradually moving from a fringe investment strategy to a mainstream consideration (Knoll 2002:681; Scheuth 2003:189).

1.1.1 Definition of SRI

The field of SRI is characterised by a lack of consensus regarding definitions and concepts. The most widely accepted definition of SRI, however, relates to an intricate process of integrating personal values as well as ESG concerns with investment decisions (Social Investment Forum 2006). According to De Cleene and Sonnenberg (2004:vii) SRI essentially merges investors’ values with their financial requirements, without jeopardising the latter.

The two most commonly used concepts in SRI research include ‘ethical investing’ and ‘socially responsible investing’, although related concepts such as ‘green investing’, ‘targeted investing’, ‘values-based investing’, ‘sustainability investing’

‘Ethical investing’ suggests that investments are based on an individual’s ethical disposition. In its most elementary sense, ethics refers to a set of values that define right and fair conduct within a society (Joyner & Payne 2002:299). As ethics also refers to a code of moral principles that direct the behaviour of individuals and groups, it comes as no surprise that devout members of religious groups, such as Quakers and Methodists, were the first investors who screened their investments for moral acceptability (Scheuth 2003:189; Sparkes & Cowton 2004:45).

The concept ‘ethical investing’ has however increasingly been replaced by a more contemporary concept namely that of ‘socially responsible investing’. Mansley (2000:5) argues that many investors feel uncomfortable about using the word ‘ethical’ to describe investment matters as it carries religious or moralising overtones. Sparkes and Cowton (2004:45) further argue that some investors object to the use of the word ‘ethical’ as it seems to imply that mainstream approaches to investment are ‘unethical’. By using the concept ‘socially responsible investing’, it is anticipated that some of these preconceptions will be avoided and that a broader, more positive approach to non-financial considerations will be adopted by investors.

A third concept which is gaining popularity in the field of SRI is that of ‘sustainability investing’ also called ‘responsible investing’ (Ambachtsheer, Myllynen & Nuzum 2006:1). In contrast to ‘ethical investing’, this approach is not premised on religious or moral principles but rather on the belief that ESG risks can affect the performance of underlying investments and must therefore be managed. This notion emphasises the importance of sustainable business practices such as the sustainable use of resources and the dynamic management of reputational risks (Tranchimand 2006:4).
For the purpose of this research, a comprehensive definition of SRI, similar to that of Mansley (2000:3), will be adopted, namely that SRI constitutes of “… a set of approaches which include moral, environmental, social and governance considerations along with conventional financial criteria in decisions regarding the selection, retention and realisation of particular investments”.

It is important to note that SRI is not distinct from conventional investing as it also focuses on issues such as capital allocation, asset allocation and security selection. The main difference, however, is that socially responsible investors also integrate moral and ESG concerns during the four stages of the investment process as set out in Figure 1.1.

**FIGURE 1.1: Stages in the socially responsible investment process**

![Stages in the socially responsible investment process](image)

Source: Adapted from Bodie, Kane & Marcus (2002:940)

As indicated in Figure 1.1, socially responsible investors need to specify their return requirements and level of risk tolerance before stipulating particular SRI
criteria and other constraints. The choice of a specific SRI strategy will depend, amongst others, on the investor’s moral disposition and approach to ethical decision making. Once an investment policy has been formulated, socially responsible investors need to monitor their portfolios on a regular basis to ensure that their investments continue to conform to their moral principles and stated SRI criteria. It should be clearly emphasised that SRI is not equivalent to charity or philanthropy as socially responsible investors are generally unwilling to sacrifice financial returns in exchange for feeling good about their investments.

1.1.2 SRI strategies

As indicated in Figure 1.2, a distinction can be made between three prominent SRI strategies, namely screening, shareholder activism and cause-based investing.

In the case of negative or exclusionary screening, investors refrain from investing in the securities of companies producing ‘undesirable’ products or services, as well as those operating in ‘undesirable’ industries and countries. According to this approach, socially responsible investors typically avoid investments in businesses which are associated with the production and/or sale of alcohol, tobacco and weapons as well as those involved with gambling, pornography and nuclear energy (Sparkes & Cowton 2004:46).

A typical example in this regard refers to the trade and financial sanctions imposed by the United Nations (UN) on North Korea in September 2006 in response to this country’s nuclear and ballistic missile programmes. Negative or exclusionary screening is the oldest SRI strategy and is mostly employed by investors who wish to integrate their religious convictions with their investment decisions.
In contrast, investors who employ a positive screening approach to SRI include securities of businesses in their portfolios which they perceive to be reputable as good corporate citizens. An inclusionary screening strategy calls for the evaluation of businesses’ products, policies and practices with regard to a wide range of ESG considerations (Cox & Brammer 2004:27). A perusal of directors’ reports in published annual statements of listed companies on the Johannesburg Stock Exchange (JSE) illustrates that many listed South African companies are not indifferent towards managing ESG risks.

As positive screens are shaped by a society’s culture and needs hierarchy, they often differ from one country to the next. Criteria dealing with broad-based black
economic empowerment (BEE) and HIV/AIDS are, for example, widely employed positive screens in South Africa. In contrast, the focus of positive screens in developed countries is rather on issues relating to climate change and fair labour practices (Horsely 2004:16).

A best-of-sector screening approach combines positive and negative screens. As such, socially responsible investors do not exclude entire sectors from their portfolios but include those businesses that are making the most effort to improve their non-financial performance across the board (Solomon, Solomon & Norton 2002:3).

A second major approach to SRI, outlined in Figure 1.2, is that of shareholder activism. This approach implies that shareholders actively engage with management boards on a range of ESG considerations. They do so by engaging in dialogue, filing resolutions, using their voting rights at annual general meetings and divesting from companies that fail to transform (De Cleene & Sonnenberg 2004:6). As in the case of positive and best-in-sector screening approaches, socially responsible investors in South Africa often engage with the boards of JSE-listed companies on issues directly affecting their employees, the environment and local communities.

Lastly, SRI could take the form of cause-based investing whereby investors finance businesses or projects that support environmental, social and empowerment initiatives. Within the South African context, cause-based investments are referred to as ‘targeted investments’ (based on the definition provided in the Financial Sector Charter) and often deal with the promotion of broad-based BEE as well as the development of social infrastructure such as roads, schools and health-care facilities (Leeman 2005:9; Petersen 2005).
1.3 Historical development of SRI

Although 18th century Quakers in the United States of America (USA) were the first investors to screen their investments for moral acceptability, retail mutual funds with a SRI focus only emerged in America in the late 1920s (Mandala 2003:23). This development mainly grew out of a change in morality brought about by the ramifications of the First World War. Perry (1993:263) points out that World War I affected the social consciousness of the West in such a profound way that it caused many people to turn back to religion as their primary source of moral guidance.

In the early 1920s, financial markets in the USA responded to this change in morality by creating funds which allowed for the evaluation of businesses’ products, policies and practices on both financial and moral grounds. As such, most of the first SRI funds in the USA employed exclusionary ‘sin’ screens eschewing the securities of companies involved in the production and/or sale of tobacco, alcohol and weapons as well as those businesses involved in gambling (Schwartz 2003:196).

The publication of the Sullivan Principles in the USA in 1974 provided a substantial stimulus for SRI internationally. US banks and companies with South African operations were required to withdraw from the country with failure to do so resulting in shareholder divestment (Grossman & Sharpe 1986:15; Ennis & Parkhill 1986:30). The use of an anti-South African screen sensitised investors to the potential impact which they could have on corporate behaviour and social change.

Since the mid-1970s, the SRI movement has gained considerable momentum in the USA. A report by the Social Investment Forum shows that $2.29 trillion or nearly one out of every ten dollars under professional management in the USA in 2005 was invested on the basis of ethical or ESG criteria (Mitchell & Larson
2006:2). This figure represents a 260 percent increase in SRI over the past decade.

Outside the USA, the most rapid growth in SRI has occurred in the United Kingdom (UK), the Netherlands and Sweden (Socially responsible investment taking root in Europe 2002:17; Guay, Doh & Sinclair 2004:126). According to the International Finance Corporation only 0.1 percent or $2.7 billion of global SRI funds were invested in emerging markets in 2003, with the majority in upcoming Asian markets (Baue 2003c).

The South African SRI market has not experienced the same growth as that observed in international SRI markets. In 2005 SRI funds represented a mere one percent of all assets invested in the country (Canter 2005:3; Personal communication Davids 2006).

Although the South African government is doing a great deal to address the dire need for socio-economic development in the country, more private sector involvement is required to make a significant difference in the lives of ordinary citizens. SRI represents a powerful means whereby more private sector capital can be channelled into areas of national priority. It is therefore imperative to gain a deeper understanding of the factors which drive the demand for SRIs in South Africa, especially those which are critical in the eyes of institutional investors as they represent the bulk investors in the country (Cameron 2006).

1.2 PROBLEM STATEMENT

Given the background pertaining to SRI, the problem statement underlying this research can be phrased in terms of three broad questions, namely:

- which variables impact on the growth and development of the SRI sector in South Africa?
- how do the risk-adjusted returns of local SRI funds compare with three benchmark categories, namely the benchmark indices of the SRI funds, a
matched sample of conventional (non-SRI) funds and the general equity market in South Africa; and
- what are the strategic implications of the findings for investors and other key stakeholders in the South African SRI sector?

To shed more light on the problem statement, two models underpinning the research were developed, namely a comprehensive conceptual model as well as a hypothetical model which will be tested empirically.

1.3 MODELS UNDERPINNING THE RESEARCH

1.3.1 The comprehensive conceptual model

In constructing a comprehensive conceptual model on SRI, a broad range of secondary sources were consulted and semi-structured, face-to-face interviews conducted with a number of local SRI fund managers and industry experts. The construct of the comprehensive conceptual model (Figure 1.3) thus reflects a range of qualitative variables which impact on the demand for SRIs, both locally and in South Africa.

It should be noted that the aim of this research was not to establish any typical cause-and-effect relationships between the eighteen independent variables depicted in Figure 1.3 and the dependent variable (the demand for SRIs). The relationships depicted in Figure 1.3 merely show that, based on a phenomenological research paradigm, theories pertaining to SRI in South Africa were generated (De Vos, Strydom, Fouché & Delport 2002:81; Zikmund 2003:9).

A justification for the phenomenological component of the research design will be presented in Chapter Two. It should further be noted that the impact of the variables listed in Figure 1.3 differ from one country to the next and might not even be applicable to SRI sectors in some countries.
FIGURE 1.3: Comprehensive conceptual model underlying this research

Source: Researcher’s own construct
Each of the variables of the comprehensive conceptual will now operationalised and contextualised for the research in question.

- **Demand for socially responsible investments (SRIs):** This variable refers to the demand for SRIs (including SRI funds) expressed by individual and institutional investors. For the purpose of this research, an SRI fund is defined as “…any local collective investment scheme that employs a screening, shareholder activism and/or cause-based investment strategy”.

- **Historic SRI fund performance:** Statman (2000:30) argues that the risk-adjusted performance of SRI funds is the most important variable influencing its demand. Although international research findings on the risk-adjusted performance of SRI funds is mixed, it seems that SRI funds tend to (i) underperform broad market indices and (ii) perform at least as well as conventional (non-SRI) funds (Guerard 1997a:11, 1997b:31; Goldreyer & Diltz 1999:23; Bauer, Koedijk & Otten 2005:1751).

- **Consumerism:** Consumerism refers to a growing awareness among investors that their investment decisions and ownership practices have a wider environmental and social impact. This realisation has lead to an increased demand for screened portfolios as well as greater shareholder activism in the global SRI arena (Solomon *et al.* 2002:4).

- **Profile of the investment community:** McGeer (2004:7) and Scheuth (2003:195) point out that more women and young investors have entered the financial markets compared with a decade ago and show that they are more likely to invest in SRI funds than men and older investors. Kalideen (2004) also notes that more Islamic investors are requesting faith-based (i.e. ethical) investment funds.
- **Corporate scandals**: This variable has a powerful influence on SRI given the devastating consequences that white-collar crime holds for investors and other corporate stakeholders. According to Clarke (2002:44), the increased media exposure of unethical business practices since the turn of the millennium has eroded investor confidence and has led to increased scrutiny of corporate behaviour.

- **Views on the role of business in society**: This variable deals with the views held by investors regarding the role that businesses ought to play in society i.e. whether they should be ‘social reformers’ or ‘free-market proponents’ (Friedman 1970:32; Murray & Nathan 2005). A critical evaluation of this variable is of particular importance in a country such as South Africa where the government is struggling to fulfil its social obligations.

- **Triple bottom line reporting**: Triple bottom line reporting refers to the practice whereby businesses report not only on financial (economic) performance but also on issues relating to social and environmental sustainability (Line, Hawley & Krut 2002:69; Visser 2005:29). It can be argued that increased levels of triple bottom line reporting, both globally and locally, have aided investors in making more responsible decisions.

- **SRI research and information**: The demand for SRI funds depends to a large extent on the amount and quality of information available to investors (Madden 2001:12; Scheuth 2003:192; McGeer 2004:7). It can be argued that an increase in the number of SRI research agencies and consultancies play have played a positive role in this regard.

- **ESG stock market indices**: The development of indices dealing with ethical and ESG considerations, such as the KLD indices, FTSE4GOOD indices as well as the Dow Jones Sustainability and Islamic indices, have not only led to a greater awareness of SRI internationally but have also led to the
development of several SRI funds tracking these indices (Sauer 1997:137; Hussein & Omran 2005:110). In South Africa the FTSE/JSE SRI Index has performed a similar function (Wadula 2004; Futuregrowth lok R30 miljoen se beleggings 2004:17).

- **Pension fund legislation:** SRI experts like Mansley (2000:1), Schwartz (2003:197) as well as Sparkes and Cowton (2004:50) are of the opinion that amendments to pension fund legislation have been one of the most influential forces driving SRI internationally.

- **Broad-based BEE legislation, sector charters and scorecards:** In South Africa the promulgation of the broad-based BEE Act in 2003 as well as the implementation of various BEE sector charters and scorecards has provided a substantial stimulus for SRI in South Africa (Wierzycka 2004, 2005a).

- **Stakeholder advocacy:** This variable refers to the growing pressure exerted by non-governmental organisations (NGOs), lobby groups and trade unions on management boards to consider ESG issues (Solomon *et al.* 2002:4; Seeds of new asset management 2002:18).

- **Investment guidelines:** Guidelines on the incorporation of ESG considerations into investment decisions and ownership practices are set out in the UN Principles for Responsible Investment (2006:1). Locally, some guidelines pertaining to cause-based investing and shareholder activism have also been formulated and set out in the Financial Sector Charter (2003:4).

- **Macro-economic conditions:** The demand for SRIs is inextricably linked to prevailing macro-economic conditions such as economic growth as well as interest, inflation and exchange rates as these variables impact on the performance of SRI funds’ underlying investments.
- **Trustees’ fiduciary duties**: According to a report by the World Economic Forum, new regulations regarding trustees’ fiduciary duties have heightened their sensitivity toward risk taking and have encouraged inertia around ‘tried and tested’ approaches (which clearly exclude SRI) (Mainstreaming Responsible Investment 2005:9). In South Africa, trustees avoided SRIs as some have suffered significantly losses in the late 1990s and have thus adopted a more cautious approach to SRI (De Cleene & Sonnenberg 2004:14).

- **Availability of SRI opportunities, asset classes and funds**: An important variable impacting the demand for SRIs in South Africa relates to the lack of new SRI opportunities, asset classes and limited variety of SRI funds (Social responsibility must be put on agenda 2005).

- **Performance benchmarks**: This variable depicted in the comprehensive conceptual model refers to the widespread use of short-term performance benchmarks in the evaluation of SRI fund performance (Mainstreaming Responsible Investment 2005:7).

- **SRI definition and terminology**: Confusion regarding the definition of SRI and related terminology has been identified as a major barrier to growing the SRI market both locally and overseas (De Cleene & Sonnenberg 2004:15; Ambachtsheer & Steward 2006:19).

- **Skills gaps**: A lack of skills among investment analysts and fund managers is one of the crucial variables hindering the growth and development of the SRI sector, both in South Africa and internationally (Healing 2005:18; Heese 2005:733; Personal communication Adsetts, Davids, Johnston and Palframan 2006; Mainstreaming Responsible Investment 2005:9).
1.3.2 The hypothetical model underpinning the research

In the problem statement (Section 1.2 of this chapter) a pivotal question was raised, namely: How do the risk-adjusted returns of local SRI funds compare with three benchmark categories, namely the benchmark indices of the SRI funds, a matched sample of conventional (non-SRI) funds as well as the performance of the general equity market in South Africa. To address this question a hypothetical model, consisting of eight pairs of null and alternative hypotheses, was developed (Figure 1.4).

The benchmark categories depicted in the hypothetical model can be operationalised as follows:

- **SRI funds’ respective benchmark indices**: As will be pointed out in Tables 7.2 and 7.3 of Chapter Seven, each local SRI fund has its own benchmark index against which its performance can be measured. Examples of such benchmark indices include the FTSE/JSE All Share Index, the FTSE/JSE SRI Index, the inflation rate and the All Bond Index calculated by the Bond Exchange Actuarial Society of South Africa.

- **Conventional (non-SRI) funds**: For the purpose of this study, a conventional (non-SRI) fund is defined as “…any local collective investment scheme which does not employ a screening, shareholder activism or cause-based investment strategy”. As will be pointed out in Section 7.4.1 of Chapter Seven, a matched sample of conventional (non-SRI) funds was identified by adopting the methodologies proposed by Bauer et al. (2005:1751) and Mallin, Saadouni and Briston (1995:483).
FIGURE 1.4: Hypothetical model underpinning this research

Source: Researcher's own construct
The South African equity market: This variable is operationalised by evaluating the performance of the FTSE/JSE All Share Index. This index consists of the top 99 percent of eligible JSE-listed companies ranked by full market capitalisation (FTSE/JSE Africa Index Series 2006).

Also shown in the hypothetical model are three sub-periods during which local SRI fund performance was evaluated. These sub-periods were identified based on an extensive overview of the prevailing macro-economic conditions in South Africa over the period 1 June 1992 to 31 March 2006. More details on the macro-economic conditions during the respective sub-periods are provided in section 5.3.4 of Chapter Five.

Sub-period one stretched from 1 June 1992 to 31 August 1998 and can be labelled the ‘establishment period of SRI in South Africa’. Sub-period two, which started on 1 September 1998 and ended on 31 March 2002, can be labelled the ‘decline period of SRI in South Africa’. Sub-period three stretched from 1 April 2002 to 31 March 2006 and can be labelled the ‘resurgence period of SRI in South Africa’ as several new SRI funds were established during this sub-period.

As shown in Figure 1.4, three measures risk-adjusted performance were calculated during each of the identified sub-periods. These measures can be operationalised as follows:

- **Sharpe ratio**: This measure of risk-adjusted portfolio performance evaluates a risk premium per unit of standard deviation (Sharpe 1964:425; Sharpe 1994:49).

- **Sortino ratio**: Akin to the Sharpe ratio, the Sortino ratio also measures a fund’s excess returns per unit of risk, but uses a more refined measure of risk, namely downside deviation (Sortino & Price 1994:59).
- **Upside-potential ratio (UPR):** The Upside-potential ratio compares a fund's returns above a threshold or minimum acceptable return value with its downside deviation (Sortino, Van der Meer & Plantinga 1999:50; Leggio & Lien 2003a:82, 2003b:211).

A complete description of the abovementioned ratios will be provided in Sections 6.3.1, 6.3.3 and 6.3.4 of Chapter Six respectively.

### 1.4 PURPOSE OF THE RESEARCH

With reference to the comprehensive conceptual model (Figure 1.3) and the hypothetical model (Figure 1.4), the purpose of this research can be phrased in a threefold manner:

- Firstly, to develop, via phenomenological research methodologies, substantive theories of SRI in South Africa. The concept ‘substantive theories’ will be explained in Section 2.2.4 of Chapter Two.

- Secondly, to gauge by means of positivistic research methodologies, the risk-adjusted performance of South African SRI funds as compared with three benchmark categories, namely the benchmark indices of the SRI funds, a matched sample of conventional (non-SRI) funds and the general equity market in South Africa. SRI fund performance will be evaluated against these three benchmark categories during all three of the identified sub-periods.

- Thirdly, to outline the strategic implications of the findings for investors and other key stakeholders in the South African SRI sector. This strategic dimension is imperative when conducting research of this nature.
1.5 RESEARCH OBJECTIVES

To focus on the purpose of the research, two sets of objectives are relevant.

1.5.1 Primary research objectives

The primary objective of this research is to obtain a deeper understanding of SRI in its broadest context in South Africa. However, besides investigating this relatively uncharted investment domain in South Africa, the focus of this research will also be on the assessment of the risk-adjusted performance of local SRI funds as compared with three benchmark categories.

1.5.2 Secondary research objectives

To give effect to the primary objective of the research and to focus on the purpose of the research, the following secondary research objectives were formulated:

(i) To determine which research paradigms, research methodologies, data collection and data analysis methods are the most appropriate to research the problem in question.

(ii) To conduct an extensive review of the literature (supplemented, where applicable, with semi-structured, face-to-face interviews with local SRI fund managers and industry experts) on the following topics:
   a. the historical development of SRI globally and in South Africa;
   b. the strategies employed by socially responsible investors in South Africa and abroad;
   c. the ethical premises underpinning SRI;
   d. the current size, driving forces in and the obstacles to SRI internationally and locally;
1.6 RESEARCH QUESTIONS AND HYPOTHESES

Given the purpose of the research and the stated research objectives, a number of research questions and hypotheses present themselves.

1.6.1 Research questions

The following research questions require answers:

- How should SRI be defined within the South African context?
- What is the current size of the SRI sector in South Africa?
- Which strategies are employed by SRI fund managers in South Africa?
- Which ethical approaches do socially responsible investors in South Africa employ when evaluating investment opportunities?
- Which variables impact on the growth and development of the SRI sector in South Africa?
- How does the performance of local SRI funds compare, on a risk-adjusted basis, with the returns of the three benchmark categories as identified in the hypothetical model (Figure 1.4)?
What are the strategic implications of the findings for investors and other key stakeholders in the South African SRI sector?

1.6.2 Research hypotheses

To evaluate the risk-adjusted performance of South African SRI funds compared with three benchmark categories, eight pairs of null and alternative hypotheses were formulated. These hypotheses were depicted in Figure 1.4 and are presented next.

(a) Hypotheses associated with the first benchmark category (the SRI funds’ respective benchmark indices)

As indicated in Figure 1.4, the first benchmark category deals with the evaluation of SRI fund performance in terms of the SRI funds’ own benchmark indices. Three pairs of null and alternative hypotheses were formulated to correspond with the three sub-periods identified earlier.

More formally these hypotheses can be stated as:

- \( H_{1,0} \): There is no difference between the risk-adjusted performance of South African SRI funds and their respective benchmark indices over the period 1 June 1992 – 31 August 1998 (the establishment period of SRI in South Africa).
- \( H_{1,A} \): There is a difference between the risk-adjusted performance of South African SRI funds and their respective benchmark indices over the period 1 June 1992 – 31 August 1998 (the establishment period of SRI in South Africa).
- \( H_{2,0} \): There is no difference between the risk-adjusted performance of South African SRI funds and their respective benchmark indices over the period 1 September 1998 – 31 March 2002 (the decline period of SRI in South Africa).
- $H_{2,A}$: There is a difference between the risk-adjusted performance of South African SRI funds and their respective benchmark indices over the period 1 September 1998 – 31 March 2002 (the decline period of SRI in South Africa).
- $H_{3,0}$: There is no difference between the risk-adjusted performance of South African SRI funds and their respective benchmark indices over the period 1 April 2002 – 31 March 2006 (the resurgence period of SRI in South Africa).
- $H_{3,A}$: There is a difference between the risk-adjusted performance of South African SRI funds and their respective benchmark indices over the period 1 April 2002 – 31 March 2006 (the resurgence period of SRI in South Africa).

(b) Hypotheses associated with the second benchmark category (a matched sample of conventional (non-SRI) funds)

The second benchmark category deals with the evaluation of SRI fund performance against a matched sample of conventional (non-SRI) funds. Due to certain constraints, which are explained in Section 7.4.1(c) of Chapter Seven, SRI fund performance could only be evaluated in sub-periods two and three. The corresponding pairs of null and alternative hypotheses read as follows:

- $H_{4,0}$: There is no difference between the risk-adjusted performance of South African SRI funds and a matched sample conventional (non-SRI) funds over the period 1 September 1998 – 31 March 2002 (the decline period of SRI in South Africa).
- $H_{4,A}$: There is a difference between the risk-adjusted performance of South African SRI funds and a matched sample conventional (non-SRI) funds over the period 1 September 1998 – 31 March 2002 (the decline period of SRI in South Africa).
- $H_{5,0}$: There is no difference between the risk-adjusted performance of South African SRI funds and a matched sample conventional (non-SRI) funds over the period 1 April 2002 – 31 March 2006 (the resurgence period of SRI in South Africa).
H₅,A: There is a difference between the risk-adjusted performance of South African SRI funds and a matched sample conventional (non-SRI) funds over the period 1 April 2002 – 31 March 2006 (the resurgence period of SRI in South Africa).

(c) Hypotheses associated with the third benchmark category (the general equity market in South Africa)

As indicated in Figure 1.4, the third benchmark category deals with the evaluation of SRI fund performance vis-à-vis the general equity market in South Africa. The FTSE/JSE All Share Index is used as proxy for the performance of the general equity market in South Africa. Three pairs of null and alternative hypotheses were formulated to correspond with the three identified sub-periods.

More specifically the hypotheses can be stated as:

- H₆,₀: There is no difference between the risk-adjusted performance of South African SRI funds and the FTSE/JSE All Share Index over the period 1 June 1992 – 31 August 1998 (the establishment period of SRI in South Africa).
- H₆,ₐ: There is a difference between the risk-adjusted performance of South African SRI funds and the FTSE/JSE All Share Index over the period 1 June 1992 – 31 August 1998 (the establishment period of SRI in South Africa).
- H₇,₀: There is no difference between the risk-adjusted performance of South African SRI funds and the FTSE/JSE All Share Index over the period 1 September 1998 – 31 March 2002 (the decline period of SRI in South Africa).
- H₇,ₐ: There is a difference between the risk-adjusted performance of South African SRI funds and the FTSE/JSE All Share Index over the period 1 September 1998 – 31 March 2002 (the decline period of SRI in South Africa).
- H₈,₀: There is no difference between the risk-adjusted performance of South African SRI funds and the FTSE/JSE All Share Index over the period 1 April 2002 – 31 March 2006 (the resurgence period of SRI in South Africa).
There is a difference between the risk-adjusted performance of South African SRI funds and the FTSE/JSE All Share Index over the period 1 April 2002 – 31 March 2006 (the resurgence period of SRI in South Africa).

1.7 RESEARCH DESIGN AND METHODOLOGY

An analysis of the research problem, research questions, research hypotheses, units of analysis and types of data to be sourced, collectively suggested the adoption of data and methodological triangulation strategies. The integration of phenomenological and positivistic research paradigms enabled the researcher to address the key issues embedded in the problem statement of the research. More details on the motivation for the adopted research design and methodology are presented in Chapter Two.

1.8 DATA COLLECTION AND ANALYSIS

For the purpose of this research, qualitative data were collected from secondary sources as well as semi-structured, face-to-face interviews which were conducted with twelve South African SRI fund managers and industry experts. The qualitative data analysis component was executed according to approved phenomenological data analysis techniques, such as content analysis and analytical induction based on grounded theory (Collis & Hussey 2003:196; Jakowicz 2005:121). More details on the qualitative data sourcing and analysis procedures are set out in Sections 2.7.1 and 2.7.2 of Chapter Two respectively. Contextualised to this research, phenomenological research strategies were utilised to understand, assess and comprehend the meaning and magnitude of SRI in South Africa.

Due to the objective of comparing the performance of local SRI funds with three benchmark categories, quantitative data were collected and analysed. The use of quantitative data collection and analysis methods, linked to hypothesis testing,
reflect the main characteristics of a positivistic paradigm (De Vos et al. 2002:81). Quantitative data on SRI funds, their respective benchmark indices, a matched sample of conventional (non-SRI) funds, a risk-free instrument as well as proxies for the market index in South Africa were sourced from MoneyMate, I-Net Bridge, Bloomberg, Alexander Forbes Asset Consultants, the Bureau of Economic Research at the University of Stellenbosch as well as a number of SRI fund managers. The comprehensive quantitative data collection process and associated sampling procedure will be described in full in Chapter Seven.

Quantitative data were analysed in four broad phases. Firstly, monthly returns were calculated for the 24 SRI funds and the constituents of the three benchmark categories. Secondly, the unadjusted (raw) returns of the SRI funds were calculated. Thirdly, the risk-adjusted returns of the SRI funds were evaluated using the Sharpe, Sortino and Upside-potential ratios. Jensen's alphas were also calculated based on the single-factor Capital Asset Pricing Model (CAPM) and two-factor Van Rensburg and Slaney Arbitrage Pricing Theory (APT) model. Next, the research hypotheses were tested by using appropriate measures of risk-adjusted portfolio performance and conducting suitable tests of statistical significance.

1.9 SCOPE OF THE RESEARCH

This study will focus on the primary research objective which is to obtain a deeper understanding of SRI in its broadest context in South Africa. An important aspect hereof refers to the testing of hypotheses dealing with the risk-adjusted performance of local SRI funds vis-à-vis three benchmark categories. Furthermore, the research will also give effect to the stated secondary objectives, with an emphasis on the strategic implications of the findings.
1.10 PRIOR RESEARCH

A comprehensive search of the literature has been undertaken on various facets of SRI, particularly SRI fund performance. Since the publication of the Sullivan Principles in the USA in 1974, several international studies have been undertaken to investigate the impact and financial performance of SRI funds. The first researchers who investigated the performance of SRI funds faced two constraints; firstly, very few SRI funds existed at the time, and secondly, of those that existed most had very short track records (Rudd 1979:5; Grossman & Sharpe 1986:15). As a result researchers resorted to constructing their own artificially screened equity and bond portfolios (Diltz 1995:69; Guerard 1997b:31; Hutton, D’Antonio & Johnsen 1998:281).

The launch of the Domini 400 Social Index in May 1990 greatly facilitated SRI research in the USA and gave rise to a number of studies which compared this index’s performance against market indices, such as the S&P500 Index and other unrestricted indices (Kurtz & DiBartolomeo 1996:35; Sauer 1997:137). It was shown that the performance of the Domini 400 Social Index was generally no different from that of broad market indices and unrestricted equity indices.

As SRI funds’ track records in the USA became longer and more funds saw the light since the mid-1980s onwards, researchers turned their focus from the construction and performance evaluation of hypothetical SRI funds to that of real SRI funds (Hamilton, Jo & Statman 1993:62; Goldreyer & Diltz 1999:23; Statman 2000:30; Bauer et al. 2005:1751). The risk-adjusted performance of these funds was typically compared with broad market indices, small cap indices, ESG indices and conventional (non-SRI) funds. Similar research was also undertaken in the UK, Australia and Germany (Luther, Matatko & Corner 1992:57; Luther & Matatko 1994:77; Mallin et al. 1995:483; White 1995:323; Cummings 2000:79; Bauer, Otten & Rad 2006:33).
Although research findings yielded mixed results, it seems as if SRI funds (i) tend
to under-perform broad market indices and (ii) perform at least as well as
conventional (non-SRI) funds (Guerard 1997a:11, 1997b:31; Goldreyer & Diltz

In an attempt to address the lack of research on local SRI fund performance,
Alexander Forbes Asset Consultants initiated a quarterly survey of Targeted
Development Investment Vehicles in September 2001. In similar vein, RisCura
Risk and Investment Consulting began publishing a monthly survey, called the
RisCVieW Socially Responsible Investment Vehicles survey, in August 2003.
Although these surveys have created a heightened awareness of SRI fund
performance in South Africa, they lack methodological rigour (an issue to be
addressed in this research).

Other South African research that has proven valuable in the completion of this
study has dealt with:

- the performance of local unit trusts (Firer & Gray 1996; Meyer 1998; Von
  Wieligh & Smit 2000; Akinjolire & Smit 2003; Friis & Smit 2004; Steyn & Smit
  2004);

- an introduction to SRI in South Africa (De Vries & De Villiers 1997a,b; Van
  frequently be made to the contribution of De Cleene and Sonnenberg (2004)
  as they are seminal contributors to SRI research in South Africa;

- corporate social responsibility and corporate social investing (Binedell 1989;
  Skinner 1994; Alperson 1995; Visagie 1996; De Cleene 2002);
- environmental and sustainability reporting in South Africa (Erasmus & Vorster 1997; Savage 1998; De Villiers & Lubbe 1998; De Villiers 2000; Visser 2002; Visser 2005; Mitchell & Quinn 2005);

- business ethics, fraud, corruption and corporate governance in South Africa (Van der Walt 2001; Van Niekerk 2003; Rossouw & Van Vuuren 2003); and

- ethical management and education in South Africa (Kretzschmar 2002).

A review of the NEXUS and Dissertation Abstracts International databases confirmed that no other doctoral studies have been undertaken on the topic in question.

1.11 STRUCTURE OF THE THESIS

Chapter One provides the background to the research, leading to an introduction and problem definition of the issues in question. The research objectives, questions and hypotheses were generated and linked to a comprehensive conceptual model and hypothetical model.

In Chapter Two the research design and methodology to be adopted for this research will be explained and motivated.

Chapter Three will focus on the historical development of SRI as well as a description of the prominent strategies employed by socially responsible investors and SRI fund managers in South Africa.

Chapter Four will present the ethical premises underpinning SRI, whereas Chapter Five will provide greater clarity on the variables impacting on the demand for SRIs.
In *Chapter Six* an overview will be presented of the measures used to evaluate the risk-adjusted performance of investment portfolios as well as the findings of prominent international studies regarding SRI fund performance.

*Chapter Seven* will focus on the positivistic dimension of this research and will specifically deal with the identification of the population, sampling frame and final sample of local SRI funds in South Africa. The sourcing of quantitative primary data will also be addressed in this chapter.

The data analysis and empirical findings of the research will be set out in *Chapter Eight*, whereas *Chapter Nine* will present a holistic overview of the pertinent research findings with a specific focus on the strategic implications for investors and other key stakeholders in the South African SRI sector.
CHAPTER TWO

RESEARCH DESIGN AND METHODOLOGY

2.1 INTRODUCTION

Having described the problem statement and purpose of the research in question, this chapter will give effect to the first secondary research objective, (as stated in Section 1.5.2 of Chapter One), namely to determine which research paradigms, research methodologies, data collection and data analysis methods are the most appropriate to research the problem in question.

This secondary research objective implies that an appropriate overall research design for the study must first be determined. The research design should enable the researcher to effective address the problem statement and research objectives of the research.

In this chapter the nature and purpose of business research will firstly be explored with particular emphasis on business ethics research. This will be followed by a comprehensive research design framework as contextualised for the research in question. Next an exploration of the different types of research and various research paradigms will be presented with a clear motivation for the adopted research methodology. The criteria for a well-designed research project will further be identified. The chapter concludes with a brief overview of the qualitative data sourcing and analysis methods as applicable to this study. A dedicated chapter (Chapter Seven) will deal with these issues as they pertain to the positivistic dimension of this study.

2.2 THE NATURE AND PURPOSE OF RESEARCH

There is consensus in business research literature (Leedy & Ormrod 2005:1; Collis & Hussey 2003:1; Zikmund 2003:5) that the features and purpose of
business research revolve around the fact that it entails a process of thorough and rigorous enquiry and investigation; that it is systematic and methodical in nature; and serves several purposes. Some of these purposes include:

- reviewing, reflecting on and synthesising existing knowledge;
- investigating some existing situation or problem;
- providing solutions to a problem;
- exploring and analysing more general issues;
- constructing or creating new procedures or systems;
- explaining new phenomena; and
- generating new knowledge and theories.

The aim of this study is to perform a rigorous enquiry and investigation into the phenomenon of SRI in South Africa in order to increase knowledge on the topic in South Africa. Mouton (2001:137) differentiates between three different kinds of knowledge as outlined in the ‘Three Worlds Framework’ (Figure 2.1). The notion of a ‘world’ could also be understood as a ‘sphere’ or ‘realm’.

2.2.1 The world of everyday life and lay knowledge

In the sphere of everyday life, individuals produce and rely on lay knowledge. This type of knowledge enables them to cope effectively with their daily tasks and is acquired through learning, experience and self-reflection (Mouton 2001:138). Different terms such as common sense, experiential knowledge, self-knowledge, insight and practical know-how are also used to refer to lay knowledge as this type of knowledge is used to solve problems and gain insight into everyday tasks. Greenberg and Baron (2000:118) refer to the ‘knowledge of getting things done’ as ‘tacit knowledge’. The first characteristic of tacit knowledge is that it is action-orientated, secondly, that it allows individuals to achieve their personal goals and thirdly, that it is usually acquired without the direct help of others.
With regard to SRI it could be argued that investors refrain from investing in companies associated with the production of alcohol or tobacco as a result of practical experience in terms of the perils associated with such products. A further example within the South African context relates to the choice of a cause-based investment strategy in that the actions or outcomes of such a strategy are directly observable in the form of social infrastructure development and the upliftment of previously disadvantaged communities.
2.2.2 The world of science and scientific research

A discussion on scientific knowledge, which originate in ‘World Two’, cannot be separated from the meaning of the word ‘science’ (or *scire* in Latin) namely ‘to know’ (Hunt 1991:197). Mouton (2001:139) explains that scientists search for ‘truthful knowledge’ by transforming and subjecting real life phenomena to systematic and rigorous inquiry. This is done with the aim of constructing valid and reliable descriptions, models, theories and laws of reality.

Babbie and Mouton (2001:6) distinguish between lay and scientific knowledge by saying that the latter is based on the “…collective, validated experiences of the members of the scientific community rather than individual experiences and observations of any single person alone”. They further state that scientific knowledge is the outcome of rigorous and methodical inquiry as opposed to the haphazard way in which lay knowledge is acquired. Another important distinction between lay and scientific knowledge lies in the fact that scientific researchers reject the value and importance of any personal authority and only accept the authority of evidence.

In relation to SRI it could be argued that the increasing number of research publications in international journals in recent years bear evidence to a growing body of scientific knowledge on the topic. The research in question also strived to evaluate existing theories and models with regard to SRI within the South African context.

2.2.3 The world of meta-science

Babbie and Mouton (2001:15) point out that the practice by which scientists constantly submit ‘truthful’ research findings to critical reflection has over the years led to the development of meta-disciplines (where *meta* means ‘beyond’ or ‘over’). Examples of such disciplines include the philosophy of science, research methodology, research ethics as well as the sociology and history of science. These disciplines, evident in ‘World Three’, all involve a reflection on the nature of science and scientific research.
This study will draw on some of these meta-disciplines, most notably research methodology, but will not contribute to their development.

As the research in question deals with the creation of scientific knowledge, a closer look should be taken at the notion of theory development. Zikmund (2000:38) defines theory development as a process of describing phenomena at increasingly higher levels of abstraction, a process which will be highlighted in the next section.

2.2.4 Theory development as an outcome of phenomenological research methodologies

Concepts or constructs form the building blocks of theories and can be described as generalised ideas about a class of objects, attributes, occurrences or processes (Zikmund 2000:38). Examples of concepts in SRI theories include ‘cause-based investing’ and ‘shareholder activism’. Cooper and Schindler (2003:47) explain that concepts in isolation are not theories unless the relationships between concepts are understood and explained. In this regard, propositions are formulated to state relationships or logical linkages between concepts. Examples of propositions identified in this study were presented in the comprehensive conceptual model (Figure 1.3 of Chapter One).

Hypotheses are the empirical counterparts of propositions as they are concerned with the relationships that exist between concepts (which are now referred to as variables). The hypotheses applicable to this study were depicted in the hypothetical model (Figure 1.4 of Chapter One) and essentially deal with the evaluation of local SRI fund performance against three benchmark categories.

Researchers should be mindful, throughout the theory-building process, that “…the corpus of science at any moment consists of the theories that have not been disproved” (Robinson 1962:26). The question may be raised as to why a given theory should ‘not be disproved’ rather than ‘proved’.
The rationale is that there may be other, untested theories which could account for the observed results. Researchers can therefore never be entirely certain that their theory is the only correct one in existence. Researchers can merely state that they have a theory which has been objectively tested with data, and that the data were consistent with the stated theory. As such, their theory cannot be disproved (Zikmund 2000:25).

According to Merriam (1988 in Collis & Hussey 2003:123), theories can be classified into three types:

- grand theories – which are most often found in the natural sciences;
- middle range theories - which are placed higher than mere working hypotheses, but do not have the status of a grand theory; and
- substantive theories – which are developed within a certain context.

In all three cases a ‘theory’ refers to a set of interrelated constructs and propositions that present a systematic view of phenomena by specifying relationships among variables with the purpose of explaining the phenomena (Kerlinger 1979:64 in Collis & Hussey 2003:122). Laughlin (1995:81) argues that it is not possible in the social sciences to have a grand theory, only a skeletal theory which is incomplete unless supplemented with ‘empirical data in particular contexts’.

For the purpose of this research substantive theories of SRI in South Africa will be developed. These theories will be based on the accumulated body of SRI research in South Africa as well as qualitative data sourced by means of semi-structured, face-to-face interviews conducted with local SRI fund managers and industry experts.

Having discussed the definition and purpose of business research in general, attention will now be drawn to three approaches employed by business ethicists when conducting research. An analysis of these approaches is deemed important as the research in question will focus on an ethical aspect of economic activity, namely SRI.
2.2.5 Business ethics research

Three main approaches to the study of business ethics have gained prominence in recent years, namely the descriptive, prescriptive and meta-ethical approaches.

According to Rossouw (2002:32) the objective of a **descriptive approach** to business ethics research is to provide accurate descriptions and explanations of the states of ethical affairs in a given business context. This approach ties in with general descriptive ethics which is concerned with “…describing, characterising and studying the morality of a society by comparing and contrasting different moral codes, systems, practices, beliefs and values” (Carroll & Bucholtz 2000:99). The distinguishing feature of descriptive ethics is therefore that it focuses on giving descriptions rather than value judgements about economic phenomena.

In contrast, a **prescriptive (normative) approach** to business ethics research entails making prescriptions or judgments about ethical issues. Normative researchers take a definite stand about what is right or wrong and provide a theoretical justification for their position (Rossouw 2002:33). Carroll and Bucholtz (2000:100) point out that the prescriptive approach is concerned with supplying and defending a coherent moral system that seeks to uncover, develop and justify basic moral principles that are intended to guide behaviour, actions and decisions. The normative approach to business ethics research therefore seeks to formulate some principles for distinguishing right from wrong in an economic setting.

A third approach employed by business ethicists is the **meta-ethical approach**. As indicated earlier, meta implies ‘next to’ or ‘beyond’. As a result, meta-ethics concerns itself with issues related to ethical judgements without offering such judgements themselves (Rossouw 2002:34). An example of this would be to discuss different approaches to determine the ethicality of broad-based BEE in South Africa, e.g. under what conditions arguments for ethicality would be acceptable as valid or not.
The research in question could be labelled as both descriptive and normative in nature as it seeks to describe and evaluate the ethicality of SRI in South Africa (see Chapter Four for several applications in this regard).

With regard to the purpose of business ethics research, two broad schools of thought are further discernible. According to proponents of the *explanative* school of thought, the purpose of business ethics research is to come to a deeper understanding of the ethical aspects of an economic activity (Rossouw 2004b:4). Questions however remain as to the goal that this deeper understanding ought to serve. In contrast, *evaluative* researchers seek more than a mere understanding of the ethical aspects of an economic activity and wish to establish whether the economic activity itself can stand the test of ethical scrutiny (Rossouw 2004b:7).

The research in question is clearly explanatory in nature as it seeks a deeper understanding of the phenomenon of SRI in South Africa. This deeper understanding will help to address a number of strategic challenges facing the growth and development of the local SRI sector. The study is however also evaluative in nature as it evaluates the ethical premises underpinning SRI in South Africa.

Having outlined the nature and purpose of business research in general and business ethics research in particular, the focus will now turn to the research design of this study.

### 2.3 RESEARCH DESIGN OF THE STUDY

The concept *research design* refers to the kind of research that is being planned as well as the kind of results that are being aimed at (Babbie & Mouton 2001:75). These researchers also point out that a study's problem statement and research objectives should serve as the point of departure when contemplating a study's research design. As such, a comprehensive research design framework was constructed for this study (illustrated in Figure 2.2).
As illustrated in the centre square of Figure 2.2, the problem definition, research objectives, questions and hypotheses are central to the research design framework. As pointed out in Section 1.2 of Chapter One, the focus of this research is on gaining a deeper understanding of SRI in South Africa with particular emphasis on the risk-adjusted performance of local SRI funds.

Figure 2.2 indicates that research can be classified into different types, an overview which is provided in Section 2.4 of this chapter. An important precondition and requirement for any research project is a motivated decision on the research paradigms and methodologies to be adopted. Section 2.5 of this chapter presents two main research paradigms and their relevance to the research in question.

The criteria for a well-designed research project are explained, indicating that effect must be given to these requirements. Section 2.6 elaborates on the criteria that will be considered and implemented in this research, in particular reliability, validity and generalisability. The experience and skill of the researcher are also accounted for in the research design and overall execution of this project. Finally, the methodologies on data sourcing and data analysis will be presented in Section 2.7.
FIGURE 2.2: Research design framework

Source: Adapted from Han (2006:20) and Collis and Hussey (2003:83)


### 2.4 TYPES OF RESEARCH

At the most basic level, a distinction can be made between non-empirical and empirical research. Babbie and Mouton (2001:76) state that non-empirical studies deal with philosophical and conceptual analyses as well as theory building and do not require new (primary) data to be gathered. In contrast, empirical studies, which aim to address the need for lay and scientific knowledge, call for the collection of both new (primary) and existing (secondary) data. This study contains elements of philosophical thought and thus dimensions of non-empirical analysis (as embodied in a phenomenological paradigm adopted), as well as the need for primary data to be gathered and statistically analysed so as to gauge the risk-adjusted performance of local SRI funds.

Different categories of research have been identified in which to classify research projects and research in general. As bases of classification, Collis and Hussey (2003:10) have distinguished between the process, the purpose, the logic and the outcome of the research. Table 2.1 lists the main types of research and the bases of classification.

**TABLE 2.1: Classification of the main types of empirical research**

<table>
<thead>
<tr>
<th>Type of research</th>
<th>Basis of classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quantitative or qualitative research</td>
<td>Process of the research</td>
</tr>
<tr>
<td>Exploratory, descriptive, explanatory/analytical or predictive research</td>
<td>Purpose of the research</td>
</tr>
<tr>
<td>Deductive or inductive research</td>
<td>Logic of the research</td>
</tr>
<tr>
<td>Applied or basic research</td>
<td>Outcome of the research</td>
</tr>
</tbody>
</table>

*Source: Collis & Hussey (2003:10)*

Each of the above types of research will now be examined and contextualised for the research in question.
2.4.1 Qualitative and quantitative and research

Generally speaking it is possible to distinguish between two main research approaches, namely the qualitative approach and the quantitative approach (Blumberg et al. 2005:124; Leedy & Ormrod 2005:94).

**Qualitative research** is typically used to answer questions about the complex nature of phenomena, often with the purpose of describing and understanding such phenomena from the researcher’s point of view (Leedy & Ormrod 2005:94). It includes an array of interpretive techniques which seek to describe, decode, translate and otherwise come to terms with the meaning, and not the frequency, of phenomena in the social world i.e. ‘World One’ (Cooper & Schindler 2006:196). Some of these interpretive techniques include the critical incident technique, diaries, focus groups, interviews, observation, protocol analysis and questionnaires (Collis & Hussey 2003:151). These approaches are typical of a phenomenological research paradigm.

Although qualitative research aims to achieve an in-depth understanding of a situation, cognisance should be taken of its limitations, the most important being its subjective nature (Cooper and Schindler 2006:196).

In contrast **quantitative research** is deemed to be objective as it focuses on seeking the facts or causes of social phenomena (Lancaster 2005:67; Collis & Hussey 2003:13). According to Leedy and Ormrod (2005:94), quantitative research is undertaken to answer questions about relationships between variables with the purpose of explaining, predicting and controlling phenomena (Creswell 2003:18; De Vos et al. 2002:79). Quantitative research employs strategies of inquiry such as experiments and surveys, and collects data using research instruments that yield statistical data (Collis & Hussey 2003:13). Although quantitative studies are highly reliable, they also suffer from a number of shortcomings, the most prominent being the risk of oversimplification and the question whether researchers can be truly distant and objective (Gill & Johnson 2002:40).
The research in question was both qualitative and quantitative in nature as it employed a combination of qualitative and quantitative data collection and analysis strategies. In the first phase of this research qualitative data, sourced by means of semi-structured, face-to-face interviews with a number of local SRI fund managers and industry experts, contributed to the building of theories regarding SRI in South Africa. This was followed by the collection and analysis of quantitative data in the second phase of the research where the focus was on local SRI funds’ performance vis-à-vis three benchmark categories. The choice of data and methodological triangulation approach will be further justified in Section 2.5.6 of this chapter.

A second means by which research can be classified is according to the purpose, the details of which are set out in the following section.

2.4.2 Exploratory, descriptive, analytical and predictive research

The concepts exploratory, descriptive, analytical and predictive must first be briefly explained before a decision can be made on how the research in question can be classified.

Exploratory research is conducted into a research problem or issue where few or no earlier studies were conducted into the relevant problem or issue. According to Collis and Hussey (2003:10), the aim of such research is to find patterns, ideas or hypotheses and it focuses on gaining familiarity with the subject area. Exploratory studies are typically undertaken for the following reasons (Babbie & Mouton 2001:80):

- to satisfy the researcher’s curiosity and desire for better understanding;
- to test the feasibility of undertaking a more extensive study;
- to develop the methods to be employed in any subsequent studies;
- to explicate the central concepts or constructs of a study;
- to determine priorities for future research; and
- to develop new hypotheses about existing phenomena.
As indicated in Section 1.10 of Chapter One, a lack of prior academic research on SRI in South Africa, and SRI fund performance in particular, implies that this study will exhibit several features of exploratory research. The construction of the comprehensive conceptual model (Figure 1.3 of Chapter One) and the hypothetical model (Figure 1.4 of Chapter One) bear evidence of the exploratory nature of this research.

On the other hand, *descriptive research* describes phenomena as they exist and is often used to obtain information on the characteristics of a particular problem or issue. Babbie and Mouton (2001:81) indicate that a wide spectrum of descriptive studies exists such as undertaking in-depth descriptions of specific individuals, social events, groups, companies or social artefacts.

Alternatively researchers may also focus on the frequency with which a specific characteristic or variable occurs in a sample. Furthermore, the description of phenomena may range from a narrative type of description (as in historic and discourse analyses) to a highly structured statistical analysis (as is the case in correlation studies). A description of the current size and composition of the SRI sector in South Africa as well as the current drivers and impediments of SRI growth and development are outcomes of descriptive research.

A third classification of research according to its purpose is that of explanatory or *analytical research*. Explanatory research goes beyond the mere description of characteristics, phenomena or events to analysing and explaining why or how they happened (Collis & Hussey 2003:11). According to Cooper and Schindler (2003:11) explanatory researchers use theories or hypotheses to account for the forces that cause certain phenomena to occur. The major aim of explanatory research is thus to identify the existence of causal relationships between variables. This research can not be classified as analytical as no existing cause-and-effect relationships are being investigated.

According to Blumberg, Cooper and Schindler (2005:12), *predictive research* goes further than analytical research and is rooted equally in theory and
explanation. Predictive research generalises from the analysis by predicting that certain phenomena will occur on the basis of the identified hypothesised relationships. If the predictive research can provide a valid, robust solution based on a clear understanding of the relevant causes, the solution to a problem in a particular study will be applicable to similar problems elsewhere (Collis & Hussey 2003:12). This type of study often calls for a high level of inference.

Once a phenomenon can be explained and predicted, a capability to control it is expected (Blumberg et al. 2005:12). The characteristics of predictive research feature prominently in this study as it seeks to generalise findings on the risk-adjusted performance of a sample of local SRI funds to the population of SRI funds in South Africa.

2.4.3 Inductive and deductive research

The concepts **inductive** and **deductive** pertain to the type of methodological reasoning that takes place during the research process.

**Inductive research** reflects a reasoning process through which a general proposition is established on the basis of the observation of particular facts (Zikmund 2003:47). This mental process of inductive reasoning implies that general inferences are induced from particular instances (Mouton 2001:118). As such, inductive research reflects characteristics of qualitative research and is generally undertaken to develop new theories and hypotheses (Lancaster 2005:25). An inductive approach is commonly associated with phenomenological research methodologies.

In contrast, **deductive research** is undertaken when a theoretical structure (such as the hypothetical model depicted in Figure 1.4 of Chapter One) is developed and tested by means of empirical observations (Lancaster 2005:22). This reasoning implies that particular instances are deduced from general inferences (Collis & Hussey 2003:15). Stated differently, deductive research moves from the general to the particular and effectively reverses the
process found in inductive research. Deductive research is associated with a positivistic research paradigm as it often focuses on the testing of hypotheses.

Zikmund (2000:44) argues that over the course of time, theory construction is often the result of a combination of deductive and inductive reasoning.

The research in question employs both inductive and deductive reasoning as it firstly aims to develop new theories regarding SRI in South Africa and secondly strives to test eight sets of hypotheses relating to SRI fund performance.

It is possible to further classify research into either basic or applied, the distinguishing features of which are presented next.

2.4.4 Basic and applied research

When a research problem is of a less specific nature, and when the research is conducted primarily to improve the understanding of a general issue without emphasis on immediate application, **basic research** is undertaken (Collis & Hussey 2003:14). Basic research is also referred to as fundamental or pure research. According to Zikmund (2000:6) basic research is intended to expand the boundaries of knowledge itself and is often conducted to verify the acceptability of a given theory.

**Applied research**, on the other hand, has a practical problem-solving emphasis, which means that it is conducted in order to find answers to specific questions, related to action, performance or policy needs (Blumberg et al. 2005:13; Zikmund 2003:7).

The aim of applied research is, as stated above, to apply its findings to solve specific and existing problems, as is the purpose of this research dealing with the risk-adjusted performance of local SRI funds.
2.4.5 Conclusions on the different types of research

Based on the discussion above, the following conclusions are evident: Firstly, the research in question is of both a qualitative and quantitative nature. This categorisation is based on the three-fold research problem which calls for data and methodological triangulation. Secondly, the research clearly carries typical features of exploratory, descriptive and predictive research. Table 2.2 lends support to this conclusion by categorising the stated research questions of this study according to the purpose of the research.

Thirdly, this research draws on both inductive and deductive reasoning as new theories on SRI in South Africa will be generated in conjunction with the testing of eight pairs of null and alternative hypotheses. Finally, this research can be classified as applied research as its findings will be useful to members of the investment fraternity in South Africa.

An important element of the research design framework refers to the choice of an appropriate research paradigm.

2.5 RESEARCH PARADIGMS

A research paradigm in essence refers to “…the process of scientific practice based on a researcher’s philosophies and assumptions about the world and the nature of knowledge” (Collis & Hussey 2001:46). Among the various research approaches that exist, two main research paradigms or philosophies may be distinguished, namely a phenomenological and a positivistic paradigm. The phenomenological paradigm is also known as the qualitative, subjectivist, humanistic or interpretive research paradigm, whereas the positivistic paradigm is alternatively known as the quantitative, objective, scientific, experimentalist or traditionalist research paradigm (Collis & Hussey 2003:47).
TABLE 2.2: Exploratory, descriptive, analytical and predictive research as pertaining to SRI in South Africa

<table>
<thead>
<tr>
<th>Type of research (classified according to purpose)</th>
<th>Contextualised research questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exploratory</td>
<td>How should SRI be defined within the South African context?</td>
</tr>
<tr>
<td>Descriptive</td>
<td>What is the current size of the SRI sector in South Africa?</td>
</tr>
<tr>
<td></td>
<td>Which strategies are employed by SRI fund managers in South Africa?</td>
</tr>
<tr>
<td></td>
<td>Which ethical approaches do socially responsible investors in South Africa employ when evaluating investment opportunities?</td>
</tr>
<tr>
<td></td>
<td>Which variables impact on the growth and development of the SRI sector in South Africa?</td>
</tr>
<tr>
<td>Explanatory / analytical</td>
<td>No typical cause-and-effect relationships were investigated in this research</td>
</tr>
<tr>
<td>Predictive</td>
<td>How does the performance of local SRI funds compare, on a risk-adjusted basis, with the returns of the three benchmark categories as identified in the hypothetical model (Figure 1.4)?</td>
</tr>
<tr>
<td></td>
<td>What are the strategic implications of the findings for investors and other key stakeholders in the South African SRI sector?</td>
</tr>
</tbody>
</table>

Source: Researcher’s own construct

As the research in question involves data and methodological triangulation i.e. a combination of positivistic and phenomenological paradigms, a closer inspection of both paradigms is warranted. As will be pointed out Section 2.5.4 of this chapter, such an approach is widely encouraged in the field of business ethics research.

2.5.1 A phenomenological (qualitative) research paradigm

A phenomenological research paradigm or mindset is concerned with understanding human behaviour from the researcher’s own frame of reference. The act of investigating a reality within a phenomenological context is thus seen as having an effect on that reality. Researchers using this paradigm essentially focus on the meaning that individuals attach to actual experiences related to a concept or a phenomenon rather than on measuring it (Miller & Salkind 2002:51). This further implies that phenomenologists have to interact personally with the objects (or units of analysis) being investigated. According to this approach the opinions of experts are sought rather than drawing samples from a population (Collis & Hussey 2003:53).
In line with this type of reasoning, the views of several local SRI fund managers and industry experts were sought during the phenomenological phase of this research.

Lancaster (2005:67) points out that phenomenological research often takes place in natural and uncontrolled settings; researchers tend to use small samples and the research yields rich, subjective data. Finally, it should be noted that phenomenologists formulate insights and theories as the research progresses. This is in stark contrast to positivists who rely on (and test) pre-existing definitions, theories and hypotheses (Cooper & Schindler 2006:199).

2.5.2 A positivistic (quantitative) research paradigm

A positivistic paradigm consists of several beliefs about how a researcher can make sense to others, and it is based on the assumption that all researchers are fallible. As such, it is posited that human behavioural studies should be conducted in the same manner as studies in the natural sciences (Blumberg et al. 2005:18-19). It can be stated that positivism is based on realism in that it searches for the truths ‘out there’.

According to Jankowicz (2005:110) ‘truth’ can only be recognised in two ways: either by seeing that an assertion makes sense by itself and is consistent with deductions made from it, or by recognising that it is supported by empirical evidence. This belief is based on the assumption that social reality is independent of research objectives and exists regardless of whether or not the researcher is aware of it. Therefore, the ontological debate on what constitutes the nature of reality can be kept distinct from the epistemological question of how researchers obtain knowledge of that reality. Furthermore, little regard is given in positivistic studies to the subjective state of the individual when analysing facts or causes of social phenomena (Babbie & Mouton 2001:49).
The positivists’ response to the question regarding the nature of the relationship between the researcher and the research problem is based on three fundamental principles, namely:

- the social world exists externally and is viewed objectively;
- research is value-free i.e. researchers do not allow values or bias to distort their objective views; and
- the researcher is independent, taking on the role of an objective analyst.

Positivists place a strong emphasis on the quantification of constructs and believe that the best, or the only, way of measuring the properties of phenomena is through quantitative measurement. The overriding features of a positivistic paradigm are therefore the production of quantitative data based on large samples as well as on theory and hypothesis testing.

As the research in question strived to test a number of quantitative hypotheses a positivistic research paradigm was adopted alongside that of a phenomenological paradigm.

2.5.3 A comparison between phenomenological and positivistic paradigms

A summary of the key features of the two main research paradigms is presented in Table 2.3. As can be seen from this table, a core distinction between the two research paradigms arises from their epistemological roots. Whereas a positivistic researcher strives to be independent from that being researched, the phenomenologist actively interacts with that being researched (Collis & Hussey 2003:49). As a consequence, data sourced by means of positivistic studies tend to be standardised and context free and whereas qualitative data tend to be rich and context bound. The differences between the two paradigms also extend to data analysis procedures as well as the requirements of reliability, validity and generalisability.
### TABLE 2.3: Comparison between phenomenological and positivistic research paradigms

<table>
<thead>
<tr>
<th>Phenomenological (qualitative) research paradigm</th>
<th>Positivistic (quantitative) research paradigm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Epistemological roots in phenomenology</td>
<td>Epistemological roots in positivism</td>
</tr>
<tr>
<td>Purpose is to construct detailed descriptions of social reality</td>
<td>Purpose is to test predictive and cause-and-effect hypotheses about social reality</td>
</tr>
<tr>
<td>Concerned with generating hypotheses</td>
<td>Concerned with testing hypotheses</td>
</tr>
<tr>
<td>Reasoning process utilises inductive logic</td>
<td>Reasoning process utilised deductive logic</td>
</tr>
<tr>
<td>Suitable for a study of a relatively unknown terrain; seeks to understand phenomena</td>
<td>Suitable for a study of phenomena that are conceptually and theoretically well developed; seeks to control phenomena</td>
</tr>
<tr>
<td>Participants’ natural language is used in order to come to a genuine understanding of their world</td>
<td>Concepts are converted into operational definitions; results appear in numeric form and are eventually in statistical language</td>
</tr>
<tr>
<td>The research design is flexible and unique and evolves throughout the research process; there are no fixed steps that should be followed and the design cannot be exactly replicated</td>
<td>The research design is standardised according to a fixed procedure and can be replicated</td>
</tr>
<tr>
<td>Data sources are determined by the information richness of settings; types of observations are modified to enrich understanding</td>
<td>Data are obtained systematically and in a standardised manner</td>
</tr>
<tr>
<td>Tends to produce qualitative data</td>
<td>Tends to produce quantitative data</td>
</tr>
<tr>
<td>Uses small samples</td>
<td>Uses large samples</td>
</tr>
<tr>
<td>Data are rich and subjective</td>
<td>Data are highly specific and precise</td>
</tr>
<tr>
<td>Location is natural</td>
<td>Location is artificial</td>
</tr>
<tr>
<td>Reliability is low</td>
<td>Reliability is high</td>
</tr>
<tr>
<td>Validity is high</td>
<td>Validity is low</td>
</tr>
<tr>
<td>Generalises from one setting to another</td>
<td>Generalises from sample to population</td>
</tr>
<tr>
<td>The unit of analysis is holistic, concentrating on the relationships between elements, context, etc.; the whole is always more than the sum</td>
<td>The units of analysis are variables that are atomistic (i.e. elements that form the whole)</td>
</tr>
</tbody>
</table>

Source: Adapted from Collis & Hussey (2003:55) and De Vos et al. (2002:81)

#### 2.5.4 Conclusion: motivation for the adopted research paradigm

Figure 2.4 is instrumental in providing a final motivation in favour of a data and methodological triangulation approach to be adopted in this study. It shown in the top section of Figure 2.4 that the adoption of a phenomenological approach leads to the development of theories on SRI, whereas a positivist approach (shown in the bottom section of Figure 2.3) centres on the testing of hypotheses on local SRI fund performance.
2.6 CRITERIA FOR A WELL-DESIGNED RESEARCH PROJECT

Having explained why a combination of phenomenological and positivistic methodologies is the most appropriate methodology for this study, it is important to ensure that the criteria for a well-designed research project are incorporated in the overall research design framework of this study. As illustrated in Figure 2.2, three basic sets of criteria, namely reliability, validity and generalisability are widely used to evaluate the credibility of a research project. Besides these criteria, a collection of other criteria may be added. It is important to demonstrate how this research project accommodates these criteria.
2.6.1 Reliability

According Tull and Hawkins (1993:319) reliability refers to the repeatability of a study. They argue that a project is reliable only if different researchers get the same results when the study is replicated at a later stage or when a different sample is used. Cooper and Schindler (2006:321) likewise point out that a study is reliable only to the degree to which it generates consistent results (assuming that there are no real changes in what is measured or the circumstances surrounding the measurement).

Leedy and Ormrod (2005:88) show that reliability largely depends on the methods employed to collect and analyse data. A research instrument is deemed to be reliable to the extent that it contributes towards consistent results. A typical example is a bathroom scale that consistently overweighs a person by five kilograms. If the scale erratically overweighs from day to day, it is not reliable and therefore may not be regard as valid (Blumberg et al. 2005:385). In a phenomenological study, the researcher is often seen as the research instrument to emphasise his/her close involvement with that paradigm (Collis & Hussey 2003:151).

A number of measures were taken to ensure the reliability of this research, in terms of both the phenomenological and positivistic components of the research. These measures were:

- to interpret published and unpublished (in-house) secondary sources correctly;
- to select appropriate methods for drawing qualitative and quantitative samples;
- to source primary qualitative data from experts in the local SRI sector;
- to source primary quantitative data from credible financial data services providers (see Section 2.7.1 of this chapter for an overview of these providers);
- to verify SRI fund particulars with fund managers to ensure completeness and accuracy;
- to analyse qualitative data according to prescribed phenomenological approaches; and
- to analyse quantitative data according to appropriate statistical conventions and risk-adjusted performance measures.

Given the abovementioned precautionary measures, it will be demonstrated that the findings of this research can be deemed reliable.

2.6.2 Validity (internal validity)

Whereas reliability deals with repeatability, validity shows the extent to which the findings of a study accurately reflect what really happened in a specific situation (Collis & Hussey 2003:58). Validity can also be defined in terms of the absence of self-contradiction and is closely linked to the research instrument used (Lancaster 2005:71). The validity of a research instrument more specifically refers to the extent to which it measures what it is supposed to measure (Leedy & Ormrod 2005:28; Blumberg et al. 2005:380).

Validity takes on different forms with each form being important in different situations (Blumberg et al. 2005:380; Leedy & Ormrod 2005:28). The first two types of validity described below pertain to both the phenomenological and positivistic dimensions of this research, whereas the last two only deal with the positivistic dimension.

**Content validity** relates to the extent to which a research instrument is able to reflect the findings in respect of a representative sample of the content area (domain) being measured. With regard to the phenomenological dimensions of this study, content validity refers to the sourcing and analysis of qualitative data by the researcher. Acknowledged phenomenological data sourcing and analysis methods were employed to ensure that the content validity of this research is not jeopardised (Collis & Hussey 2003:252).

Due to the fact that no questionnaires were distributed to source primary quantitative data, the issue surrounding content validity is not that clear.
Primary data were sourced from credible financial data services providers and interpreted according to procedures advocated in leading international studies on SRI fund performance (Kurtz & DiBartolomeo 1996:35; Luther, Matatko & Corner 1992:57; Mallin et al. 1995:483; Reyes & Grieb 1998:4). Collectively the above mentioned strategies contributed to the content validity of this study.

**Face validity** refers to the extent to which, on the surface, a research instrument appears to be measuring a particular characteristic (Zikmund 2003:302). In terms of the phenomenological dimension of this study face validity was ensured by posing the same problem statement and research questions to all interviewees in the sample of SRI fund managers and industry experts. These questions that were posed are presented in Annexure A. In terms of the positivistic dimension of this research, face validity was ensured by applying risk-adjusted performance measures which are widely used in SRI research internationally.

**Criterion validity** reflects the ability of a measure, for example a portfolio performance measure, to correlate with other measures of the same construct (Zikmund 2003:302). It will be demonstrated in Chapter Eight that, although the use of different portfolio performance measures leads to some disparities in the ranking of funds, all of them strive to measure some aspect of a fund’s risk-adjusted performance (Leggio & Lien 2003a:211, 2003b:82).

**Construct validity** is established by the degree to which a measure confirms a network of related hypotheses that were generated from a given theory (Zikmund 2003:303). Construct validity thus requires that the empirical evidence generated by a measure be consistent with the theoretical logic of the underlying concepts. When researchers ask questions (or make statements) as a way of assessing a construct, they should have obtained some kind of evidence that their approach does, in fact, measure the construct in question (Leedy & Ormrod 2005:92). As will be shown in Chapter Eight, the measures used to test the stated hypotheses, do in fact confirm
theories pertaining to the risk-adjusted performance of actively managed investment portfolios.

As mentioned in previous sections, the positivistic research paradigm focuses on the precision of measurement and the ability to repeat an experiment. Research errors such as faulty research procedures, poorly drawn samples and inaccurate or misleading measurements can however undermine validity (Jankowicz 2005:111). In contrast, phenomenological research projects generally have high levels of validity as the researcher acts as the research instrument (Collis & Hussey 2003:59).

For this research, it is imperative that validity be ensured. To meet this requirement, pre-conditions are that the overall research design of this study must be sound; that the most relevant research procedures be adopted; that appropriate samples be drawn; and that suitable investment analysis and statistical procedures be performed.

2.6.3 Generalisability (external validity)

Generalisability, also called external validity, is concerned with the application of research findings to cases or situations beyond those examined in the study (Lancaster 2005:9; Zikmund 2003:273). It can further be defined as the extent to which a researcher can come to conclusions about one thing (often a population), based on information from another (often a sample).

With regard to the research in question, generalisability implies that the findings of the local SRI funds’ risk-adjusted performance can be applied to the entire population of SRI funds in South Africa.

2.6.4 Other criteria for good research

In addition to reliability, validity and generalisability a good research project should also display attributes such as the ones described below (Jankowicz 2005:55-56; Collis & Hussey 2003:19).
- **Originality:** This requirement implies the capacity to act or to think independently regarding the research and not to simply copy someone else's work. Originality is therefore an important attribute when research is conducted. In this research, originality was *inter alia* demonstrated by (i) the construct of the comprehensive conceptual model (Figure 1.3 of Chapter One), (ii) the construct of the hypothetical model (Figure 1.4 of Chapter One), (iii) the research design framework (Figure 2.2 of this chapter), (iv) the combination of two research methodologies in a unique manner, and (v) the application of a number of ethical decision making approaches to the practice of SRI (Section 4.7 of Chapter Four).

- **Scientific theoretical base:** This criterion refers to a critical and contextualised literature review on which the research is founded. For the research in question, an analysis of the relevant secondary sources will be set out in Chapters Three to Six. The analysis of secondary sources in this study will be used to generate theories regarding SRI activities and fund performance in South Africa.

- **Purposiveness:** This requirement pertains to the pre-condition that the researcher should have a clear objective in mind with the research, as was demonstrated in Section 1.5 of Chapter One.

- **Logical research framework:** This criterion is underpinned by Figure 2.2 of this chapter which depicts the overall research design framework for the research in question.

- **Underpinned by a conceptual framework:** A comprehensive conceptual model consisting of eighteen independent variables impacting on the demand for SRI funds (the dependent variable) was presented in Figure 1.3 of Chapter One.

- **Integration between research methodology, literature review, data analysis and conclusions:** This holistic requirement will be demonstrated in Chapter Nine where the conclusions of the research, which follow
logically from the findings, will be presented. The research findings have to contribute towards the existing body of knowledge on the phenomenon of SRI in South Africa. Further, the strategic implications of the findings will be explained and the recommendations made will be robust in terms of practicality.

- **Interpretability:** Cooper and Schindler (2006:323) argue that this aspect of research is relevant when persons other than the original researcher need to interpret the results. The positivistic phase of this research is highly interpretable as conventional portfolio performance measures were used to evaluate the risk-adjusted performance of local SRI funds.

- **Practical application:** Gill and Johnson (2002:15) argue that publicly funded research (such as the project in question) should be devoted to problems which have a practical application. As pointed out earlier, the South African government has recognised the valuable role that SRI can play in channelling more funds into areas of national priority. They are furthermore aware of the fact that pension fund trustees and institutional asset managers need to be convinced that SRI does not entail a financial sacrifice. As such, funds are dedicated to research projects (such as this one) which would address pension fund trustees and institutional asset managers’ concerns.

- **High ethical standards are upheld:** With regard to this criterion, Cooper and Schindler (2003:14) argue that a study’s recommendations ought not to exceed the scope of the study and that its methodology and limitations reflect the researcher’s restraint and concern for accuracy. With regard to the research in question, high ethical standards were maintained throughout the various stages of the data collection and analysis phases as well as in the reporting of the research findings.

The last items from Figure 2.2 which remain to be discussed relate to the methods of data sourcing and analysis.
2.7 METHODS OF DATA SOURCING AND ANALYSIS

2.7.1 Data sourcing

Data refers to all the known facts or things that a researcher could gather for his/her study and which could be used for inference or estimation (Collis & Hussey 2003:160). More specifically primary (raw) data refers to original data collected at the source, whereas secondary data refers to existing data originating from books, journals, newspapers, Internet websites, published statistics and surveys. To give effect to the research objectives of this study, both secondary and primary data were sourced.

In sourcing secondary data a comprehensive literature review was undertaken on the various elements of SRI. Secondary sources dealing with investment analysis and related subject disciplines such as financial management, business ethics and business research were consulted. International and national literature searches at the Library of the Nelson Mandela Metropolitan University included databases such as DIALOGUE, SABINET, ABI/FORM, Business Link (full-text database), South African Studies (CD/ROM), Dissertation Abstracts International, NEXUS (Human Sciences Council) and the Internet. Secondary data were accessed from other international and national libraries by means of the interlibrary loan facilities at the Nelson Mandela Metropolitan University.

Given the adoption of a data and methodological triangulation strategy in this research, two sets of primary data were sourced, i.e. qualitative and quantitative data.

Primary qualitative data was sourced from a sample of twelve local SRI fund managers and industry experts. The respondents' names and affiliations are contained in Annexure A. The sample was constructed based on the respondents' specialised knowledge and insight of the SRI sector in South Africa. According to Hair, Babin, Money and Samouel (2003:139) the use of small, carefully selected samples of experts are typical of qualitative research
and very useful in clarifying concepts and complex problems. In the case of this research, the willingness of respondents to participate in the research (due to time constraints and confidentiality agreements) also contributed to the choice of this convenience sample.

Semi-structured, face-to-face interviews were conducted with respondents in Cape Town in July 2003 as well as in Johannesburg in March 2006. The open-ended questions posed during the interviews are contained in Annexure A. The questions mainly focussed on issues such as:

- the definition of SRI in the South African context;
- the drivers of SRI in South Africa;
- the challenges facing the SRI sector in South Africa;
- legislating SRI in South Africa; and
- the financial performance of local SRI funds.

Despite the problems associated with face-to-face interviews, such as interviewer bias, they do allow the researcher to establish empathy and interest in the study, probe complex issues and clarify respondents’ queries (Collis & Hussey 2003:170). Semi-structured interviews were conducted in this study given their flexibility, as compared with structured interviews, in terms of exploring emerging issues as they arise (Hair et al. 2003:136).

In order to ensure stimulus equivalence i.e. the methodological requirement of asking the same questions in the same way to all the interviewees, interview questions were emailed to respondents prior to meeting them on a face-to-face basis (Hair et al. 2003:140).

In terms of sourcing primary quantitative data, a sample consisting of 24 South African SRI funds was drawn. A detailed description of the sampling procedure and data collection methods will be presented in Chapter Seven. Data was furthermore sourced on the SRI funds’ respective benchmark indices, a matched sample of conventional (non-SRI) unit trusts, a risk-free asset and two proxies used for the market index in South Africa.
2.7.2 Data analysis

Collis and Hussey (2003:151) note that some qualitative data collection methods are so intertwined with the analysis of the data that it is impossible to separate the two procedures. Nonetheless accepted conventions pertaining to qualitative data analysis were closely adhered to in this research. Qualitative data were analysed using both quantifying and non-quantifying methods.

With reference to the quantification of qualitative data, content analysis was chosen as the most appropriate method. Content analysis is a way of systematically converting text to numerical variables for quantitative analysis (Collis & Hussey 2003:254). The analysed material is classified into various coding units which are normally pre-constructed by the researcher. Thereafter quantitative procedures, such as establishing frequencies, can be employed (Babbie & Mouton 2003:390).

In the case of this research, the analysed material consisted of literature on local SRI funds’ investment objectives which were coded according to SRI strategies, such as negative (exclusionary) screening and shareholder activism. Section 3.7 of Chapter Three contains the results of this process. Given the small number of SRI funds established in South Africa over the research period (1 June 1992 – 31 March 2006), the investment objectives of the entire population of SRI funds (N = 43) could be evaluated.

Collis and Hussey (2003:254) stress that the process of codification should be based on an analysis and theoretical understanding of the substance of the material. This requirement was met by thoroughly describing generic SRI strategies in Chapter Three before coding, counting and interpreting the SRI strategies employed by local SRI fund managers.

The qualitative data sourced through semi-structured, face-to-face interviews were analysed through a process of analytical induction i.e. by means of grounded theory (Jankowicz 2005:121). The initial stage of the analysis also consisted of coding whereby codes or ‘labels’ were used to separate, compile
and organise the collected data. The codes, which reflected the nature and content of the data, were then organised into ‘themes’ (Collis & Hussey 2003:272). Examples of codes used included “Drivers of SRI in South Africa” and “Ethical insights into the practice of SRI”.

Once concepts and categories were identified and coded, the researcher examined recurrent patterns and inconsistencies (Jankowicz 2005:354). Insights gained from this stage of the data analysis are presented in Sections 5.3.2 and 5.3.3 of Chapter Five. In the final stage of the data analysis, the researcher developed a substantive theory of SRI in South Africa based on the insights gained. These insights are summarised in the comprehensive conceptual model of SRI in South Africa (Figure 1.3 of Chapter One).

This process of analytical induction closely corresponds with the four processes of qualitative data analysis as described by Lindlof (1995:35) and Morse (1994:20), namely comprehending, synthesising, theorising and re-contextualising. Lindlof (1995:35) and Morse (1994:20) show that the outcome of these four processes also yield ‘themes’ which eventually lead to the formulation of new theories (mainly substantive ones).

Quantitative data were analysed in four broad phases. Firstly, monthly returns were calculated for the 24 SRI funds and the constituents of the three benchmark categories. Secondly, the unadjusted (raw) returns of the SRI funds were calculated. Thirdly, the risk-adjusted returns of the SRI funds were evaluated using the Sharpe, Sortino and Upside-potential ratios. Jensen’s alphas were also calculated based on the single-factor CAPM and two-factor Van Rensburg and Slaney APT model. Next, the research hypotheses were tested by using appropriate measures of risk-adjusted portfolio performance and conducting suitable tests to establish statistical significance.

2.8 SUMMARY AND CONCLUSIONS

This chapter described the overall research design and methodology to be use in this research. The questions why, what, when, where, how and on
whom the research was conducted, were answered in this chapter. At the beginning of the chapter an overview was presented of the purpose of business research in general and business ethics research in particular. This was followed by a research design framework for the research in question.

It was motivated that this study:

- exhibits features of both qualitative and quantitative research;
- can be labelled as exploratory, descriptive and predictive research;
- uses both inductive and deductive reasoning; and
- can be classified as applied research.

An analysis of the research problem, research questions, research hypotheses, units of analysis and types of data to be sourced, collectively suggested the adoption of data and methodological triangulation strategies. The criteria for a well-designed research project were described, with an indication of how these requirements would be addressed in this research. Finally, a brief overview of the strategies dealing with data sourcing and collection was provided.

By presenting the research design framework, it is evident that the researcher is aware of:

- different types of research and how the research in question can be classified;
- different research paradigms and the necessity to motivate the choice of the adopted paradigm;
- criteria for a good research project and the implementation thereof;
- methods of data sourcing and analysis; and
- the necessity of a solid research approach and execution.

The following chapter will provide an overview of the historical development of SRI as well as a discussion on the three main strategies typifying SRI, namely screening, shareholder activism and cause-based investing.
CHAPTER THREE

INTRODUCTION TO SOCIALLY RESPONSIBLE INVESTING

3.1 INTRODUCTION

This chapter addresses secondary research objectives two (a) and two (b) (as stated in Section 1.5.2 of Chapter One), namely to conduct an extensive review of the literature (supplemented with semi-structured, face-to-face interviews with local SRI fund managers and industry experts) on:
- the historical development of SRI globally and in South Africa;
- the strategies employed by socially responsible investors in South Africa and abroad.

It is deemed necessary at this point to restate the definition of SRI adopted in this study, namely that SRI consists of “… a set of approaches which include moral as well as ESG considerations along with conventional financial criteria in decisions regarding the selection, retention and realisation of particular investments”.

Given that SRI mainly involves investments in listed financial securities, its history cannot be separated from the development of stock exchanges and financial instruments, particularly collective investment schemes. Nor can SRI’s history be divorced from the views held by society regarding morality and wealth. Developments in the light of the latter will be presented during two distinct periods, namely the pre-capitalistic era (circa 2000BC to 1500AD) and the capitalistic era (1500AD to the present).

After describing the historical development of SRI, the focus of this chapter will shift to three prominent SRI strategies, namely screening, shareholder activism and cause-based investing. A number of lesser-known forms of SRI will then be identified, followed by a description of the SRI strategies employed by SRI fund managers in South Africa.
3.2 THE HISTORY OF SRI

3.2.1 The development of stock exchanges and collective investment schemes

King Phillip the Fair of France called for the creation of the first known stock exchange in the 12th century (Grosvenor & Grosvenor 1977:121). The purpose thereof was to facilitate medieval credit transactions which required supporting documentation such as drafts, notes and bills of exchange. During this time Flanders also played a pivotal role in medieval trade. Merchants gathered in Bruges in front of the house of the Van der Burse family to negotiate transactions and soon the Van der Burse name became synonymous with trading. In time a 'bourse' (directly translated as 'purse') came to signify a stock exchange.

In 1309 Flemish merchants institutionalised their informal meetings and became known as the ‘Bruges Bourse’. Other ‘bourses’ soon opened in Ghent and Amsterdam. Thirteenth century records also show that bankers in the city-states of Venice, Genoa and Florence traded in government securities at similar ‘bourses’ (Wikipedia Encyclopedia 2006a).

Italian bankers and merchants during the early Renaissance (circa 1300AD) pioneered much of what later became standard capitalist practices such as partnership agreements, holding companies, marine insurance, credit transfers and the double-entry bookkeeping system (Grosvenor & Grosvenor 1977:130). Hale (1966:36) argues that Italy’s head start into capitalism enabled its entrepreneurs and financiers to survive the economic depressions and epidemics that swept across Europe in the 14th and 15th centuries.

The 16th century saw the rise of influential nation states such as Hapsburg-Spain, Portugal and France. Wealth flowed into these countries as they conquered, colonised and exploited new regions in Africa, Asia and the Americas (Perry 1993:263). The Dutch followed suite and by 1602 the Dutch East India Company made history by listing its shares on the Amsterdam
stock exchange, a development which paved the way for modern day investments in listed financial securities (Wikipedia Encyclopedia 2006a).

By the 18th century Dutch financial power and commercial prowess waned and England emerged as the world leader in finance, manufacturing and trade. The London stock exchange came into existence in 1773 followed by a number of stock exchanges in American cities such as Philadelphia (1791) and New York one year later (Wikipedia Encyclopedia 2006a). By the 1900s stock exchanges were firmly established in most Western European countries with new exchanges emerging in Asia, Eastern Europe, as well as parts of Latin America and Africa. The Johannesburg Stock Exchange (JSE) came into existence in 1887 one year after the discovery of gold on the Witwatersrand to provide for the growing capital requirements of fledgling mining companies (Van Zyl, Botha & Skerritt 2003:288).

Although the notion of diversification of investment risk dates back to medieval times, the first recorded retail mutual fund, the Foreign and Colonial Government Trust, only saw the light in London in 1868. It promised investors of ‘modest means’ the same advantage as large capitalists by “…spreading their investments over a number of different stocks” (Mutualfunds 2006a). The creation of retail mutual funds enabled investors to pool their money with other investors who had similar objectives, to spread their risk and to benefit from the skills and experience of professional investment managers.

Although the first retail mutual fund in the USA was introduced in 1924, interest in mutual funds only took off in the 1940s. The lack of support prior to the 1940s has been attributed to the stock market crash of 1929, the resultant depression and the lack of investment regulation in the USA (MutualFunds 2006a). Developments in the global financial markets in subsequent years gave rise to a burgeoning collective investment scheme industry accounting for an inflow of $305 billion in the third quarter of 2005 (Bonorchis 2006a).

Even though the first retail collective investment scheme in South Africa was already launched in 1965, the market has only started showing signs of
growth since the 1980s (Oldert 2006:32). In 2005 assets in the local industry totalled more than R400 billion with the total number of local funds reaching a record number of 617 (Bonorchis 2006a).

Given the dual focus of socially responsible investments on economic and moral issues, attention will now be directed to developments in morality as pertaining to investments matters. Particular emphasis will be placed on society’s views towards morality and wealth during two periods, namely the pre-capitalistic era (circa 2000BC to 1500AD) and the capitalistic era (1500AD to the present).

3.2.2 Changing societal views on morality and wealth

During the pre-capitalistic era (circa 2000BC to 1500AD) two dominant forces shaped the Western world’s view of morality and wealth. These were the Judeo-Christian religion and the espousal of rational thought introduced by the ancient Greeks.

The Hebrews believed that God bestowed moral freedom on people i.e. that they have the capacity and personal responsibility to choose between good and evil (Perry 1993:29). The Hebrews also placed a strong emphasis on the dignity of the individual and the need to express mercy towards the poor and oppressed, sentiments entrenched by Jesus of Nazareth.

Akin with the Hebrews, the ancient Greeks asserted that individuals are responsible for their own behaviour and that wealth was nothing to be proud of, unless it could be employed for the benefit of the common good. Makedon (1995) points out that there were undoubtedly many ancient Greeks who wallowed in the accumulation of their possessions, but that they did not represent the acknowledged ideal of the time. He states that ancient Greeks did not consider wealth anything to be proud of, and that those individuals who sought wealth or power for their own sake were often “…shunned, stumped out, or hated as the occasion may allow”. Similar attitudes permeate the present day practice of SRI, although the focus is now more on the
economic goals of groups of individuals (organised as shareholders or owners of businesses) than on individual members of society.

Upon observing the adverse effects of affluence on morality, Stoic philosophers (circa 500BC) warned ‘wise individuals’ not to pursue wealth, power or fame for “…the pursuit thereof would only provoke anxiety” (Makedon 1995). The apostle Paul, living in the first century AD, likewise cautioned young Christians that the love of money is the root of all kinds of evil (Spirit Filled Life Bible: 1 Timothy 6:10).

The aforementioned views underpinned much of Western morality for centuries to come but were slowly being replaced by a growing secular (capitalistic) outlook from the late Middle Ages, circa 1500AD, onwards. Several Catholic bankers and merchants in Italy for example profited from usury, a practice utterly condemned by the Church. However, instead of cutting themselves off from the Roman Catholic Church many merely kept a ‘conscience account’ for making contributions to charitable causes, much in the same spirit as modern day corporate philanthropists do (Hale 1966:16).

Stevenson (2005:60) remarks that the Reformation of the 16th century laid the foundation of early capitalism as it gave people a religious obligation to pursue wealth as well as the self-discipline to do so. Convinced that prosperity was God's blessing and poverty His curse, Calvinists had a spiritual inducement to labour industriously and to avoid laziness; they viewed hard work, diligence, dutifullness, efficiency, prudence and a disdain for pleasurable pursuits as necessary traits for businessmen to succeed in a highly competitive world (Stevenson 2005:60).

Therefore, by the time of the Industrial Revolution (circa 1760AD) the exemplary Christian was no longer a selfless saint, but rather an enterprising businessman, motivated by self-interest. Unfortunately, the Protestant values of work, thrift and prudence eventually led to harsh individualism, materialism, selfishness and callousness (Perry 1993:337).
Liberal economic thought during this period gave rise to the *laissez-faire* approach which was characterised by governments’ abstention from interference in trade and commerce (Bosch, Tait & Venter 2006:729). Adam Smith (1732-1790), a leading liberal of the time, maintained that a free economy, in which private enterprise was unimpeded by government regulations, was as important as political freedom for the wellbeing of the individual and the community.

Liberalists believed that when people acted from self-interest (as espoused by Calvinist doctrine), they worked harder and achieved more (Stevenson 2005:189). Due to their belief that individuals were responsible for their own misfortunes, liberals were often unmoved by the suffering of the poor (Hobsbawm 1962:251).

Criticism was however mounting against the ‘accepted’ business practices of child labour and slavery as manifested in early capitalism. Religious groups, such as the Quakers, who held that the light of God’s truth worked in every human being, vehemently opposed slavery. They subsequently refrained from owning slaves or investing in businesses associated with the slave trade. As the Quakers furthermore shunned enterprises associated with gambling and the production and/or sale of alcohol and weapons, they effectively became the first ‘modern’ socially responsible investors (Scheuth 2003:189).

The French Revolution of 1789 marked a significant turning point in Western morality. The French Declaration of the Rights of Man and of the Citizen emphasised the natural rights of individuals and sanctioned resistance against governments that deprived individuals of these rights (Perry 1993:310). The French (and later the US) declaration laid the foundation of deontological or duty-based ethics, which feature strongly in current day SRI philosophy. An overview of deontological considerations is presented in Section 4.7.3 of Chapter Four.

Between 1860 and 1880 the *laissez-faire* policy reached its peak and resistance against free capitalism started to set in (Bosch *et al.* 2006:729).
Revolutionaries such as Marx (1818-1883) and Lenin (1870-1924) fervently opposed free capitalism claiming that it does not only produce material poverty, but also poverty of the human spirit. Their ideologies eventually ignited the Russian revolution of 1917.

Perry (1993:263) points out that World War I brought about a change in the social consciousness of the West as it called into question established norms and exacerbated the spiritual crises of preceding generations. Sceptical of core liberal beliefs such as the essential goodness of human nature, the primacy of reason, the efficacy of science and the inevitability of progress, many scholars turned back to Christianity in an attempt to explain the crises of the 20th century. In 1933 Dawson, a Catholic theologian, wrote “…if our civilisation is to recover its vitality, or even to survive, it must cease to neglect its spiritual roots and must realise that religion is not a matter of personal sentiment which has nothing to do with the objective realities of society, but is, on the contrary, the very heart of social life and the root of every living creature” (Mandala 2003:23).

Views like these gave rise to the first retail SRI funds in the USA. The Pioneer Fund, launched in 1928, was the first of its kind and catered specifically for the needs of Methodist investors by employing a range of exclusionary ‘sin’ screens (Schwartz 2003:196).

At the height of the Great depression in the 1930s, US president Franklin D. Roosevelt was reported as saying: “…We have always known that heedless self-interest was bad morals; we know now that it is also bad economics” (A brief history of socially responsible investing 1998). The wisdom of this statement was however rapidly forgotten when, after World War II, most Americans once more pursued profit maximisation at all costs.

In the period following World War II, philosophers and theologians increasingly criticised Western society for its espousal of secular rationality and argued that ‘reason without God’ degenerates into selfish competition, domination, exploitation and unrestrained hedonism (Stevenson 2005:203).
The prevailing global political climate of the 1960s and 1970s further sparked interest in SRI. Issues emerging from the cold war, anti-Vietnam sentiments, the civil rights and women’s liberation movements fostered a greater sensitivity among investors towards moral as well as ESG considerations. During the 1970s, anti-nuclear attitudes and labour issues evolved to take centre stage in the SRI arena (Guay et al. 2004:126).

Political developments in South Africa provided a strong impetus for the growth of the SRI movement in the USA in the 1970s. In 1974 the American Reverend Leon Sullivan, articulated a set of standards to which banks and businesses with operations in South Africa would be held accountable. Soon thousands of US investors began setting minimum requirements in terms of the Sullivan Principles and failure by banks and businesses to subscribe to these principles led to their immediate exclusion from investment portfolios. Investors in Canada, the UK, Western Europe (in particular the Netherlands) and Japan rapidly followed suit by divesting from banks and businesses with South African operations (Mandala 2003:15).

Environmental disasters in the 1980s, such as the explosion at the Chernobyl nuclear reactor in the Ukraine in 1986, the Exxon Valdez oil spill in the Gulf of Alaska in 1989, as well as vast amounts of new information about global warming and ozone depletion shifted the attention of the global investment community to environmental concerns. As a result a large number of ‘green’ or environmentally oriented funds came into existence in developed countries (White 1995:326).

During the late 1980s a global concern for human rights also came to feature prominently on the SRI agenda (Scheuth 2003:190). This period saw the establishment of the first SRI funds in South Africa as trade unions refused to invest their members’ contributions in local businesses that were supportive of the apartheid regime or those that practised poor industrial relations (De Cleene & Sonnenberg 2004:15).
The devastating effects of corporate scandals in the new millennium rekindled the debate regarding corporate governance initially introduced by Berle and Means in 1932. According to a global survey conducted in 2005, 62 percent of investment managers felt that corporate governance concerns were the most important considerations in mainstream investment analysis (2006 Fearless Forecast: What do investment managers think about responsible investing? 2006:4). As corporate governance deals with issues such as board accountability and independence, executive compensation, financial disclosure and internal controls, it essentially reflects on the moral character and behaviour of employees and managers in the 21st century.

In the introduction and background of the study (Section 1.1 of Chapter One) three prominent SRI strategies were introduced and illustrated in Figure 1.1. For the benefit of the reader Figure 1.2 is now replicated as Figure 3.1 followed by a complete exposition of the depicted SRI strategies. It should be noted that socially responsible investors often combine these strategies when constructing and managing investment portfolios.

As the SRI movement developed along the lines of a screening approach, this strategy will be outlined first.

3.3 SCREENING AS AN SRI STRATEGY

According to Kinder and Domini (1997:12) a SRI screen serves as a non-financial criterion applied to a universe of potential investments. Two basic frameworks can be used when formulating screens, namely a self-referential framework and a comprehensive framework (Sparkes & Cowton 2004:46). The former refers to investors who take a stand on what they do not want to own and has given rise to the use of negative or exclusionary screens. In contrast, the comprehensive approach refers to the evaluation of businesses’ role in society and has led to the development of positive or inclusionary screens as well as a hybrid approach, namely a best-of-sector approach, which combines positive and negative screening practices on a sector basis.
The following section will provide a description of all three screening strategies along with their shortcomings. Reference to the respective SRI approaches within the South African context is made in Section 3.7 of this chapter.

**FIGURE 3.1: Prominent SRI strategies**

![Diagram of SRI strategies](source: Researcher's own construct)

### 3.3.1 Negative (exclusionary) screening

#### (a) Background to negative (exclusionary) screening

As pointed out before, members of religious groups were the first investors to use a self-referential framework by avoiding investments in ‘sin shares’, that is securities of companies associated with the production and/or sale of alcohol, tobacco, firearms and weapons as well as those involved with gambling (Sparkes & Cowton 2004:46; Guay et al. 2004:126). Many still do so today. Roman Catholics, who are opposed to abortion and birth control, have also been known to exclude hospitals which offer abortion services as well as the
manufacturers of abortifacients and birth control medication and devices (Whitten 2004:20).

Detailed investment guidelines and criteria regarding ‘acceptable investments’ are outlined on websites tailored to the needs of members of several denominations within the Christian faith (Ethical considerations for Quaker investors 2001; Crosswalk.com 2006; Christian Investment Services 2006; Christian Brothers Investment Services 2006; Crosswalk.com 2006).

Similar websites exist for Jewish investors who wish to invest according to the tenets of their faith (Religious Action Centre for Reform Judaism 2006) as well as for Islamic investors (iHilal Financial Services 2006; Banker Middle East 2006).

Islamic investors screen companies based on Shari’ah principles which are in accordance with Islamic law and generally exclude companies associated with alcohol, gambling, pornography, non-Halaal foodstuffs (such as pork), tobacco, firearms, weapons and entertainment. Shari’ah compliant funds also exclude financial institutions as the Qur’an expressly prohibits any association with the charging of interest or usury (see Exhibit 3.1 for two extracts from the Qur’an in this regard). In similar fashion, Shari’ah compliant funds also excluded companies with high levels of financial leverage (gearing), debtors and interest income (Needham 2004:13).

In sharp contrast to excluding ‘sin shares’, one particular US mutual fund, the Morgan FunShares fund, only invests in addictive products such as tobacco, alcohol and gambling. The founder of the fund argues that companies have the right to sell products which tend to be harmful to the human body and soul just as individuals have the right to use them (Schwartz 2003:197).

Other (non-faith based) socially responsible investors screen potential investments for highly specialised issues (e.g. uranium) or cater for the concerns of specific groups such as animal rights activists (Whitten 2004:20). In terms of anti-defence screens, St Goar (2002:93) notes that the September 11
attacks in New York in 2001 and the subsequent ‘war on terrorism’ did not have a widespread impact on socially responsible investors, contrary to what might have been expected.

EXHIBIT 3.1: Extracts from the Qur’an regarding usury

Hadith - Sahih Bukhari, 2.468, Narrated Samura bin Jundab, r.a.

He speaks of in a dream related to the Prophet that there is a river of blood and a man was in it, and another man was standing at its bank with stones in front of him, facing the man standing in the river. Whenever the man in the river wanted to come out, the other one threw a stone in his mouth and caused him to retreat back into his original position. The Prophet was told that these people in this river of blood were people who dealt in usury.

Al-Baqarah 275

Those who eat Ribâ (usury) will not stand on the Day of Resurrection except like the standing of a person beaten by Satan leading him to insanity. That is because they say: "Trading is only like Ribâ (usury),” whereas Allâh has permitted trading and forbidden Ribâ (usury). So whosoever receives an admonition from his Lord and stops eating Ribâ (usury) shall not be punished for the past; his case is for Allâh (to judge); but whoever returns [to Ribâ (usury)], such are the dwellers of the Fire - they will abide therein.

Source: The Institute of Islamic Banking and Insurance (2006)

In the weeks following the attacks, very few SRI funds announced changes in their anti-weaponry screening criteria and many continued to invest in US treasury securities, which represent an indirect investment in firearm and weapon manufacturing. In this regard, Arthur (1999:41) asserts that investments in treasury securities are not ethical as he argues that governments violate a fundamental human right by financing defence-related activities. Many SRI funds however invest in treasury securities for diversification and stability purposes.

An ethical case for an avoidance strategy follows from the prima facie argument that holding a share in a company suggests approval of their activities, and that approving an immoral action is immoral (Larmer 1997:397). By owning a security and earning a return from it, a shareholder thus indicates some acquiescence or support for the activities of the company in question.
Mills (1996:3) follows the same line of thought when stating that “…the righteousness of any monetary return is conditional upon the absence of the exploitation of customers, workers, creditors and suppliers”. The views by Larmer and Mills are strongly supported in this research and will be revisited in Chapter Four when the ethical foundations of SRI are evaluated.

An overview of negative screening would be incomplete without considering some of its inherent weaknesses.

(b) A critique of negative (exclusionary) screening

The first major drawback of an exclusionary screening strategy is that it reduces efficient portfolio diversification (Knoll 2002:686; Sparkes & Cowton 2004:55). This drawback is of particular concern for South African investors given the relatively small size of the JSE compared with global securities exchanges (Leeman 2003:6). Baue (2002) explains that the exclusion of certain JSE-listed companies or entire sectors will significantly reduce investors’ options and will result in poorly diversified portfolios.

In dealing with this problem, investors typically use a maximum percentage, say ten percent, of a company’s turnover in a problem area as an exclusionary threshold. According to Sparkes and Cowton (2004:45), the use of such an acceptability threshold, poses a problem in principle. They argue that the use of an arbitrary cut-off point, rather than absolute avoidance, in effect condones the presence of certain apparently undesirable attributes in an investment portfolio.

Socially responsible investors might also use ‘case specific’ exclusionary screens to limit the adverse effect of screening on diversification, animal testing being a case in point. Socially responsible investors might, for example, shun cosmetic companies that conduct animal testing but might include pharmaceutical companies that undertake animal testing in the development of potentially life-saving drugs. In cases where animal testing is unavoidable, socially responsible investors typically require that it be done in a humane manner (Selcraig 2006:102). Yet another approach in dealing with
the problem of reduced portfolio diversification is using a best-in-sector approach (discussed in Section 3.3.3 of this chapter).

A second major criticism of exclusionary screening is that ostracising ‘bad companies’ doesn’t necessarily reform them. From a theoretical perspective it could be argued that exclusionary screening would raise a company’s cost of capital (as fewer investors are willing to provide capital to the company) thus lowering its value (Reilly & Brown 2000:797). Heinkel, Krauz and Zechner (2001:431) however found that excluding polluting companies from portfolios did not persuade them to reform as the cost of environmental reform outweighed the capital cost of being eschewed.

Researchers such as Rudd (1979:5), Posnikoff (1997:76) as well as Teoh, Welch and Wazzan (1999:35) likewise found that the exclusion of banks and companies with South African operations from investment portfolios in the 1970s and 80s had no significant effect on the institutions’ market valuations. These researchers all remarked that the insignificant effect which exclusionary screening had on market value could be attributed to the lack of a critical mass of socially responsible investors in equity markets.

A further disadvantage of using an exclusionary approach to SRI lies in its subjective nature i.e. ‘sin lies in the eye of the beholder’. To illustrate the arbitrary nature of negative screening, Belsie (2001:20) shows that some SRI funds exclude tobacco manufactures but not the producers of cigarette-rolling paper. Others question whether socially responsible investors ought to avoid an entire company if only one of its subsidiaries is involved in military activities, emits pollutants or if it earns a certain percentage of its income from gambling operations. Furthermore, is a company that produces life-saving drugs a responsible company if it fails to make these drugs affordable to poorer third world countries? A critic of exclusionary screening contends that the boundary lines of negative screening can be drawn so sharply that “… all one would ultimately invest in would be environmentally friendly factories where nuns make choir robes” (Belsie 2001:22).
It should be noted that ‘unacceptable corporate behaviour’ largely depends on the culture prevalent in a country. Robbins (1993:69) states that cultural relativism recognises people’s notions of right and wrong as derived from their country’s societal values. Discrimination, racism and bribery are good examples of practices that are culturally rooted. In this regard, Whitten (2004:20) points out that Japanese investors do not consider cigarettes, alcohol, gambling, nuclear power or weapons as ‘anti-social’ and subsequently do not have such exclusionary screens. Factors other than culture, which shape investors’ choices of exclusionary screens, are outlined in Section 4.4 of Chapter Four. These include religious convictions, philosophical views, professional values and a country’s legal system.

Despite the shortcomings of negative screening, it remains the basic approach used by most SRI fund managers in the USA and UK (Scheuth 2003:189). Sparkes and Cowton (2004:46) state that investors who simply wish to keep their investment portfolios ‘clean’ by means of exclusion, prefer moral purity to moral effectiveness. Many contemporary socially responsible investors have however come to recognise the importance of and need for the latter. As such, they are more interested in promoting social change than in punishing ill-doers by withholding capital from them.

Subsequently, a comprehensive approach to screening has evolved. This approach to SRI involves the use of positive or inclusionary screens, as well as a hybrid approach combining both positive and negative screens.

### 3.3.2 Positive (inclusionary) screening

(a) **Introduction to positive (inclusionary) screening**

Investors who use a positive screening approach to SRI strive to include the securities of companies in their portfolios which are perceived to be reputable as good corporate citizens. Exactly how ‘good corporate citizenship’ is defined and measured has long been the focus of debate. Empirical research by Aupperle, Carroll and Hatfield (1985), Wartick and Cochran (1985) and
Graves and Waddock (1994) led to the development of several multi-attribute research instruments to evaluate companies’ products, policies and procedures with regard to a range of ESG considerations.

A number of ESG stock market indices have also appeared since 1990 screening companies on as many as 300 different ESG criteria, most of which focus on companies’ stakeholder relations (De Cleene & Sonnenberg 2004:6). The proliferation of positive screens can be attributed to two main factors, namely improved triple bottom line reporting as well as an increase in the number of SRI research agencies and consultancies (Line et al. 2002:69; McGeer 2004:7). These issues will be discussed in more detail in Sections 5.2.2(f),(g) and (h) of Chapter Five.

Ambachtsheer et al. (2006:9) point out that no definitive list of ESG issues exists but that positive screens typically display a public-concern focus; have a medium or long-term time horizon; have qualitative objectives that are not readily quantifiable in monetary terms; their externalities (i.e. costs borne by other firms or by society at large) are not well captured by market mechanisms and that they are characterised by changing regulatory and policy frameworks.

An global survey evaluated 157 investment professionals’ views on a set of ESG criteria which are currently considered as having the most impact on corporate and investment performance (2006 Fearless Forecast: What do investment managers think about responsible investment? 2006:5). As indicated in Table 3.1, globalisation, corporate governance and terrorism were seen as the most important ESG factors in December 2005, whereas environmental concerns are anticipated to feature more prominently in investment analysis in five years time (i.e. December 2010).

Investors who apply positive screens often argue that socially responsible companies tend to be more profitable than companies that fail to take cognisance of or act upon the needs of their stakeholders.
TABLE 3.1: Relevance of ESG factors to investment analysis in 2005 and 2010

<table>
<thead>
<tr>
<th>ESG factor</th>
<th>Percentage of international asset managers who felt that the following factors were relevant for consideration in mainstream investment analysis in December 2005 (rank of factor shown in parentheses)</th>
<th>Percentage of international asset managers who felt that the following factors will become or will remain material in five years time (rank of factor shown in parentheses)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adherence to corporate conventions(^{(a)})</td>
<td>8% (11)</td>
<td>14% (11)</td>
</tr>
<tr>
<td>Climate change</td>
<td>15% (9)</td>
<td>37% (4)</td>
</tr>
<tr>
<td>Corporate governance</td>
<td>62% (2)</td>
<td>55% (1)</td>
</tr>
<tr>
<td>Employee relations(^{(b)})</td>
<td>23% (5)</td>
<td>31% (8)</td>
</tr>
<tr>
<td>Environmental management(^{(c)})</td>
<td>21% (6)</td>
<td>42% (3)</td>
</tr>
<tr>
<td>Globalisation</td>
<td>65% (1)</td>
<td>53% (2)</td>
</tr>
<tr>
<td>Health issues in emerging markets(^{(d)})</td>
<td>17% (7)</td>
<td>25% (9)</td>
</tr>
<tr>
<td>Human rights(^{(e)})</td>
<td>16% (8)</td>
<td>19% (10)</td>
</tr>
<tr>
<td>Sustainability(^{(f)})</td>
<td>25% (4)</td>
<td>34% (6)</td>
</tr>
<tr>
<td>Terrorism</td>
<td>41% (3)</td>
<td>33% (7)</td>
</tr>
<tr>
<td>Water (use of/access to clean water)(^{(g)})</td>
<td>11% (10)</td>
<td>36% (5)</td>
</tr>
</tbody>
</table>

\(^{(a)}\) Adherence to corporate conventions (such as the UN Global Compact) refers to voluntary corporate actions on specific issues – such as working conditions, human rights and the environment – which reinforce accountability.

\(^{(b)}\) Employee relations encompass a number of criteria relating to employee satisfaction, equitable pay, work/life balance, employee benefits and stock ownership opportunities.

\(^{(c)}\) This criterion deals with the measurement and reporting of resources used (such as energy, materials and water) with the goal of increasing efficiency.

\(^{(d)}\) This criterion relates to reporting on the economic impact of HIV/AIDS, tuberculosis, and malaria by companies operating in affected areas.

\(^{(e)}\) This criterion refers to compliance with national and international law, maintaining licences to operate, effective public relations, risk management, and stakeholder relations.

\(^{(f)}\) Sustainability refers to the concept of meeting present needs without compromising the ability of future generations to meet their needs. It encompasses social welfare, protection of the environment, efficient use of natural resources and economic wellbeing.

\(^{(g)}\) This criterion deals with corporate activity in water-stressed areas.


They claim that socially responsible companies avoid expensive fines and litigation and benefit from higher levels of customer loyalty, better relations with suppliers as well as more dedicated and productive employees. A plethora of research has been undertaken to investigate this claim, yielding mixed results.

Griffin and Mahon’s (1997:6) extensive review of studies conducted up to 1995 on the relationship between corporate social performance (CSP) and corporate financial performance (CFP) shows that 53 percent of studies found a positive relationship between CSP and CFP, 32 percent a negative...
relationship and 15 percent an inconclusive relationship or no relationship at all. Griffin and Mahon (1997:7) attribute the divergent research findings to conceptual, operational and methodological differences in the definitions and measurement of CSP and CFP.

Despite the use of more refined research methodologies and definitions of CSP and CFP, post-1995 studies still report conflicting findings on this topic. On balance the evidence does however seem to support the finding that companies which are good corporate citizens are indeed good investments (McWilliams & Siegel 2000:603; Hillman & Keim 2001:125; Orlitzky, Schmidt & Rynes 2003:409).

The complex interaction between CFP (which can be divided into past, concurrent and subsequent financial performance), CSP and triple bottom line reporting is depicted in Figure 3.2.

**FIGURE 3.2: The nexus of relationships between CFP, CSP and triple bottom line reporting**

![Diagram showing the relationships between CFP, CSP, and triple bottom line reporting.]

*Source:* Adapted from Balabanis, Phillips and Lyall (1998:35); contextualised for South African issues
As can be seen from Figure 3.2 a firm’s size and the environmental impact of its industry have an effect on the past, concurrent and subsequent (future) financial performance, whereas CSR performance only has an impact on concurrent and future performance.

It has further been shown that a company’s performance in terms of sustainability is an excellent proxy and leading indicator of management quality. In South Africa, the management of ESG factors, however, represents some of the most complex challenges facing local business leaders (Strong investment case for SRI 2005:58). In addition to the competitive pressures brought on by globalisation, South African businesses also need to contend with the impact of a 25.6 percent unemployment rate and the dire consequences of the HIV/AIDS pandemic (South African Reserve Bank 2006).

Positive screens are often shaped by the level of economic prosperity in a country, hence the Dutch expression “Eerst het brood, dan de moraal” (first bread, then morals). In affluent countries, such as the Netherlands, more emphasis is placed on ‘higher order moral issues’ such as genetically modified food and renewable energy, whereas socially responsible investors in South Africa are more likely to focus on ‘bread and butter issues’ such as job creation and infrastructural development.

The King II report on corporate governance in South Africa (2002:31) provides valuable insights into what constitutes good corporate citizenship in South Africa. The report identifies socially responsible businesses as “…those well managed companies which are aware of, and respond to social issues, and place a high priority on ethical standards”. The report suggests that businesses’ ESG responsibilities should incorporate issues such as corporate values, human rights, animal rights, HIV/AIDS, environmental protection, supply chain integrity, product life cycle impacts, occupational health and safety, broad-based BEE, diversity, community rights, employee satisfaction, corporate social investment and the development of intellectual capital. As will
be pointed out in Section 3.7 of this chapter several local SRI funds screen JSE-listed companies on these and other issues. Despite the growing appeal of positive screening, a number of weaknesses of this approach also need to be highlighted.

(b) A critique of positive (inclusionary) screening

Positive screening is more difficult to administer than exclusionary screening as investors cannot simply look at the products or services of a business to determine its suitability but need to examine its corporate policies and practices on a variety of ESG issues. To do so investors need access to information which is often not available to the public or is in a format that is difficult or expensive to analyse (Kinder & Domini 1997:12).

In evaluating ESG issues, rating agencies and socially responsible investors often analyse the contents of companies’ annual reports, interview industry experts, evaluate proxy statements and scrutinise articles in the general media. They can also refer to ESG stock market indices such as the KLD indices, the FTSE4GOOD indices and the Dow Jones Sustainability indices (Balabanis et al. 1998:35; KLD Indexes 2006; FTSE4GOOD Indices 2006; Dow Jones Sustainability Indexes 2006). In South Africa, socially responsible investors can refer to the FTSE/JSE SRI Index as well as the Empowerdex Index, an index exclusively devoted to measuring the BEE credentials of South African businesses (Empowerdex 2006).

Yet another drawback of positive screening is that once investors have evaluated non-financial corporate performance, they are often left balancing performance across diverse areas. For example, a company might do very well in some areas (such as environmental management) but may do very poorly in other areas (say labour relations) (Knoll 2002:683).

Heese (2005:729) further points out that positive screens often reflect a ‘developed country bias’ as many sustainability criteria are based on northern hemisphere standards. Heese (2005:29) states that this bias exists despite
the need for developing countries to ensure that their own growth is not compromised by environmentally reckless actions or restrictive agreements such as banning dichlorodiphenyltrichloroethane (DDT).

DDT is a colourless contact insecticide which is toxic to humans and animals when swallowed or absorbed through the skin and has been banned in the USA for most uses since 1972 (Wikipedia Encyclopedia 2006b). DDT is nonetheless critical in the fight against malaria which affects 175 million people in 15 countries, most of which are in Sub-Saharan Africa (USAID Health: Infections diseases, Malaria Fact Sheet 2006).

Finally, SRI experts point to the time factor involved in screening and monitoring non-financial corporate performance (Personal communication Adsetts & Davids 2006). As “someone has to foot the bill” SRI funds generally exhibit higher expense ratios as compared with conventional funds (Sauer 1997:137; Cowton 1998:190; Bauer et al. 2005:1755; Ambachtsheer & Steward 2006:19).

By combining negative and positive screening approaches, a best-of-sector screening strategy has evolved in recent years.

### 3.3.3 Best-of-sector screening

According to Bauer et al. (2006:11) a best-of-sector (or best-in-class) approach combines positive and negative screening on a sector basis. Using such an approach implies that a full universe of companies is evaluated against some key criteria allowing investors to select the top ranked company or companies across sectors, even though some might be deemed ‘undesirable’ from a negative screening point of view (De Cleene 2002:17). As such, investors can include the securities of companies in their portfolios which are taking decisive actions to improve their non-financial performance across the board (Solomon et al. 2002:3).
Bauer et al. (2006:11) argue that the best-of-sector approach has mainly been developed to overcome the difficulty which most fund managers face when trying to limit deviations from a general benchmark (i.e. tracking error). By including securities from companies across economic sectors, a best-of-class approach leads to smaller sector biases and thus more efficient portfolio diversification.

This approach is particularly suitable for the South African SRI market given the relatively small size of the JSE compared with global stock exchanges and the dominance of a few large companies. A good example of one such company is SABMiller Plc which represents approximately five percent of the JSE’s overall market capitalisation (Profile’s stock exchange handbook January – June 2006 2006:14). By excluding this company on the grounds that they produce alcohol, socially responsible investors ignore the tremendous efforts that this company has made (and continues to make) in areas such as responsible procurement, community upliftment, HIV/AIDS education and environmental management (SABMiller 2006 Sustainable Development Report 2006:2).

Cowton (1998:183) shows that socially responsible investors in the UK tend to favour a best-of-sector approach as do investors in Europe. Tranchimand’s (2006:4) observes that this strategy is increasingly being viewed as best practice in Europe. The main criticism against the application of a best-in-sector approach is that resultant portfolios are morally ‘tainted’ in that they contain securities of ‘undesirable’ companies next to morally acceptable ones (Sparkes & Cowton 2004:46).

Along with the growth of an inclusionary screening approach, many contemporary SRI practitioners are also increasingly becoming ‘engaged shareholders’. This concept, which attempts to promote social change by influencing corporate decision making, will now be presented.
3.4 SHAREHOLDER ACTIVISM AS AN SRI STRATEGY

3.4.1 Background to shareholder activism

Shareholder activism, also called ‘active shareholder engagement’, refers to shareholders communicating with management boards on specific ESG issues. Investors can do so through dialogue, by filing resolutions, using their voting rights at annual general meetings and divesting from companies that fail to transform (De Cleene & Sonnenberg 2004:6).

Guay et al. (2004:12) indicate that active engagement strategies are slowly becoming more commonplace among institutional investors in the USA. Clarke (2002:44) confirms this trend and further notes that mutual fund managers with significant SRI accounts are increasingly pressurising companies into improving their ESG policies and practices.

According to a 2006 European SRI survey, the use of an engagement strategy was also the most prevalent among socially responsible investors in Europe (Tranchimand 2006:10). More support for this approach to SRI is foreseen in the global arena as active ownership forms a cornerstone of the UN Principles for Responsible Investment (2006:4). Institutional investors in South Africa have however not warmed to the idea of shareholder activism mainly due to a lack of skills among fund managers and investment analysts regarding the evaluation of ESG issues (De Cleene & Sonnenberg 2004:19).

Sparkes and Cowton (2004:52) caution that a distinction ought to be drawn between shareholder activism and stakeholder advocacy (as practised by non-governmental organisations (NGOs) such as churches, community groups and human rights organisations as well as trade unions). They claim that stakeholder advocacy is characterised by a single-issue focus, no financial interest and the seeking of confrontation and publicity, whereas shareholder activism is characterised by multi-issue concerns, strong financial interests, the seeking of engagement with management and the avoidance of
publicity. Thus, although the means of stakeholder advocacy and shareholder activism may be similar, the aims of the two groups are clearly different.

NGOs have grown significantly in number and influence since the 1980s and have initiated major changes in corporate behaviour in the USA (Guay et al. 2004:129). In South Africa, NGOs have likewise risen in prominence since the mid-1990s and have become visibly more active in challenging management boards on a number of material ESG issues (Visser 2004). Local trade unions too are increasingly engaging with management boards on matters pertaining to their members (Personal communication Adsetts 2006). Cases in South Africa where companies have become targets of stakeholder advocacy include Thor Chemicals, AECI, Chevron, Mittal Steel SA, WasteTech-Enviroserve, Sasol Mining, Cape Plc, Gencor, De Beers, Anglo American, Shell and GlaxoSmithKline (Claasen 2003:14).

A number of shortcomings of this approach to SRI need to be highlighted in the context of this research. The nature of shareholder activism in South Africa will be described in Section 3.7 of this chapter.

3.4.2 Shortcomings of an active engagement approach to SRI

The main shortcoming of a shareholder activism approach is that, in order for it to be effective, shareholders need to have a significant stake in a company. As such, this approach calls for the support of large institutional investors such as pension funds, insurance companies and commercial banks. A UK study shows that institutional investors in the UK own almost 70 percent of listed UK shares, clear evidence that their impact on corporate decision making cannot be overlooked (Solomon et al. 2002:5).

Although support for ‘soft’ engagement (in the form of lobbying and dialogue) has been noted among private investors in the UK (Lewis & Mackenzie 2000a:215), Sparkes and Cowton (2004:46) cast doubts on how successful their efforts have been in promoting corporate change. These authors argue that institutional investors often side with management with the result that
shareholder resolutions rarely receive a significant proportion of the votes cast at annual general meetings.

Another problem associated with shareholder activism relates to the time and resources required to analyse companies' products, policies and practices with regard to ESG considerations, to obtain support for resolutions, to attend meetings and to formulate policies on issues of materiality (Personal communication Canter 2003; Davids 2006).

A third mainstream SRI strategy, and one that is of particular importance within the South African context, is that of cause-based investing. A background to this approach, along with its shortcomings will be presented next.

3.5 CAUSE-BASED INVESTING AS AN SRI STRATEGY

3.5.1 Background to cause-based investing

Whereas screening and shareholder activism strategies deal with secondary investments in existing financial securities, cause-based investing involves direct investments in the 'real economy'. This approach refers to supporting a particular ESG cause by financing it (Schueth 2003:191). Leeman (2005:9) classifies cause-based investments as primary investments since they have a powerful and visible impact on the economy in terms of infrastructural development and job creation.

Although secondary investments do not directly benefit local communities, they still give investors the power to influence corporate decision making in favour of improved ESG policies and practices. As will be pointed out in Section 3.7 of this chapter, cause-based investments in South Africa mainly centre on improving the standard of living in previously disadvantaged communities.
Cause-based investors generally seek a financial return equal to market rates, although some investors may accept marginally lower returns in order to support a particular cause. In South Africa the National Treasury stipulates that cause-based investments are only acceptable investments for pension funds if they offer inflation-linked returns (Petersen 2005).

Several authors show that cause-based investing, also called community investing, is an SRI strategy which is increasingly being supported by institutional investors in developed countries (O’Reilly 2001:19; Beckwith 2004). According to Mitchell and Larson (2006:2) cause-based investing in the USA has nearly quintupled since 1995. Despite the dire need for greater cause-based or targeted investing in South Africa, many local institutional investors still refrain from making such investments. They cite a number of reasons ranging from the lack of viable opportunities in South Africa to the illiquid nature of such investments (Wierzycka 2004; Personal communication Canter & Dinan 2003; Davids, Sonnenberg & Adsetts 2006). Other concerns regarding cause-based investing are set out below.

### 3.5.2 Weaknesses of a cause-based investing strategy

Leeman (2005:9) states that the major problems associated with a cause-based investment strategy relate to the fact that they are often private equity based. It is well documented that private equity investments lack regular market valuations which makes it difficult to assess investment returns (Bacher 2004:4).

Furthermore, private equity investments are fairly illiquid investments as capital is often tied up for three to seven years. According to Segal (2004:6), this poses a serious threat to the cash flow management of smaller SRI funds. It has been noted that pension fund trustees do not like to be tied to an investment for a lengthy period of time and prefer investments that can be liquidated quickly and without penalties (Social responsibility must be put on agenda 2005).
Private equity investments also have a much higher risk of default. In this regard Barrow, Brown and Clarke (2001:198) estimate that approximately one third of all private equity investments are failures, another third merely produce enough profits to survive, a further 25 percent only offer modest returns and a meager 10 percent of all private equity investments generate superior returns.

Despite these problems associated with cause-based investing, most SRI funds in South Africa currently employ such a strategy (see Section 3.7 of this chapter for more details).

Besides the three primary SRI strategies outlined above i.e. screening, shareholder activism and cause-based investing, a few lesser-known forms of SRI also exist.

3.6 OTHER LESSER-KNOWN FORMS OF SRI

As pointed out earlier, NGOs have become such a powerful force in the financial markets that their investment strategies can no longer be ignored (Guay et al. 2004:132). Four typical NGO strategies include exclusion, inclusion, engagement and confrontation.

Exclusion and inclusion refer to negative and positive screening strategies as presented in Sections 3.3.1 and 3.3.2 of this chapter respectively, whereas engagement and confrontation relate to shareholder activism and stakeholder advocacy as outlined in Section 3.4 of this chapter. These and other strategies used by NGOs to influence corporate behaviour are depicted in Figure 3.3.
From Figure 3.3 it is clear that the first strategy involves NGOs pressurising institutional investors into considering their views when making investment decisions. A second strategy entails NGOs serving as advisors, information analysts and consultants to SRI funds. Issues that have been addressed in this regard include CEO compensation, the practice of combining the functions of CEO and chairman of the board, global warming, global labour standards, healthcare and drug development, equal employment opportunities, tobacco, HIV/AIDS and sustainability reporting (Guay et al. 2004:132).

NGOs could further engage with or confront management boards. According to Guay et al. (2004:132) these strategies constitute a direct challenge to management boards and draw attention to shareholder demands and by extension, the inadequacy of managerial actions. This strategy could take several forms including public announcements, shareholder proposals, personal negotiation with management and proxy contests.
Besides the abovementioned strategies, NGOs could also establish their own SRI funds or sponsor existing ones. In this way NGOs can set their own ESG screens and play a significant role in changing the investment criteria of existing SRI funds.

As indicated in Figure 3.3, the first two strategies (exclusion and inclusion) largely have an indirect effect on companies’ understanding and realisation of corporate citizenship as NGOs work through intermediaries. Once NGOs themselves however become shareholders they start having a direct impact on corporate behaviour. It should also be noted that NGOs often combine several of these influencing strategies to accomplish their goals.

Another type of SRI includes ‘green banking’. Triodos Bank in the Netherlands pioneered the way as a ‘socially responsible bank’ in 1980 by lending to individuals and businesses based on specific social, cultural and environmental criteria. Funds received from their clients, whether by means of ‘green’ savings accounts or listed mutual funds, are also channelled into ‘green’ projects such as organic farming, wind and solar energy and natural textiles (Triodos Bank 2006).

In South Africa another unique approach to SRI has developed, namely placing funds with black asset managers. This approach provides opportunities for the development of black financial services groups and skills transfer among a new group of entrepreneurs and professionals (Du Preez 2005:36; Wierzycka 2004). An example of such a fund in South Africa is the Investment Solutions Emerging Managers Fund.

From the above it is clear that socially responsible investors can employ a wide variety of strategies, traditional or contemporary, to incorporate moral and ESG considerations into their investment decisions. The most pertinent strategies employed by SRI fund managers in South Africa will now be highlighted.
3.7 SRI STRATEGIES EMPLOYED BY SOUTH AFRICAN SRI FUND MANAGERS

This section will provide an overview of the screening, shareholder activism and cause-based investment strategies employed by South African SRI fund managers. It is based on a synthesis of:

- existing secondary sources;
- content analysis of the fund objectives of all 43 SRI funds which were launched in South Africa over the period 1 June 1992 to 31 March 2006; and
- insights gained from semi-structured, face-to-face interviews conducted with local SRI fund managers and industry experts.

Table 3.2 provides an overview of the SRI strategies employed by local SRI fund managers and shows that more than half of the SRI funds in South Africa employ (or employed in the case of discontinued funds) a cause-based investing strategy, either on its own or in combination with other SRI strategies.

**TABLE 3.2: SRI strategies employed by South African SRI fund managers**

<table>
<thead>
<tr>
<th>Type of SRI strategy employed</th>
<th>Total N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cause-based investing</td>
<td>12</td>
<td>27.91</td>
</tr>
<tr>
<td>A strategy combining cause-based investing and positive screening</td>
<td>8</td>
<td>18.60</td>
</tr>
<tr>
<td>A strategy combining cause-based investing with two other SRI strategies</td>
<td>4</td>
<td>9.30</td>
</tr>
<tr>
<td>Positive (inclusionary) screening</td>
<td>9</td>
<td>20.93</td>
</tr>
<tr>
<td>Negative (exclusionary) screening</td>
<td>4</td>
<td>9.30</td>
</tr>
<tr>
<td>Shareholder activism</td>
<td>3</td>
<td>6.98</td>
</tr>
<tr>
<td>A strategy combining shareholder activism and positive screening</td>
<td>2</td>
<td>4.65</td>
</tr>
<tr>
<td>A strategy combining shareholder activism and negative screening</td>
<td>1</td>
<td>2.33</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>43</strong></td>
<td><strong>100.00</strong></td>
</tr>
</tbody>
</table>

*Source: See sources as indicated in Tables 3.3 – 3.6*

Table 3.2 confirms Petersen’s (2006:6) observation that a new generation of SRI products is appearing in South Africa which integrate various SRI strategies.
3.7.1 Cause-based investing in South Africa

Despite confusion as to what exactly constitutes cause-based or targeted investing in South Africa, there seems to be general agreement on the definition formulated in the Financial Sector Charter (2003:2), namely that it refers to “…the debt financing of, or other forms of credit extension to, or equity investment in South African projects in areas where gaps or backlogs in economic development and job creation have not been adequately addressed by financial institutions”. More specifically it means the financing of or investment in:

- transformational infrastructure investments that support economic development in underdeveloped areas and contribute towards equitable access to economic resources. Such infrastructure projects could be in the following sectors: transport; telecommunication; water, waste water and solid waste; energy; and social infrastructure such as health, education, correctional service facilities as well as municipal infrastructure and services.

- Agricultural development involving integrated support for resource-poor farmers, through enabling access to and the sustainable use of resources.

- Low-income housing for households with a stable income in excess of R1 500 per month and less than R7 500 per month. This income band will be increased in line with the CPIX (consumer price index excluding interest rates on mortgage bonds) on the 1st of January each year commencing on 1 January 2004.

- Black-owned small or medium-sized enterprises (with a sales turnover ranging from R500 000 per annum to R20 million per annum) which are black companies or black-empowered companies. According to the Financial Sector Charter (2003:2) black-owned companies are ones that are more than 50 percent owned by black people, whereas black-empowered companies refer to companies that are more than 25 percent owned by black people, and where substantial participation in control is vested in black people. It should be noted that the Financial Sector Charter (2003:3) defines ‘black people’ as all Africans, Coloureds and Indians who are South African citizens.
Table 3.3 lists fund objectives of the local SRI funds which employ a pure cause-based investment strategy.

**TABLE 3.3: Fund objectives of local cause-based SRI funds**

<table>
<thead>
<tr>
<th>SRI fund name</th>
<th>Status</th>
<th>BEE Financing</th>
<th>Social infrastructure development</th>
<th>Type of social infrastructure investments made</th>
</tr>
</thead>
<tbody>
<tr>
<td>AIIF South African Infrastructure Fund(m)</td>
<td>Active</td>
<td>✓</td>
<td></td>
<td>(a) (b)</td>
</tr>
<tr>
<td>AIIF African Infrastructure Investment Fund(m)</td>
<td>Active</td>
<td>✓</td>
<td></td>
<td>(a)</td>
</tr>
<tr>
<td>AMB Empowerment Equity Fund(n)</td>
<td>Discontinued</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Futuregrowth Community Property Fund(p)</td>
<td>Active</td>
<td>✓</td>
<td>✓</td>
<td>(a) (j) (k) (l)</td>
</tr>
<tr>
<td>Futuregrowth Diversified Development Fund(p)</td>
<td>Discontinued</td>
<td>✓</td>
<td>✓</td>
<td>(a) (c) (d) (e) (f) (g) (h) (i)</td>
</tr>
<tr>
<td>Futuregrowth Infrastructure Bond Fund(q)</td>
<td>Active</td>
<td></td>
<td>✓</td>
<td>(a) (c) (d) (f) (g)</td>
</tr>
<tr>
<td>Futuregrowth Structured Empowerment Fund(r)</td>
<td>Discontinued</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Investec Mafisa Fund(s)</td>
<td>Discontinued</td>
<td>✓</td>
<td>✓</td>
<td>(a) (c) (d) (f) (g) (i)</td>
</tr>
<tr>
<td>Investec Sechaba Fund(t)</td>
<td>Discontinued</td>
<td>✓</td>
<td>✓</td>
<td>(a)</td>
</tr>
<tr>
<td>Investec SRI Life Fund(u)</td>
<td>Active</td>
<td></td>
<td></td>
<td>(a)</td>
</tr>
<tr>
<td>OMAM IDEAS Fund(v)</td>
<td>Active</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prodigy Transformation Fund(w)</td>
<td>Discontinued</td>
<td>✓</td>
<td>✓</td>
<td>(a)</td>
</tr>
</tbody>
</table>

(a) General social infrastructural development (not specified)  
(b) Roads including privately funded toll roads  
(c) Telecommunication networks  
(d) Electrification / energy projects  
(e) Housing schemes  
(f) Water and sanitation  
(g) Education  
(h) Security  
(i) Health care  
(j) Community upliftment through investments which develop and transfer skills  
(k) Community upliftment through investments that create employment  
(l) Community upliftment through investments that support local entrepreneurs’ initiatives  
(m) Source: Personal communication Johnstone (2006)  
(n) Sources: Kobokoane (1999); South African Venture Capital Association (2006); Personal communication McKinley & Hall (2006)  
(o) Sources: Bonorchis (2004); Newmarch (2004:15); Moledi (2004:17); Qoza (2004:17); Futuregrowth corporate website (2006); Personal communication Kalam (2006)  
(p) Source: AFAC TDI Manager Watch Survey September 2001; Personal communication Kalam (2006)  
(q) Sources: Du Preez (2005:39); Futuregrowth corporate website (2006); Personal communication Kalam (2006)  
(r) Sources: Seeds of new asset management (2002:14); Personal communication Kalam (2006)  
(s) Sources: Social investment performs well (1998); AFAC TDI Manager Watch Survey September 2001; Personal communication Alexander (2006)  
(t) Sources: AFAC TDI Manager Watch Survey September 2001; Personal communication Alexander (2006)  
(u) Source: Personal communication Alexander (2006)  
(v) Sources: Du Preez (2005:37); OMAM corporate website (2006); Personal communication Swart (2006)  
(w) Sources: Cranston (2002); Personal communication Engelbrecht (2006)
As illustrated in Table 3.3, all cause-based funds which provided BEE financing were discontinued at some point before 31 March 2006. After the democratic elections in South Africa in 1994, financial institutions mainly financed BEE deals by means of creating special purpose vehicles or SPVs (Visser 2004:3; Thomas 2004). SPVs, also known as Special Purpose Entities (SPEs), are single-purpose, separate legal structures created by financial institutions to give an external and beneficial source of funding to a BEE partner. The risks (and liabilities) of the new venture are transferred from the sponsor (i.e. the financial institution) to the SPV implying that the SPVs’ assets and liabilities are kept separate from the sponsoring company.

Hirsch (2005) explains that once a BEE deal had been negotiated, the financier usually provided funds to the SPV in exchange for preference shares (usually at a discount to the original price). Although the BEE partner got voting rights, the financier enjoyed the performance of the underlying shares, up to a certain hurdle rate. The hurdle rate was generally expressed as a percentage of the prime lending rate. Returns in excess of the hurdle rate would accrue to the BEE partner.

Thus, in exchange for the cachet of black ownership and a chance to participate in a big share transfer in a relatively illiquid market, the financier had to give up a portion of the upside potential and had to take all the downside risk. Unfortunately, easy access to finance has left many empowerment groups complacent, freeing them to buy more assets rather than to develop existing investments (Bridge 1999).

All the other SRI funds listed in Table 3.3 (i.e. the active ones) invest in a variety of social infrastructural development projects. Examples include the construction of roads and telecommunication networks, the provision of electricity, water and sanitation as well as healthcare and educational facilities to previously disadvantaged communities. Although some cause-based SRI funds do not specify the type of infrastructural development projects in which they invest, they all state similar goals such as ‘social upliftment’ and ‘economic empowerment’.
As will be pointed out in the next section, a cause-based strategy is often combined with a positive screening strategy. The Investment Solutions’ Sakhisizwe Fund as well as the three SRI funds managed by Rockland Investment Management also combine a cause-based investment strategy with either a shareholder activism or best-of-sector approach (Du Preez 2005:3,40; Personal communication Davids, Steyn, Naran, Wildt & Oaker 2006; Glenrand MIB commits R300m to Rockland fund 2004).

Only moderate growth is foreseen in cause-based investments in South Africa, despite the need for more targeted investments Wierzycka (2004) attributes this to the problems associated with this kind of investing, namely the lack of liquidity, the lack of market valuations and the lack of skills in evaluating such projects. These arguments are legitimate and need to be addressed.

A shortage of viable targeted investment opportunities has also been cited as a major obstacle for growth in cause-based investments in South Africa (Personal communication Plaistowe & Mafolo 2003; Davids, Sonnenberg & Adsetts 2006). These and other obstacles to the wider support of cause-based investing in South Africa are outlined in Section 5.3.3 of Chapter Five.

3.7.2 Positive screening in South Africa

As illustrated in Table 3.4, nine South African SRI funds screen companies’ products, policies and practices on a variety of ESG measures before investing in their financial securities. Given the time and cost associated with positive screening, three of these funds have opted to track the FTSE/JSE SRI Index. As will be pointed out in Section 5.3.2(a) of Chapter Five the FTSE/JSE SRI Index addresses issues relating to all three pillars of the triple bottom line as well as companies’ adherence to the principles of fairness, accountability, responsibility and transparency (Wadula 2004).

As SRI funds’ investment criteria are often stated in vague terms, it was not always possible to convert text to numerical values as is typical in content
analysis. Instead, the non-quantifying methods of qualitative data analysis, as advocated by Lindlof (1995:35) and Morse (1994:20), were rather employed. As stated in Section 2.7.2 of Chapter Two, these methods imply that qualitative data analysis involves the comprehending, synthesising, theorising and re-contextualising of qualitative data. As such, Table 3.4 reflects the re-contextualised fund objectives of the local SRI funds which employ a positive screening strategy.

De Cleene (2002:52) warns that greater diversification of positive screening criteria is required in South Africa to enable SRI to sustain itself and suggests the inclusion of more environmental screens such as alternative technologies, waste minimisation and land biodiversity. This suggestion by De Cleene (2002:52) is of critical importance and strongly supported in this research.

The combination of a cause-based investment strategy with a positive screening approach makes intuitive sense given the overlapping nature of the ESG issues supported and evaluated within the South African SRI market. A review of these funds’ combined objectives shows that most funds integrate a cause-based investing strategy with a positive screening approach, and focus on social infrastructural development and the promotion of broad-based BEE.

As was the case in Table 3.4, only the re-contextualised investment objectives are highlighted in Table 3.5.
<table>
<thead>
<tr>
<th>SRI fund name</th>
<th>Status</th>
<th>Fund objective</th>
</tr>
</thead>
<tbody>
<tr>
<td>African Harvest Infrastructure Bond Fund&lt;sup&gt;(a)&lt;/sup&gt;</td>
<td>Active</td>
<td>To invest in a range of government, government-guaranteed, municipal and corporate bond issues with a specific focus on infrastructural development, including the provision of electricity, health care, transport, water, sanitation, communication, education and security to underprivileged communities. The fund takes into account the development objectives of the Government and certain guidelines for infrastructural development which provide specifications for desired social impact.</td>
</tr>
<tr>
<td>Nedbank Sustainable Investment Index Fund&lt;sup&gt;(b)&lt;/sup&gt;</td>
<td>Discontinued</td>
<td>To track the performance of the Edward Nathan &amp; Friedland Sustainability Index. The index, predecessor of the FTSE/JSE SRI Index, considered the social, environmental and economic consequences of investments thus taking cognisance of the triple bottom line approach to corporate performance measurement.</td>
</tr>
<tr>
<td>Sanlam Empowerment Equity Fund&lt;sup&gt;(c)&lt;/sup&gt;</td>
<td>Discontinued</td>
<td>To invest in shares of companies directly or indirectly involved in economic empowerment.</td>
</tr>
<tr>
<td>Sasfin Socially Responsible Fund&lt;sup&gt;(d)&lt;/sup&gt;</td>
<td>Active</td>
<td>To deliver consistent growth over the long term through investing in mainly SRI listed equities. Equity investments will be limited to the shares of companies included in the FTSE/JSE SRI Index.</td>
</tr>
<tr>
<td>Sasfin TwentyTen Fund&lt;sup&gt;(e)&lt;/sup&gt;</td>
<td>Active</td>
<td>To invest in listed companies that will profit from South Africa's social and investment expenditure projects and benefit overall from the rest of the world's attraction to build a more successful and prosperous African continent. The portfolio will invest mainly in listed equity securities which will benefit from spending or financing of social and development expenditure such as infrastructure, building and construction and building, basic industries, transport, elimination of disease, health and similar developmental projects.</td>
</tr>
<tr>
<td>Community Growth Gilt Fund&lt;sup&gt;(f)&lt;/sup&gt;</td>
<td>Active</td>
<td>To invest in bonds with a particular emphasis on reconstruction, development and the empowerment of the South African labour force. The emphasis is on institutions and projects that contribute to the development of South Africa through programmes that have a meaningful social impact, and are committed to development, community participation and support.</td>
</tr>
<tr>
<td>Futuregrowth Anchor Fund&lt;sup&gt;(g)&lt;/sup&gt;</td>
<td>Discontinued</td>
<td>To invest in socially responsible companies listed in the financial, resources and industrial sectors of the JSE.</td>
</tr>
<tr>
<td>Futuregrowth SRI Equity Fund&lt;sup&gt;(h)&lt;/sup&gt;</td>
<td>Active</td>
<td>To track 27 of the best performing companies contained in the FTSE/JSE SRI Index.</td>
</tr>
<tr>
<td>Community Growth Fund of Funds&lt;sup&gt;(i)&lt;/sup&gt;</td>
<td>Active</td>
<td>To promote sustainable and responsible investing by investing in other SRI funds namely the Community Growth Equity Fund (equities), Community Growth Gilt Fund (fixed income), Community Growth Money Market Fund (money market) and the OMAM IDEAS Fund (alternative assets).</td>
</tr>
</tbody>
</table>
TABLE 3.5: Fund objectives of local SRI funds which combine a cause-based investing strategy with a positive screening approach

<table>
<thead>
<tr>
<th>SRI fund name</th>
<th>Status</th>
<th>Fund objective</th>
</tr>
</thead>
<tbody>
<tr>
<td>Futuregrowth SRI Balanced Fund</td>
<td>Active</td>
<td>To address the complex nature of socially responsible investing in South Africa. To provide investors with social impact from a targeted and development perspective and to give them exposure to listed equities that have met the FTSE/JSE SRI Index criteria with regard to environmental, economic and social performance.</td>
</tr>
<tr>
<td>Metropolitan Futurebuilder Fund</td>
<td>Active</td>
<td>To invest in listed and unlisted bonds that focus on the provision of infrastructure. The equity investments include listed companies and private equity initiatives. In the past, the fund has invested in the telecommunications, energy, water, housing and infrastructure sectors, with a view to improving the quality of life of ordinary people, transferring skills and creating a more equitable wealth distribution in the country.</td>
</tr>
<tr>
<td>Metropolitan Socially Responsible Investment Fund</td>
<td>Active</td>
<td>To contribute to the South African society by investing in businesses which are economically, socially and environmentally sustainable organisations. Equities are primarily selected from the FTSE/JSE SRI Index, whereas the bond portfolio is strongly biased towards infrastructure development. The property portfolio is mainly invested in properties located in under-developed areas.</td>
</tr>
<tr>
<td>Sanlam Community Builder</td>
<td>Active</td>
<td>To provide a focused opportunity through which investors can contribute to the growth of South Africa through investing in infrastructure, job creation, service provision and economic enablement. The fund typically invests in listed and unlisted equities, bonds, cash and property.</td>
</tr>
</tbody>
</table>
### TABLE 3.5: Fund objectives of local SRI funds which combine a cause-based investing strategy with a positive screening approach (cont.)

<table>
<thead>
<tr>
<th>SRI fund name</th>
<th>Status</th>
<th>Fund objective</th>
<th>Sources</th>
</tr>
</thead>
</table>
| Sanlam Development Fund<sup>(e)</sup> | Active     | To uplift previously disadvantaged individuals through **infrastructure development**; to ensure a better distribution of economic benefits through equity ownership and a process of skills transfer; to **invest in BEE companies**, **financial instruments empowering previously disadvantaged individuals to acquire ownership of companies and intermediaries promoting small business entrepreneurs**; to be involved in the pre-listing of black oriented companies. The fund not only provides capital but also strategic and investment **advice** to new black-led private equity and venture capital businesses.                                                                 | Sources: Futuregrowth corporate website (2006); Personal communication Kalam (2006)  
(a) Sources: AFAC TDI Manager Watch Survey 30 September 2002; Du Preez (2005:37); Metropolitan Asset Managers corporate website (2006); Personal communication Albertyn (2006)  
(b) Sources: Investment with a conscience (2006:5); Personal communication Albertyn (2006)  
(c) Sources: Heese (2002b); Personal communication Scholtz & Forster (2006)  
(d) Sources: AFAC TDI Manager Watch Survey 30 September 2002; Personal communication Scholtz & Forster (2006)  
(e) Sources: Door opens for institutional investors (2003); Cranston, Gqubule & Mahabane (2004); Personal communication Scholtz & Forster (2006)  
(f) Sources: Personal communication Jackson & Albertyn (2006)  
(g) Sources: Du Preez (2005:37); Personal communication Bosch (2006)  
(h) Sources: Du Preez (2005:37); Personal communication Bosch (2006) |
| Sanlam Development Fund of Funds<sup>(f)</sup> | Active     | To allow investors to spread their investments over one or more of four **private equity** funds, each with a strong empowerment financing focus and to **finance empowerment transactions** in South Africa, Namibia and other Sub-Saharan African countries.                                                                                                                                                                                                                                                   | Sources: Door opens for institutional investors (2003); Cranston, Gqubule & Mahabane (2004); Personal communication Scholtz & Forster (2006)  
(f) Sources: Personal communication Jackson & Albertyn (2006)  
(g) Sources: Du Preez (2005:37); Personal communication Bosch (2006)  
(h) Sources: Du Preez (2005:37); Personal communication Bosch (2006) |
| TopGEAR Fund<sup>(g)</sup>               | Discontinued | To give impetus to the government's macro-economic GEAR (growth, employment and redistribution) strategy by:  
- investing in **development-related** projects that focus on improving the quality of life in South Africa, reducing the levels of unemployment and uplifting previously disadvantaged communities; and  
- **investing in those industries whose development has been recognised as crucial to the country's development**: tourism, building and construction, agriculture, exporting, financial services, and education and training.  
- **supporting listed black empowerment companies** or those that are in the process of listing because of their redistributive nature.                                                                                                                                                                                                 | Sources: Personal communication Jackson & Albertyn (2006)  
(g) Sources: Du Preez (2005:37); Personal communication Bosch (2006) |
| STANLIB Corporate Wealth Development Fund<sup>(h)</sup> | Active     | To finance projects which provide **electrification, sanitation and infrastructure in under-serviced areas and to facilitate the purchase of equity in companies owned or managed by previously disadvantaged people**. Even though the fund consists of **listed and unlisted securities**, unlisted equities and special **purpose bonds** are generally preferred by management.                                                                                                                                                                                                                                                                                                                                 | Sources: Personal communication Jackson & Albertyn (2006)  
(g) Sources: Du Preez (2005:37); Personal communication Bosch (2006) |

- 100 -
3.7.3 Negative screening in South Africa

Five local SRI funds, all of them active funds, employ a negative (exclusionary) screening strategy which is based on Shari’ah (Islamic law) principles. One fund manager cautioned that the performance of local Shari’ah funds should not be compared directly with one another as different Shari’ah advisory boards formulate different criteria for ‘acceptability’ (Personal communication Craig 2006). An overview of Table 3.6 reveals that this is indeed the case.

**TABLE 3.6: Negative screens employed by local Shari’ah compliant SRI funds**

<table>
<thead>
<tr>
<th>SRI fund name</th>
<th>Alcohol</th>
<th>Gambling</th>
<th>Non-Halaal foodstuffs</th>
<th>Financial institutions</th>
<th>Pornography</th>
<th>Tobacco</th>
<th>Weapons</th>
<th>Entertainment</th>
<th>High levels of gearing, debtors and interest earnings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fraters Islamic Equity Fund(a)</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Futuregrowth Albaraka Equity Fund(b)</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Investment Solutions Shari’ah Fund(c)</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Oasis Crescent Equity Fund(d)</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Oasis Crescent International Fund of Funds(e)</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

(a) This fund also employs a shareholder activism strategy; Sources: FundsData (2006); Fraters corporate website (2006); Frater launches first Islamic Unit Trust Fund (2006); Personal communication Craig (2006)
(b) Sources: FundsData (2006); Futuregrowth corporate website (2006); Personal communication Kalam (2006)
(c) Sources: Investment Solutions Quarterly Bulletin (March 2006); Personal communication Davids, Steyn, Naran & Wildt (2006)
(d) Source: FundsData (2006)
(e) Sources: Du Preez (2005:1); FundsData (2006)

All five of the local Shari’ah compliant funds exclude companies whose core business activities or sources of revenue are derived from alcohol, gambling, non-Halaal foodstuff (such as pork-related products) or financial services (such as conventional banks and insurance companies). Discrepancies are however noted in terms of other exclusionary screens such as pornography, tobacco, weapons, entertainment and companies’ financial ratios dealing with financial leverage (gearing), debtors and interest earnings. As pointed out in Exhibit 3.1 of Chapter Three, Shari’ah law prohibits any association with the practice of charging interest (usury).
3.7.4 Shareholder activism in South Africa

All of the funds launched and managed by Frater Asset Management employ a shareholder activism strategy (either on its own or in combination with another SRI strategy). Fraters promotes an awareness of corporate social responsibility, including environmental management, economic empowerment and corporate governance, through constructive engagement with the management boards of the companies in which they invest (FundsData 2006; Fraters corporate website 2006; Personal communication Craig 2006).

Two local SRI funds combine a shareholder activism philosophy with a positive screening strategy. The first fund is the Momentum Supernation Fund which not only invests in infrastructural development, social upliftment, rural development and job creation but also engages with management boards with the aim of enhancing corporate governance (Du Preez 2005:38; Personal communication Kalam 2006). The Community Growth Equity Fund also invests in and engages with JSE-listed companies that are viable and sustainable and have a clear commitment to job creation, skills development, affirmative action, sound environmental practices and effective corporate governance (Segal 1997; FundsData 2006).

Despite its shortcomings, shareholder activism remains an important SRI strategy in South Africa and is one that is set to grow (Strong investment case for SRI 2005:58; Temkin 2003:7; Bacher 2004:4). Especially in the light of the recent announcement by the Government Employees Pension Fund (GEPF) that it will use its financial might to “…force corporate South Africa to shape up in areas of good governance, social responsibility and environmental protection” (Cameron 2006). The GEPF, a signatory to the UN Principles of Responsible Investment, has the potential to exert enormous influence on corporate decision making in South Africa as it controls R560 billion in retirement savings, almost half of the total retirement savings of the country. Other drivers of shareholder activism in South Africa are outlined in Section 5.3.2 of Chapter Five.
3.8 SUMMARY AND CONCLUSIONS

The historical overview presented in this chapter reveals that SRI is not an entirely new phenomenon, and one which continues to be shaped by society’s views regarding morality and wealth. The unique history of South Africa has led to formulation of specific SRI strategies and criteria, the promotion of broad-based BEE being a casing point.

There seems to be a mindset in South Africa which suggests that socially responsible investors in South Africa ought to focus exclusively on cause-based investments given these investments’ tangible impact on the ‘real economy’. This mindset clearly has its roots in the investment community’s desire to correct past injustices and, although such an approach to SRI is commendable, it is simply too narrow in its focus.

It is suggested that a broader view of SRI be adopted in South Africa whereby local investors who wish to base their investment decisions on moral and/or religious convictions are also regarded as ‘authentic’ socially responsible investors. The view that ethical or faith-based investing is ‘old fashioned’ lends support to Pope Benedict XVI’s remark that “…it is becoming more difficult to believe these days” (Purvis 2006:40).

The main argument in favour of faith-based, exclusionary screening is that not all socially responsible investors want to change the world. Hamilton et al. (1993:62) state that the dean of a Quaker college was once asked why his college shunned investments in weapon manufacturers. “Did the board of trustees think they could to stop the armaments build-up in the USA?” The dean responded by saying: “No. Our board isn’t out to change the world. We’re only seeking a oneness between ourselves and our Lord”. This type of reasoning expressed by local faith-based investors should be respected.

Furthermore, when looking at the types of positive and best-of-sector screens employed by South African SRI fund managers, is it clear that they differ from those which feature prominently in the international SRI arena. It is by no means suggested that the SRI market in South Africa should mirror the
international market, but more attention should be given to ESG considerations which are deemed to be important in those markets (particularly those dealing with environmental management).

Shareholder activism is seen as the SRI strategy that will show the most growth in South Africa, followed by strategies employing positive and best-of-sector screening approaches. Growth in these areas is however dependent on the extent to which a number of key challenges in the SRI sector are addressed. These challenges are presented in Chapter Five, but before doing so the ethical premises underpinning SRI need to be investigated.
CHAPTER FOUR

THE ETHICAL FOUNDATIONS OF SOCIA LLY RESPONSIBLE INVESTING

4.1 INTRODUCTION

From discussions in the previous chapters, there appears to be an implicit assumption that SRI activities represent ethical behaviour on the part of investors. This assumption warrants closer inspection and will address secondary research objective two (c). As stated in Section 1.5.2 of Chapter One, this research objectives calls for an extensive review of the literature on the ethical premises underpinning SRI.

Ethical questions are essentially philosophical questions and there is generally no consensus among philosophers about the answers to such questions.

However, in an attempt to draw inferences on the ethicality of SRI, a number of concepts first need to be defined such as ethics, values and morality. Secondly, attention needs to be drawn to the factors that influence individuals’ investment decisions such as their level of moral development, religious beliefs, philosophical views, culture, legal considerations and professional values. A distinction will then be made between three types of investing, namely immoral, amoral (or ethically indifferent) and moral investing. This will be followed by the presentation of a generic ethical decision making model as well as a number of approaches to ethical decision making, namely ethical egoism, utilitarianism, deontological ethics, the ethics of care, virtue theory, the conventional approach to ethics as well as emotivism.

Kliemt (1990:9) points out that for many years moral philosophers and economists have regarded it as a professional vice rather than a virtue to evaluate issues from an interdisciplinary point of view. Fortunately, the sharp divide between ethics and economics has made way for valuable interdisciplinary research, of which this chapter bears testimony.
The focus of this chapter will be on the ethical decisions made by individual investors. The reason is that they are not restricted by fiduciary duties and investment mandates as are pension fund trustees and fund managers. It should further be noted that the discussion in this chapter relates to all three approaches to SRI, namely screening, shareholder activism and cause-based investing, as outlined in Sections 3.3, 3.4 and 3.5 of Chapter Three.

4.2 DEFINING ETHICS

The word ‘ethics’ is derived from the Greek word *ethos* (character) and the Latin word *mores* (customs) which, in combination, describe how individuals choose to interact with one another. Although philosophers occasionally differentiate between *ethics* and *morality*, where ethics is seen to be an intellectual reflection on conduct and morality as the actual conduct, no such distinction will be made in this chapter. Such a strict distinction is seldom made in business ethics literature, which serves as the basis for this study.

4.2.1 Defining relevant concepts

In the most elementary sense *ethics* concerns itself with what is good and right in human interaction (Smit & Cronjè 1997:490). More specifically, ethics refers to the set of moral principles or values that drive human behaviour (Stevenson 2005:4). Although not entirely distinct from ethics, *values* more specifically relate to an individual's concepts of comparative worth, utility and the importance of certain ideas. As depicted in Figure 4.1, ethics involves a consideration of the ‘self’, ‘others’ and the notion of ‘good’.

According to Rossouw (2004a:3), all three elements i.e. ‘others’, ‘self’ and ‘good’ should be included in a comprehensive definition of ethics. He argues that the unique nature of ethics would collapse when the notion of ‘good’ is omitted.
FIGURE 4.1: Elements contained in the definition of ethics

Source: Rossouw (2004a:3)

It should further be noted that ethics is not merely concerned with the interaction between the ‘self’ and ‘others’, but also with the quality of the interaction between the parties involved. Since the mid 1980s animal rights activists and authors such as Singer (1985) have sought to promote the idea that animals should also be seen as ‘others’ who ought to be treated with some measure of ‘goodness’.

A distortion would likewise occur if the ‘self’ were to be excluded from the definition of ethics. This would occur if an individual were merely concerned about what is good for others, whilst ignoring his/her own interests. This is clearly an unsustainable scenario as most individuals are not able to entirely sacrifice their own needs in favour of others. Should ‘others’ be excluded from the definition of ethics, selfish behaviour would manifest itself. Focusing merely on what is good for the ‘self’ is contrary to the very nature of ethics, which is to ensure the interests the ‘self’ and ‘others’.

Rossouw (2004a:4) cautions that self-interest should not be confused with selfishness. The latter occurs when an individual knows that his/her behaviour might have a negative effect on others, yet continues to engage in such behaviour. As a result such behaviour is not only selfish but also unethical. If, on the other hand, the individual seeks to serve his/her own
interests, while simultaneously caring about the interests of others, his/her behaviour is deemed to be ethical.

By using this threefold definition of ethics, it can be shown that socially responsible investing indeed reflects ethical decision making on the part of investors. As in the case of mainstream investors, socially responsible investors are self-interested in that they are generally not willing to sacrifice financial returns in favour of promoting the needs of others. Besides their own needs, socially responsible investors consider the needs of an array of ‘others’ such as:

- customers e.g. by excluding businesses which engage in unethical marketing or pricing practices;
- suppliers e.g. by investing in businesses that procure locally;
- employees e.g. by engaging with businesses which have poor occupational health and safety records;
- members of society e.g. by investing in businesses that generate employment opportunities or develop social infrastructure and by excluding businesses that pollute the environment; and
- animals e.g. by engaging with the management boards of pharmaceutical and cosmetic companies that conduct scientific tests on animals.

4.2.2 Four central concepts encapsulating the essence of ethics

Carroll and Bucholtz (2000:104) present four questions that capture the essence of ethics. These are: “What is?”, “What ought to be?”, “How does an individual get from what is to what ought to be?” and “What is the motivation behind it all?”.

The first question forces the individual to face the reality of what is happening in his/her environment in ethical terms. The “What is?” question is a factual, scientific or descriptive question with the aim of clarifying the ethical reality of a situation. A socially responsible investor would, for example, need to evaluate his/her portfolio to determine the ethical profile of the businesses in
which he/she currently invests. This could be done by considering a number of ESG issues.

The second question, “What ought to be?”, is quite different from the first in that it is normative rather than descriptive. The individual needs to identify alternatives and choose the best one, ethically speaking. The socially responsible investor would thus need to decide what his/her ‘ideal’ investment portfolio should look like. This will require decisions regarding the SRI strategy (or combination of strategies) to be followed as well as the specific SRI criteria to be used.

The third question represents the challenge of bridging the gap between where the individual is and where he/she ought to be with respect to ethical behaviour (or which investments ought to be made or sold in the case of SRI). This question calls for action whereby ethical goals and objectives are to be developed. At this stage the socially responsible investor would have to sell the securities of businesses in the portfolio which are seen as ‘undesirable’ and actively seek others that are more suitable, given the chosen SRI strategy (or combination of strategies) and stipulated criteria.

According to Carroll and Bucholtz (2000:107), the final question deals with the individual’s motives for making ethical decisions. They argue that many pragmatic managers do not like to dwell on this question as it often reveals some manipulative or self-centred corporate motives. The same would apply to socially responsible investors who prefer to refrain from scrutinising corporate motives as they argue that actions are more important than motives.

An example is provided to illustrate the point: if a business donates one million Rand to a charitable cause, is it fair to ask whether management did it (i) because they really believe in the cause (altruistic motive), or (ii) simply because they seek a tax deduction (selfish motive)? Most socially oriented managers and investors would agree that it is better for a business to make a
contribution than not to, regardless of the motive. This type of reasoning corresponds with contemporary action-oriented approaches to ethics.

An overview of two of these approaches namely act-utilitarianism and deontology are presented in Sections 4.7.2 and 4.7.3 of this chapter respectively. Ideally due consideration should be given to the intrinsic value of doing the right thing, as promoted by virtue ethicists (see Section 4.7.4 of this chapter in this regard). As it is not always possible to distinguish between corporate altruism and self-interest, socially responsible investors simply need to accept the actions of managers, particularly those relating to corporate social responsibility initiatives, regardless of their motives.

The same applies to an analysis of the behaviour of socially responsible investors themselves. Although it would be reassuring to believe that all socially responsible investors are motivated by altruistic, virtuous motives, it is more realistic to acknowledge that not all socially responsible investors do it because they intrinsically value the principles underpinning SRI, but that they wish to promote self-interest. Stark (1993:7) succinctly summarises this situation by observing that decision makers, whether managers or socially responsible investors “…live in a messy world of mixed motives”.

4.2.3 Ethical dilemmas

The distinction between what is ethically ‘right’ and ‘wrong’ often becomes unclear, in which case the decision maker faces a so-called ethical dilemma. Such dilemmas are characterised by the fact that the decision is no longer between what is ethically right or wrong but between conflicting moral options or rights (Smit & Cronjè 1997:491). As such, situations may arise where all the alternatives have potentially negative or positive consequences (Mescon, Bovée & Thill 1999:64). Socially responsible investors are often confronted with ethical dilemmas when having to choose between competing investment opportunities. The choice is often not so much between what is right or wrong but rather between what is good and what is better.
With ethics having been defined, the focus will now shift to the development of an individual's moral disposition.

4.3 MORAL DEVELOPMENT

Moral development refers to the growth of moral understanding. According to Parker (1998:267) it concerns a person's progressive ability to understand the difference between right and wrong, to care about the difference between them and to act on the basis of this understanding. In this regard the theories of Piaget (1896-1980), Kohlberg (1927-1987) and Gilligan (1936-) will be highlighted. Although these researchers’ work was based on observations with children, it still provides valuable insights into the ethical decision making processes of adults. These models will now be presented along with an application to SRI in South Africa.

4.3.1 Piaget's theory of moral development

Piaget identified two major stages of moral development which he termed ‘heteronomous morality’ or government by others and ‘autonomous’ morality referring to self-governance (Parker 1998:268). In the heteronomous morality stage the very young child bases moral judgements on unilateral respect for authority figures. They regard as right that which their parents or authority figures demand from them and accordingly, this stage is also called the ‘morality of duty’ stage (Parker 1998:268). Piaget argued that the child at this stage has no notion of ‘good’ as he/she simply does what is expected of him/her (Rossouw 2004a:43).

In Piaget's second stage of moral development, the child or young adolescent begins to develop a sense of autonomy and reciprocity. The child also begins to acknowledge that mutual respect is essential for human interaction and starts to treat others as they would like to be treated themselves. From this point onward Piaget envisaged a gradual process of unfolding moral development ending in mature cooperation which is based on the individual’s inner convictions and locus of control (Parker 1998:270; Rossouw 2004a:44).
It can be argued that socially responsible investors act from an ethic of autonomy as they base their decisions on inner convictions and show a concern for respect in human interaction.

4.3.2 Kohlberg’s model of moral development

Kohlberg (1981, 1984) studied differences in children’s reasoning ability with regard to moral dilemmas. He hypothesised that moral dilemmas motivated children’s development through a fixed sequence of increasingly flexible kinds of moral reasoning. Figure 4.2 presents Kohlberg’s three-level model of moral development.

(a) The pre-conventional level

Kohlberg called the first stage within the pre-conventional level that of ‘heteronomous morality’ because it consists of avoiding breaking the rules laid down by parents or authority figures. It is evident that this stage closely coincides with Piaget’s heteronomous morality stage of moral development. During the next stage, referred to as the seeking-of-rewards stage, the child notices some connection between being ‘good’ (i.e. doing what their parents or authority figures expect) and receiving some reward as a result of being ‘good’. The child therefore starts to realise that it is in his/her own best interest to do the right thing (Rossouw 2002:38).

Although not directly applicable to SRI, the pre-conventional level forms an important building block in the moral development of investors.

(b) The conventional level

Kohlberg stated that as the child gets older, he/she learns that there are others whose ideas or welfare ought to be considered. At the conventional level, which consist of two stages, the child thus acknowledges the views of others and learns the importance of conformity to the conventional norms of society (Hellriegel, Jackson, Slocum & Staude 2001:127).
Kohlberg’s third stage of moral development, called the ‘good boy/nice girl’ stage, corresponds with Piaget’s notion of autonomous morality. During this stage the child or adolescent realises the importance of being good to those close to him/her.

In stage four, the law-and-order stage, the adolescent or young adult realises that acceptable behaviour consists of doing one’s duty, showing respect for authority and maintaining the social order for its own sake (Hellriegel et al. 2001:127). Socially responsible investors at this stage will equate ‘moral’ investing with investing in companies which follow the letter of the law with regard to ESG considerations.

(c) The post-conventional level

Stages five and six jointly form the level of moral development that Kohlberg termed the post-conventional, autonomous or principled level. At this mature
level of moral development the individual’s focus moves beyond those ‘others’ who are of immediate importance to the individual to humankind as a whole. Kohlberg claims that an individual at this level has developed a notion of right and wrong that is more advanced than the conventional norms of society (Carroll & Bucholtz 2000:119).

More particularly, an individual at the fifth, or social contract stage, evaluates ethical decisions and actions in terms of general individual rights and accepted social norms. Kohlberg contended that a person at the social contract stage holds onto some absolute values such as life and liberty regardless of others’ values (Hellriegel et al. 2001:127). Kohlberg stated that individuals at this stage exhibit a common concern for the principles of utility, rights and justice. In doing so he equated this stage of moral development with utilitarian and deontological ethics which are presented in Sections 4.7.2 and 4.7.3 of this chapter respectively.

The sixth and most advanced stage of ethical reasoning in Kohlberg’s model is characterised by the individual’s commitment to universal principles that transcend all other external obligations, including the law (Hellriegel et al. 2001:127; Rossouw 2002:39). Immanuel Kant’s deontological ethic emphasising justice, public welfare, equality of human rights, and respect for the dignity of the individual, plays a pivotal role at this stage.

In the light of the above, it can be argued that socially responsible investors’ decisions and ownership practices correspond with Kohlberg’s post-conventional or principled level as they exhibit a concern for universal principles which exceed the prescriptions of the law. As such, initiatives like the UN Global Compact (2000) and UN Principles for Responsible Investment (2006:1) also receive significant support from socially responsible investors across the globe.

Against this background, a third model of moral development will be presented, namely that of Gilligan (1982:25).
4.3.3 Gilligan’s feminist view of moral development

Gilligan (1982:25) sharply criticised Kohlberg’s research which showed that girls, on average, reached a lower level of moral development than boys. She claimed that Kohlberg’s results were biased as the participants in his sample were largely male and that the scoring method used tended to favour a principled way of reasoning that was more common to boys.

Gilligan (1982:40) argued that boys (men) tend to deal with moral issues in impersonal, impartial and abstract terms, whereas girls (women) are more focused on relationship maintenance and hurt avoidance when confronted with ethical dilemmas. Gilligan claimed that since girls (women) perceive themselves to be part of a network of relationships, morality is more a matter of caring and showing responsibility toward those involved in their relationships than in adhering to abstract and impersonal principles. Gilligan criticised Kohlberg for placing too much emphasis on the value of independence at the expense of interdependence and used empirical research to identify three phases of moral development.

In the first phase, the individual’s focus is on caring for the ‘self’ to ensure survival, whereas the second phase is a transitional phase in which the individual comes to recognise that focusing merely on the ‘self’ is egocentric and selfish. This realisation of a connection between the ‘self’ and ‘others’ fosters an understanding of the concept of responsibility. Gilligan argued that the idea of ‘good’ is equated with caring for others during this phase. In the third phase of moral development, the focus shifts to the dynamics of the relationship between the ‘self’ and ‘others’ namely that of interconnection (Parker 1998:271).

Although subsequent empirical research has failed to support Gilligan’s claims by asserting that there is no gender difference in terms of ethical decision making, Gilligan’s work formed the basis for what has become known as the ethics of care. This approach to ethical decision making will be highlighted in Section 4.7.4 of this chapter and asserts that men and women do indeed differ
in terms of dealing with ethical dilemmas, including those that present themselves in the investment realm.

Barber and Odean (2001:261) for example found that men and women invest differently. Men were found to be overconfident when making investment decisions and as such, engage in more trades than women, thereby reducing their returns to a larger extent than their female counterparts. Barber and Odean’s (2001:261) findings suggest that men and women would select different portfolios, a statement underscored by the research of McLachlan and Gardner (2004:13) and Schueth (2003:192). These authors show that more women invest in socially responsible companies and SRI funds than men – indirectly lending support to Gilligan’s model which claims that women place higher values on stakeholder relationships and a concern for ‘others’ than men do.

In addition to considering the levels of moral development as an explanation for how and why people behave ethically (or invest in a socially responsible manner), it is also useful to consider a number of sources which guide ethical decision making.

4.4 SOURCES OF ETHICAL GUIDANCE

Carroll and Bucholtz (2000:122) describe five repositories of values influencing managers, namely religious convictions, philosophical views, culture, legal considerations and professional values. The same sources also apply to socially responsible investors and could be extended to include values learned from ‘significant others’ such as parents, friends, teachers and role models. Lantos (2002:209) also identifies a person’s conscience and critical reasoning ability as means of shaping their ethical judgments.

4.4.1 Religion

Most people’s values are based on teachings contained in holy books, such as the Torah, Bible and Qur’an. For many devout believers SRI is a natural extension and application of their values. Although Quakers in the USA in the 18th century were the first ‘modern’ socially responsible investors, their
Religious Society of Friends still continues today to provide members with advice on evaluating investment opportunities from a Christian (and particularly from a Quaker) point of view (Ethical considerations for Quaker investors 2001).

Several websites exist, such as Crosswalk.com, Christian Investment Services and Christian Brothers Investment Services, which provide Christian investors with investment guidelines based on biblical principles.

Devout followers of Judaism likewise support the notion of SRI as it directly correlates with the prominence placed on ‘tzedakah’ (charity) and ‘tikkun olam’ (social justice) in this religion (Wikipedia Encyclopedia 2006c,d). According to the Religious Action Centre for Reformed Judaism (2006), SRI policies and practices are “…not an optional commitment but rather an organic expression of our [Jewish] core beliefs”. Jewish expressions of ‘tzedakah’ and ‘tikkun olam’ are mainly manifest in community investing as a SRI strategy. Obligatory charity or ‘zakat’ is likewise one of the five pillars of Islam which, along with the need to invest according to Shari’ah principles, is driving the demand for Islamic faith-based SRI funds globally.

4.4.2 Philosophy

Values originating from philosophical thought date back to the time of the ancient Greeks and eastern sages. The Chinese philosopher Confucius, for example, stressed the importance of saving, education, adaptability, relationships and virtues (Needle 2004:83). The most important (Western) philosophical views applicable to the business environment and the investment setting are highlighted in Section 4.7 of this chapter.

4.4.3 Culture

The role of culture in determining values has been emphasised by many ethicists (Joyner & Payne 2002:299; Lantos 2002:209). A country’s culture represents a broad synthesis of societal norms emanating from everyday life and is passed on from one generation to the next. Each succeeding
generation thus has an impact on the next generation’s values, beliefs, attitudes and behaviour.

Kretzschmar (2002:371) remarks that it is particularly difficult to identify common values in multicultural societies, such as South Africa, were many divergent moral paradigms coexist. From an overview of the SRI strategies employed by local SRI fund managers in Section 3.7 of Chapter Three, there definitely seems to be tangencies between socially responsible investors in South Africa.

4.4.4 Legal considerations

Legislation has been and continues to be one of the most powerful forces defining what is ethical in a society. It should however be noted that legality does not necessarily equal ethicality and that ethical behaviour is generally on a level above the law (Carroll & Bucholtz 2000:122). It has been said that in civilized societies the law “…floats on a sea of ethics” (Schwartz 2003:196).

This notion is clearly illustrated in Carroll’s pyramid of corporate responsibilities (Figure 4.3) which shows that a firm’s ethical and philanthropic responsibilities relate to actions which extend beyond the prescriptions of the law.

The law is thus merely a reflection or codification of what society considers as the minimal standards of acceptable conduct and it might not address all realms in which ethical questions may arise. A good example in South Africa refers to the promotion of broad-based BEE. Before the broad-based BEE Act was promulgated in 2003, managers had to rely on vague and often conflicting guidelines developed by the National BEE Advisory Council and the Department of Trade and Industry, as well as definitions contained in various sector charters and scorecards.

As will be indicated in Section 5.3.3(c) of Chapter Five, questions have been raised in South Africa on whether SRI, particularly cause-based or targeted investing, ought to be legislated.
4.4.5 Professional values

Professional values emanate from organisations and associations that represent various professions and articulate the ethical consensus of their leaders. Exhibit 4.1 provides an example of the professional values and conduct prescribed to members of the Investment Analysts Society of South Africa.

From Exhibit 4.1, it is clear that key values such as integrity, dignity and respect feature prominently as professional values articulated by the Investment Analysts Society of South Africa.

A similar code of conduct exists for South African asset managers which could serve as a guideline when investing in a socially responsible manner (Investment Management Association of South Africa 2006).
EXHIBIT 4.1: The Investment Analysts Society of South Africa’s code of ethics

1 The reputation of the investment analysts' profession and of The Investment Analysts Society of Southern Africa is of paramount importance and must be preserved by members of the Society at all times. Members shall:

1.1 conduct their profession with integrity and dignity;
1.2 adopt irreproachable standards of conduct towards clients, fellow analysts, employers, employees and others with whom they have dealings;
1.3 preserve the confidence of both present and former clients;
1.4 conduct their activities strictly in accordance with the public interest and with full respect for the dignity of the Society, and
1.5 be aware of and comply with all legislation and other regulations affecting the conduct of their profession, in particular the prohibition on insider trading.

2 Members shall ensure that transactions for their own account or for any accounts in which they have an interest do not conflict with the interests of their clients or employers and that transactions for clients and employers have priority over transactions for their own account or any account in which they have an interest.

3 Members providing investment advice, whether by way of written research reports or in any other form (including oral advice) shall:

3.1 exercise due care, skill and thoroughness in making investment recommendations;
3.2 maintain independence and objectivity;
3.3 base their advice and recommendations on appropriate research and investigation;
3.4 distinguish between facts and opinions in research reports; and
3.5 not use material prepared by others in research reports without acknowledging the source.

4 Alleged breaches of this Code will be dealt with in terms of the Constitution of the Society.

The aforementioned sources of ethical guidance, namely religion, philosophy, culture, legal considerations and professional values play a critical role in developing an individual’s moral character and hence his/her views regarding investment matters. Three prominent views in this regard will be explored next.

4.5 TYPES OF INVESTMENT ETHICS

Carroll and Bucholtz (2000:107) identify three types of management ethics which will be adapted and contextualised in this section to reflect three types of investment ethics. As indicated in Table 4.1 these types include immoral, amoral (or ethically indifferent) and moral investing. Insight into these types of investment ethics will foster a better understanding of the range of behaviours that investors can display, intentionally or unintentionally.

**TABLE 4.1: Three types of investment ethics**

<table>
<thead>
<tr>
<th>Ethical norms</th>
<th>Immoral investing</th>
<th>Amoral (ethically indifferent) investing</th>
<th>Moral investing (SRI)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Investment decisions imply a positive and active opposition to what is ethical. Decisions are discordant with acceptable ethical principles. An active negation of what is moral is implied.</td>
<td>The investor is neither immoral nor moral, but considers investment decisions to lie outside the sphere to which moral judgements apply. May imply a lack of ethical perception and moral awareness.</td>
<td>Investment decisions conform to high ethical standards.</td>
</tr>
<tr>
<td>Motives</td>
<td>Selfish, greedy, caring only about own needs.</td>
<td>Well intentioned but selfish in the sense that no consideration is given to the impact of investment behaviour on others.</td>
<td>Good. The investor wants to prosper but only within the constraints of sound ethical precepts. Seek enlightened self-interest.</td>
</tr>
<tr>
<td>Goals</td>
<td>Wealth maximisation at any price.</td>
<td>Wealth maximisation. No other goals are considered.</td>
<td>Wealth maximisation within the confines of legal obedience and ethical standards.</td>
</tr>
<tr>
<td>Orientation towards the law</td>
<td>Legal standards are barriers that must be overcome to accomplish goals.</td>
<td>The letter of the law guides ethical decision making.</td>
<td>Obedience to the letter and spirit of the law. The law indicates minimal ethical behaviour. The investor prefers to operate well above what legislation mandates.</td>
</tr>
</tbody>
</table>

Source: Adapted from Carroll & Bucholtz (2000:114)
4.5.1 Immoral investing

Using the concepts *immoral* and *unethical* as synonyms, immoral investing can be defined as “…a posture that not only is devoid of ethical principles or precepts but also implies a positive and active opposition to what is ethical” (Carroll & Bucholtz 2000:108). As indicated in Table 4.1, this view of investing holds that an investor’s motives are selfish and greedy as the individual only cares about his/her own needs. If an investor is actively opposed to what is regarded as ethical, it implies that he/she knows what is right, yet chooses to do what is wrong. Immoral investors pursue wealth maximisation at all costs and regard the law as a barrier to be overcome in order to accomplish their goals. One example of immoral (and unlawful) investment behaviour is that of insider trading.

4.5.2 Moral investing

The antithesis of immoral investing is that of moral investing. Although it is not always clear which ethical standards prevail in a society, moral investors generally strive to uphold these as well as high standards of professional conduct (Carroll & Bucholtz 2000:109). In contrast to the selfish motives of immoral investors, moral investors aspire to prosper financially, but only within the confines of legal and ethical precepts. SRI investors are clearly moral investors as they consider what is good for themselves and others.

4.5.3 Amoral (ethically indifferent) investing

A formal definition of ‘amoral’ refers to decisions or actions which are neither moral nor immoral. It further refers to someone who fails to admit moral distinctions or judgments, who lacks moral sensibility and does not care about right and wrong (Carroll & Bucholtz 2000:112). In essence, amoral investing implies that investors are indifferent to ethical or ESG considerations. Amoral investing is however not just a middle position on a continuum between immoral and moral investing but is very different in kind from both of these types of investing.
Two kinds of amoral investors can be distinguished. First there are *intentional amoral* investors who do not factor ethical considerations into their decisions because they believe investment matters resides outside the sphere to which moral judgments apply. These investors hold on to the old adage which states that “…one should not mix morals with money”. It is important to stress that these investors are neither immoral nor moral. They simply believe that different rules apply to investment decisions than to other realms of life.

Whereas Carroll and Bucholtz (2000:112) argue that intentionally amoral managers are a distinct minority in business today, the same could not be said about amoral investors. This claim is justified when considering the small percentage of socially responsible investors in financial markets compared with traditional investors (De Cleene & Sonnenberg 2004:5).

Like intentional amoral investors, *unintentional amoral* investors do not think about investments in ethical terms. These investors are merely inattentive to the fact that their decisions and actions may have a negative effect on others. It could be said that these investors lack ethical perception and moral awareness or that they simply find it difficult to see how their investments in particular businesses affect the stakeholders of those businesses.

As shown in Table 4.1, both types of amoral investors pursue wealth maximisation as a goal but do not cognitively attend to moral issues that may be intertwined with that pursuit. Amoral investors are further guided by the letter of the law when making ethical decisions. Based on the above arguments, it could be claimed that the majority of investors today are amoral investors.

With having differentiated between immoral, amoral (ethically indifferent) and moral investing, the focus now shifts to the ethical decision making process employed by socially responsible investors.
4.6 THE ETHICAL DECISION MAKING PROCESS

Bodie *et al.* (2002:940) outline the typical stages through which investors progress when investing, namely specifying investment objectives, stipulating investment criteria and constraints, formulating an investment policy, implementing decisions as well as monitoring and updating the overall investment portfolio from time to time. Ethical decision making should not be seen as a separate activity, but rather as an integral part within each of these stages. Irrespective of the stage(s) during which moral judgment is required, investors are always faced with a decision making continuum similar to the one presented in Figure 4.4.

**FIGURE 4.4: Decision making continuum**

| Behaviour directed by prescribed, enforcable laws | Behaviour directed by ethics | Behaviour directed by free choice |

*Source: Smit & Cronjé (1997:490)*

On the one hand of the continuum, the individual’s decisions are governed by the laws of a country, for example, investments ought not to be made in businesses operating illegally. At the other extreme no laws are in place (or required) to direct the individual’s decisions. Investments could thus be made in any lawfully operating business (Smit & Cronjé 1997:490). In between the two extremes, the individual has to evaluate corporate behaviour against one or more ethical approaches in order to make an informed investment decision.

In the area of free choice, investors are accountable only to themselves, whereas on the other end of the continuum, they are fully accountable for complying with a country’s prescribed laws. In the area directed by the
individual’s personal views of morality, accountability merely depends on the norms and standards of which the individual are aware of but which are not enforceable. This type of personal accountability forms the crux of SRI and depends to a large extent on the individual’s level of moral development.

It should be noted that ethical decision making is a multi-faceted process and although it can be portrayed graphically, as in Figure 4.5, such a depiction does not fully capture the reality and complexities associated with ethical or socially responsible decision making.

**FIGURE 4.5: A generic model of ethical decision making**

1. Identify the decision or action which is about to be taken
2. Articulate all ethical dimensions of the proposed decision or action
3. Evaluate the decision or action in terms of one or more ethical approaches, such as:
   - Ethical egoism (self-interest)
   - Utilitarianism
   - Deontology
   - The ethics of care
   - Virtue theory
   - The conventional approach
   - Emotivism
4. Decision or action is consistent with ethics approach
   - Implement decision or action
   - Repeat cycle when faced with a new dilemma
5. Decision or action is not consistent with ethics approach
   - Do not implement decision or undertake action
   - Identify new course of action

Source: Adapted from Carroll & Bucholtz (2000:157)
According to the process set out in Figure 4.5 the investor has to articulate all the ethical dimensions of a proposed decision or action. Next the investor is required to evaluate the acceptability of the proposed decision or action in terms of the norms or standards proposed by one or more ethical approaches. Carroll and Bucholtz (2000:157) stress that the investor has the freedom to determine the approach or combination of approaches to be used as ethical guidelines.

If the proposed outcome of the decision or action is not consistent with the selected norms of acceptability, the investor should not implement the decision or undertake the action. The investor should rather consider new investment opportunities and submit them to the same process. On the other hand, if the decision maker has determined that a proposed decision or action is ethical he/she should engage in it and only repeat the cycle when faced with a new ethical dilemma.

A vital step in the ethical decision making process is that of setting norms according to one or more ethical approaches. Several of these approaches exist but only seven pertinent ones will be highlighted in the next section, namely ethical egoism, utilitarianism, deontology, the ethics of care, virtue theory, the conventional approach and emotivism. These approaches were selected on the basis that they feature prominently in business ethics literature and research.

4.7 APPROACHES TO ETHICAL REASONING

In presenting a number of approaches to ethical decision making, not only will the background to each approach be presented, but also its main weaknesses and its application to SRI. As no other authors have related SRI to any of the seven listed ethical approaches, all views expressed are purely those of the researcher. These views evolved from the application of phenomenological data analysis methods which comprise comprehending, synthesising, theorising and recontextualising the issues at stake (Collis & Hussey 2003:262).
The first two theories, namely ethical egoism and utilitarianism, are consequential in nature and are based on the philosophy that individuals ought to do whatever maximises good consequences, either for themselves (ethical egoism) or for those affected by their decisions (utilitarianism). These two approaches will be explored next.

4.7.1 Ethical egoism

(a) Background to ethical egoism

In philosophy, egoism is the theory which states that one’s self is, or should be, the motivation and goal of one’s own actions (Hosmer 1994:16). Ethical egoism is a form of normative egoism which holds that the investor ought to promote the ‘self’ above ‘others’. Egoism should be distinguished from egotism which refers to the psychological overvaluation of one’s own importance or activities. Rae and Wong (1999:28) state that, although egoists consider the ‘self’ above ‘others’, it does not necessarily suggest that they are narcissists. Ethical egoism further implies that the individual might avoid actions that may help others. The litmus test for the decision maker is therefore whether the considered action, decision or behaviour serves as means to promoting self-interest.

Hosmer (1994:17) point out that there are a number of flaws associated with ethical egoism, the first being that it provides the decision maker with no way of dealing with conflicting interests without appealing to some other ethical model. A second difficulty associated with this approach is that it could potentially collapse into anarchy.

The seminal ethical egoist, Thomas Hobbes (1588-1679), realised this first and suggested that an absolute monarch or some kind of ‘invisible hand’ is required to keep self-interest from disintegrating into anarchy. Adam Smith (1723-1790) also employed this kind of reasoning in his An Inquiry into the Nature and Causes of the Wealth of Nations in 1776 when he argued that
there was an ‘invisible hand’ that coordinated each person’s pursuit of enlightened self-interest and the common good.

(b) Ethical egoism and SRI

Based on the abovementioned description of ethical egoism, it could be argued that this approach is consistent with moral investing but only a weak form thereof. The argument being that the investor takes ethical issues into consideration when evaluating potential investments but will only invest if it will also benefit him/her financially. This emphasis on the economic and financial benefits of SRI serves as the basis of the UN’s Principles for Responsible Investment (2006:2) and is increasingly used as motivation as to why investors should engage in SRI, besides just doing the right thing.

4.7.2 Utilitarianism

(a) Background to utilitarianism

Utilitarianism is known as a teleological approach to ethics and is taken from the Greek word telos, meaning, ‘end’. It implies that the rightness or fairness of a decision or action can be determined by looking at its results or consequences (Rae & Wong 1999:30). If the consequences are good, the decision or action is thus considered ethical. Likewise if the consequences are bad, the decision or action is deemed unethical or immoral.

According to Mescon et al. (1999:65) utilitarianism proposes a standard outside of self-interest by which to judge the ethicality of a decision and separates morality from faithfulness to a divine ordinance or obedience to rigid rules. Two of the most influential philosophers who advocated a consequential view of business ethics were Jeremy Bentham (1748-1832) and John Stuart Mill (1806-1873). Bentham favoured a hedonistic view of utilitarianism by promoting the idea that the most moral acts were those that maximised pleasure and minimised pain, whereas Mill redirected utilitarianism away from
Mill argued that individuals’ ultimate goal should be happiness and that actions which contribute to this goal should be seen as good and ethical. He proposed the best option to choose when faced with a moral dilemma is the one that will result in the greatest amount of happiness or the least measure of harm for the greatest number of people (Rossouw 2004a:67).

Mill provided a number of arguments to justify his conviction that individuals indeed have the capacity to seek general happiness and not merely their own happiness. His first argument was based on the social nature of human beings, i.e. that individuals almost invariably view themselves as belonging to a community. Mill also attributed the quest for universal happiness to ‘external pressure’ on individuals to take heed of the interest of others. Such ‘external pressure’ originates from the fact that individuals need the support of others to survive and prosper. Finally, Mill argued that individuals have a natural inclination to sympathise with others and to refrain from harming others (Rossouw 2004a:68).

An important distinction is made in the literature between two types of utilitarianism, namely act-utilitarianism and rule-utilitarianism. The former states that individuals must first consider the consequences of their decisions and actions and from that evaluation make an appropriate choice that would generate the greatest amount of happiness for the greatest number of people involved. In contrast, rule utilitarianism states that individuals must consider the consequences of rules instead and ought to follow the rule which would yield the most happiness for the largest number of people involved (Wikipedia Encyclopedia 2006e).

There are a number of shortcomings of this approach which need to be highlighted.
Firstly, it should be noted that the adoption of a utilitarian approach to decision making could result in ignoring the rights of some individuals, often those of minority groups. In this regard utilitarianism sometimes defends obvious injustices merely because the ‘greater good of the greatest number’ is served. By focusing on the ends (consequences), the means may be ignored or it could be argued that the end justifies the means (Rae & Wong 1999:32).

Secondly, utilitarianism may come into conflict with the notion of justice. Critics argue that a mere increase in total good is not good in itself because it ignores the distribution of the good, an important element of deontological ethics (Carroll & Bucholtz 2000:135).

Thirdly, it is difficult to predict and measure the consequences of decisions and actions. Given these shortcomings, utilitarian ethics have over the years been increasingly challenged and tempered by a deontological approach to ethics.

(b) Utilitarianism and SRI

It could be argued that socially responsible investors who follow a utilitarian approach to ethics are likely to focus purely on the consequences of corporate policies and practices, including those relating to corporate social responsibility initiatives. As such, they will only invest in businesses of which the stated policies and practices will ensure the greatest good of the greatest number of stakeholders. This type of reasoning could be applied to SRI screening and shareholder activism approaches but it is probably best suited to a cause-based investing strategy. The outcomes (consequences) of cause-based investments are clearly visible in that they directly enhance the general happiness of disadvantaged communities.
4.7.3 Deontological ethics

(a) Background to deontological or duty-based ethics

In contrast to teleological forms of moral reasoning, deontological ethics is based on principles (Rae & Wong 1999:34). Deontological ethics is concerned with the moral obligations, duties or responsibilities which are inherently necessary for morality to prevail, irrespective of the ends or consequences they produce. A decision or action is therefore only deemed ethical if it conforms to moral principles. A deontologist would, for example, say that theft is wrong, irrespective of who benefits from it.

The classic proponent of this approach is Immanuel Kant (1724-1804) who sought to construct a system in which moral absolutes could be formulated without any recourse to religious authority. He strongly believed that the consequences of actions (act-utilitarianism) or how individuals feel about actions (emotivism) were irrelevant to the morality of the action (Hosmer 1994:18).

Kant’s supreme guideline for moral decision making, called his ‘categorical imperative’, is: “Act only on that maxim whereby you can at the same time will that it should become a universal law”. This means that when an individual makes a moral decision he/she should always first evaluate the principle upon which the proposed action is based. The individual must then consider whether he/she could envisage that specific principle being turned into a moral law for all to obey. If not, the proposed action is deemed immoral. Furthermore, should the principle be significant enough to be turned into a universal law, but the individual does not feel comfortable in abiding by it, the proposed action should also be considered as unacceptable (Rossouw 2002:52).

Kant further proposed that individuals should: “Act so as to treat humanity, whether in their own person or in that of another, in every case as an end in itself, and never as a means only” (Smit & Cronjè 1997:496). In this sense
Kant incorporated the Golden Rule i.e. do unto others as you would have them do unto you, into his categorical imperative.

Before deontological thinking can be applied to SRI, a distinction first needs to be made between the deontological principles of rights and justice.

(i) The principle of rights

A right is a justifiable claim or entitlement such as the right to life or the right not to be killed by others. Deontologists argue that, although one right can be superseded by another, more basic right, it cannot simply be overridden by utility. Stevenson (2005:68) points out that a rights perspective mainly expresses morality from the point of view of the individual, although not exclusively. For example, the UN Universal Declaration of Human Rights contains collective rights such as that of entire communities (e.g. the San community of the Kalahari). A distinction should also be made between liberty rights and welfare rights.

Liberty rights imply that individuals should be free from restriction or control and that they have the right to be left alone, as long as they do not trespass against the liberty rights of others. Examples of liberty rights include the right to privacy, private property, freedom of speech and freedom of association. These rights are generally protected by legislation and are set forth in documents such as the South African Constitution and the UN Universal Declaration of Human Rights (2006). Liberty rights also imply that individuals are to refrain from harming or interfering with others’ intended course of life. These rights do not require individuals to invest time, money, energy or any other resources to assist others and by refraining from doing so they do not act unethically or irresponsibly. As such, investors have the right not to invest in a socially responsible manner.

In contrast, welfare rights refer to that which is necessary to satisfy basic human needs, such as health, happiness and general wellbeing. Welfare rights are defined in the UN Universal Declaration of Human Rights (2005) as
follows: “Everyone has the right to a standard of living adequate for the health and wellbeing of himself and of his family, including food, clothing, housing, medical care and necessary social services, and the right to security in the event of unemployment, sickness, disability, … or other lack of livelihood in circumstances beyond his control.” Although the government of a country has the primary responsibility to meet the welfare rights of its citizens, it has become common practice that private enterprises engage in social responsibility initiatives to improve the welfare of society.

Two kinds of deontological duties can be distinguished, namely categorical duties and *prima facie* duties. A categorical duty, such as speaking the truth and protecting innocent life, is absolutely never to be violated. On the other hand, a *prima facie* duty is one which appears, at first sight to be binding, but which may, upon closer inspection, be overridden by other, stronger duties. The difficulty with *prima facie* duties however lies in determining which responsibilities have priority (Lantos 2002:211). A classic example of this dilemma relates to the much-debated trade-off between maximising shareholder wealth and advancing social goals (Friedman 1970:32; Sparkes & Cowton 2004:45). Given this trade-off, socially responsible investors are bound to encounter difficulties in prioritising ESG considerations.

(ii) The principle of justice

The principle of justice refers to a belief that all people should be treated fairly and impartially, that rules should be applied consistently, that people who harm others should be held responsible and that they should make restitution (Mescon *et al*. 1999:65). In this regard, Lantos (2002:214) states that people have been given just treatment when they have received what they deserve or can legitimately claim.

Several types of justice can be identified although only three are pertinent to the research in question, namely *distributive, compensatory and procedural justice*. Carroll and Bucholtz (2000:136) point out that distributive justice, also called social justice, refers to the fair distribution of benefits and
burdens and features prominently in decisions pertaining to philanthropy. Compensatory justice involves compensating an individual or group for some past injustice and underpins the current debate on broad-based BEE in South Africa. Lastly, procedural justice refers to fair decision making procedures, practices and agreements.

A primary weakness of a deontological approach to decision making is that it does not take circumstances into consideration. Some situations may require the bending or abolition of rules. A classic example in this regard relates to Dutch families who hid Jewish fugitives in their homes during the Second World War. A deontologist who believed that one should always speak the truth would have faced a moral dilemma when questioned by Nazis on whether he/she was hiding anybody. Clearly, adherence to this rule would have had dire consequences for the both the deontologist and the stowaways.

This example also highlights a second serious drawback of deontological ethics, namely that it does not provide guidelines for ranking conflicting duties or responsibilities i.e. the duty to speak the truth versus the duty to preserve life (Rae & Wong 1999:36). Ethicists suggest that in dealing with conflicting duties, decision makers ought to rank duties owed to various parties and obey the stronger or more compelling ones. In the abovementioned example, saving people’s lives clearly takes precedence over telling the truth as it deals with the ‘higher moral good’.

(b) Deontological ethics and SRI

Many socially responsible investors employ deontological principles as guidelines in ethical decision making. Many do so unknowingly. Rae and Wong (1999:35) indicate that most religious traditions such as Judaism, Christianity and Islam are strongly rooted in deontological ethics. As such, exclusionary screens, sometimes called ‘sin’ screens, are deeply rooted in the principles of duty-based ethics. It could be argued that deontologically-minded socially responsible investors in South Africa will favour corporate policies and
practices that comply with the principles of rights (both liberty and welfare) and justice (particularly distributive and compensatory justice).

4.7.4 The ethics of care

(a) Background to the ethics of care

It is useful to introduce an overview on the ethics of care after that of utilitarianism and deontology as this approach is critical of these traditional views of morality. The care perspective builds on the work of Gilligan (1982:40) who claims that teleological and deontological ethics focus too much on the individual and on rational thought processes. Advocates of the ethics of care disagree with the traditional ‘masculine’ approaches to ethics which assume that morality is impartial and that everyone’s interests should be considered as equally worthy (Lantos 2002:216).

In terms of the latter, any special relationships that an individual may have with particular individuals should thus be set aside when determining what the most ethical course of action would be. In contrast, the ethics of care views the decision maker as essentially relational and not individualistic.

Proponents of this approach, which is often associated with feminism, do not deny the existence of the ‘self’ but hold that the ‘self’ has relationships that cannot be separated from the self’s existence. According to the ethics of care, an individual thus has an obligation to exercise special care towards those persons with whom he/she has valuable close relations, particularly relations of dependency. This is in stark contrast to traditional approaches where ‘others’ are often seen as threats.

In its most refined form, the ethics of care suggest a concern for ‘weaker ones’ i.e. those who have nothing to offer the decision maker in return for his/her concern (Personal communication Naudé 2006). Jesus referred to this notion when He asked His followers: “…For if you love those who love you, what reward have you? Do not even the tax collectors do the same?” (Spirit Filled
Life Bible Matthew 6:46-47). Tax collectors, who were mainly Romans, were viewed with utter contempt by the Jews of the time as they engaged in usury and other pagan practices.

It could be argued that Gilligan’s model of moral development falls into the very trap it tries to avoid, namely eradicating a gender dichotomy. Although feminist theories claim to promote gender equality, they actually sharpen the divide by stating that men think and act in one way and women in another. However, in reality there are men who are caring and ‘feminine’ in their ethical approach while at the same time there are women who deal with ethical dilemmas in a highly legalistic and principles-based manner (Personal communication Naudé 2006).

(b) The principle of care and SRI

Socially responsible investors who make decisions based on the principle of care are likely to scrutinise firms’ stakeholder relationships. This can be done by employing a positive (inclusionary) screening approach or by actively engaging with management boards on material ESG issues. It can also be argued that cause-based investors, who require no more than inflation-linked returns on their investments, base their investment decisions on the principles embedded in the ethics of care.

4.7.5 Virtue ethics

(a) Background to virtue ethics

The virtue approach to morality differs greatly from the ethical approaches discussed so far. Rae and Wong (1999:37) point out that most contemporary approaches to ethical decision making focus on doing the right thing when being confronted with a moral dilemma. The proponents of virtue ethics however hold that there is more to morality than simply doing the right thing.
Virtue theory dates back to the classic Greeks who were concerned about the means by which individuals incorporate virtues such as honesty, fairness, truthfulness and benevolence into their characters (Carroll & Bucholtz 2000:138). The focus of virtue ethics is thus more on being a good and virtuous person than merely doing good deeds. In its strongest form this view of morality implies that good deeds can only be performed by good (virtuous) people.

An overview of virtue ethics would be incomplete without a closer inspection of Aristotle’s views on the virtuous life. Aristotle assumed that morality is both necessary and vital for human beings and that it is impossible for an individual to live with human dignity without being a well-developed moral being (Rossouw 2004a:60). For Aristotle, morality starts with the ‘self’ and hinges upon the character of the individual. He argued that what matters most is not what is right or wrong in interpersonal relations, but in the intrapersonal development of the individual’s own character.

Aristotle was of the opinion that the only way to develop a person’s character was through the cultivation of virtues (Rossouw 2004a:61). In this regard, Aristotle distinguished between the rational and irrational dimensions of human nature and argued that the individual’s natural dispositions (to avoid pain and maximise pleasure) should not be left to instinct but need to be controlled by rational thought.

Aristotle argued that ‘being virtuous’ is not about being perfect but rather about achieving a balance in life (Lantos 2002:215). The Greek philosopher rightfully observed that human beings are either too much inclined to do some things (mainly those leading to pleasure) or too little inclined to do others (usually those that result in pain). Aristotle’s ‘mean’ is thus intended to correct these defective positions and represents a midpoint between excessive and deficient dispositions. Aristotle was convinced that an individual who reaches his/her telos (ultimate goal) by always acting in a virtuous way would experience a sense of wellbeing and joy. Sometimes the individual might however have to postpone immediate pleasure in order to act with virtue.
The question could now be asked whether virtuous men and women invest in a socially responsible manner.

(b) **Virtue ethics and SRI**

With SRI having been described as a form of moral investing, it could indeed be said that socially responsible investors are virtuous people who place a high value on honesty, fairness, truthfulness and goodwill towards human beings, animals and the ecological environment. In evaluating corporate behaviour they are likely to consider whether businesses are doing the right things but also whether they are doing them for the right reasons. Motives thus play an important role in the ethical judgements made by socially responsible investors using this approach to ethical decision making.

The notion that an individual might have to postpone immediate pleasure in order to act with virtue is particularly apt when considering the nature of SRI fund performance. Research has shown that the short-term returns of SRI funds are often lower than those of traditional funds and that SRI funds only tend to out-perform conventional funds over the long term (Cummings 2000:79; Bauer et al. 2002:1). Socially responsible investors therefore require patience when prioritising virtues ahead of financial rewards and should adopt a long-term orientation.

It should also be noted that not all virtuous people necessarily have the same opinions regarding various ESG issues. Members of religious groups and animal rights activists might all be regarded as virtuous people although they might disagree on the primacy that ought to be given to animals as stakeholders over that of human beings (Lantos 2002:216).

The previous five approaches to ethical decision making, namely ethical egoism, utilitarianism, deontology, the ethics of care and virtue ethics, are strongly rooted in principles, rational thought processes and virtues (Hosmer 1994:25). The following two approaches to ethical decision making, namely the conventional approach and emotivism, are quite different from the above
in that they place more emphasis on the feelings and perceptions of individuals than on universal principles or rights.

Both approaches draw on Stoic philosophy which espouses the notion of relativism. According to Stevenson (2005:179) relativism refers to the notion that ‘good’ and ‘bad’ are not universally true and may differ from one society or individual to the next.

4.7.6 The conventional approach to ethics

(a) Background to the conventional approach to ethics

As depicted in Figure 4.6, an individual following this approach to ethical decision making will compare a proposed decision or action against prevailing norms of acceptability in his/her society before making a decision (Carroll & Bucholtz 2000:102). This approach is called the conventional approach, as benchmark norms are believed to reflect the general (or conventional) views of society. This approach implies that socially responsible investors in a specific country will consider the prevailing trends in SRI in that country at any given point in time.

FIGURE 4.6: The conventional approach to ethics

Source: Adapted from Carroll & Bucholtz (2000:102)
According to Carroll and Bucholtz (2000:100), the greatest danger of the conventional approach lies in the subjective nature of the prevailing social norms. This opens the door to cultural relativism where ‘good’ means ‘socially approved’ in a given society or culture. Prevos (2004:1) explains that a social relativist will view certain forms of behaviour as wrong in cultures which prohibit them and right in cultures which permit them. As such, advocates of cultural relativism argue that there are no absolute grounds on which to assess moral claims within different societies, as they are all right in their own cultural context.

Gensler (1998:12) points out that the members of a society generally agree at very high levels of abstraction that certain behaviours are right or wrong but that consensus tends to disintegrate as one moves from abstract to specific situations. Subsequently, two different people could consider the same decision and action, compare it with their understanding of what the prevailing social norms are and reach different conclusions as to whether it is ethical or not. Another danger of using prevailing social norms lies in determining whether these norms are truly right or justifiable. The use of discriminatory policies practised under the previous government in South Africa serves as a case in point.

(b) The conventional approach and SRI

Despite the concerns regarding cultural relativism, the conventional approach is none-the-less useful in describing some of the ‘prevailing themes’ used by socially responsible investors. In Section 3.7 of Chapter Three an overview was provided of the ethical and ESG considerations which currently dominate SRI strategies in South Africa. With the exception of the Islamic exclusionary prescriptions, the most common prevailing themes are the promotion of broad-based BEE, the provision of social infrastructure and issues relating to employees (education, training and HIV/AIDS).
4.7.7 Emotivism

(a) Background to emotivism

As a non-cognitive approach, emotivism proposes that personal feelings are the most important determinants of right and wrong behaviour (Rae & Wong 1999:33). However, since feelings differ from person to person, morality quickly breaks down to a matter of personal preference and subjectivism. Rae and Wong (1999:33) state that many of the same criticisms of cultural relativism apply to emotivism. As pointed out earlier, the most fundamental condemnation thereof is that it destroys the notion of universal human rights and offers individuals (particularly socially responsible investors) no clear guidelines by which to benchmark the morality of their decisions and actions (Prevos 2004:2).

(b) Emotivism and SRI

SRI is sometimes referred to as ‘feel good investing’ hinting at the application of an emotivist approach to SRI decision making (Middelton 2003; Barringer 2006:2). It is however not foreseen that this approach to ethical decision making will become operational among investors, whether in South Africa or further afield, for the simple reason that prudence usually supersedes emotions in investment related matters.

4.7.8 Summary of ethical approaches and their applicability to SRI

It should be clear from the above discussion that socially responsible investors could gain valuable insights into moral matters by comparing their decisions and actions against the norms of acceptability proposed by one or more of the approaches described. Table 4.2 presents an overview of the key features of these approaches along with their application to SRI.
### TABLE 4.2: Summary of ethical approaches to ethical decision making and their application to SRI

<table>
<thead>
<tr>
<th>Ethical approach to decision making</th>
<th>Key features</th>
<th>Application to SRI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethical egoism</td>
<td>Concerned with decisions and actions that will promote self-interest.</td>
<td>Socially responsible investors will only invest in SRIs if it promotes self-interest.</td>
</tr>
<tr>
<td></td>
<td>Might avoid actions that may help others.</td>
<td>Represents a weak form of moral investing.</td>
</tr>
<tr>
<td>Utilitarianism</td>
<td>Decisions and actions are deemed ethical if they result in the greatest good for the greatest number.</td>
<td>Positive screening and cause-based investment strategies are favoured by utilitarian investors as the consequences of these strategies directly or indirectly increase the general happiness of corporate stakeholders and society at large.</td>
</tr>
<tr>
<td></td>
<td>Focuses on consequences rather than rules.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sometimes overrides the rights of minorities.</td>
<td></td>
</tr>
<tr>
<td>Deontology</td>
<td>Concerned with the moral principles, obligations, duties, rights and responsibilities.</td>
<td>Deontological thinking forms the foundation of faith-based exclusionary screens as well as other SRI strategies concerned with the protection of rights and social justice.</td>
</tr>
<tr>
<td></td>
<td>Principles to be respected irrespective of the ends or consequences they produce.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Ignores circumstances.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Provides no hierarchy of responsibilities.</td>
<td></td>
</tr>
<tr>
<td>The ethic of care</td>
<td>Focuses on nurturing close relations, particularly relations of dependency (i.e. key stakeholders)</td>
<td>Socially responsible investors carefully evaluate companies’ stakeholder relations (by means of positive screening) and actively engage with management boards on material ESG issues. They also finance causes or initiatives to uplift communities in need of socio-economic development.</td>
</tr>
<tr>
<td></td>
<td>Decision makers are seen as essentially relational and not individualistic.</td>
<td></td>
</tr>
<tr>
<td>Virtue ethics</td>
<td>Focuses on being good and virtuous rather than merely doing good.</td>
<td>Socially responsible investors evaluate corporate motives rather than actions and are willing to sacrifice current returns as they realise that companies that act virtuously (i.e. by managing ESG risks) only reap benefits in the long-term.</td>
</tr>
<tr>
<td></td>
<td>Concerned with the means by which individuals incorporate virtues such as honesty, fairness, truthfulness and benevolence into their characters.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Evaluates persons or companies’ motives and attitudes rather than their actions.</td>
<td></td>
</tr>
<tr>
<td>The conventional approach</td>
<td>Decisions and actions are benchmarked against prevailing social norms of acceptability.</td>
<td>Socially responsible investors focus on prevailing ESG themes within a society.</td>
</tr>
<tr>
<td></td>
<td>Culturally relative.</td>
<td></td>
</tr>
<tr>
<td>Emotivism</td>
<td>Personal feelings determine decisions regarding right and wrong.</td>
<td>SRI seen as ‘feel good’ investing.</td>
</tr>
<tr>
<td></td>
<td>Culturally relative.</td>
<td></td>
</tr>
</tbody>
</table>

*Source: Researcher’s own construct*
4.8 SUMMARY AND CONCLUSIONS

Having scrutinised the definition of ethics, various models of moral development, sources of ethical guidance, different types of investment ethics and several approaches to ethical decision making, it is clear that the practice of SRI is strongly rooted in the topics mentioned. For this reason any student of SRI should be knowledgeable on the ethical foundations of SRI.

From the evidence presented it could be argued that socially responsible investors exhibit relatively high levels of moral development in that they generally express a concern for universal principles which exceed the prescriptions of the law. Socially responsible investors’ decisions and action are guided by a combination of religious convictions, philosophical views, cultural influences, laws and professional values.

It can be argued that South Africa’s socio-political history had a pronounced effect on the ethical approaches used by socially responsible investors in South Africa to evaluate investment opportunities. From the evidence presented in this chapter, it seems as if preference is given to the principles underlying deontological ethics as well as the ethics of care. SRI strategies which are based on deontological principles therefore tend to focus on the protection of human rights and equality as well as the promotion of distributive and compensatory justice.

Socially responsible investors who base their investment decision on the principles underlying the ethics of care are likely to scrutinise local companies’ stakeholder relations, particularly those with their employees’ and local communities. It can further be argued that certain cause-based (targeted) investments aimed at empowering previously disadvantaged communities could be premised on the notion of care.

It should be stressed that socially responsible investors, like traditional investors, mainly strive to maximise their wealth given their risk attitude. The approaches to ethical decision making discussed in this chapter therefore
merely highlight the fact that non-financial issues are considered by socially responsible investors when evaluating and managing their investments.

Having described the ethical premises of SRI in detail, the focus will now shift to the current size, drivers and obstacles of SRI markets globally and locally.
CHAPTER FIVE

VARIABLES INFLUENCING THE DEMAND FOR SOCIALLY RESPONSIBLE INVESTMENTS

5.1 INTRODUCTION

Having described the historical development of SRI, prominent SRI strategies and the ethical premises of SRI, the focus of this chapter will now shift to the variables influencing the demand for SRIs. This chapter addresses secondary research objective two (d) (as stated in Section 1.5.2 of Chapter One), namely to conduct an extensive review of the literature (supplemented with semi-structured, face-to-face interviews with local SRI fund managers and industry experts) on the current size, driving forces behind and the obstacles to SRI internationally and locally.

In the first section of this chapter (Section 5.2) issues pertaining to SRI in the global arena will be presented. The focus will be on the variables impacting the demand for SRIs internationally. These variables were depicted in the comprehensive conceptual model (Figure 1.3 of Chapter One). In Section 5.3 the focus will shift to the size and composition of the SRI sector in South Africa.

5.2 THE GLOBAL SRI SECTOR

5.2.1 Current size of the international SRI sector

A report by the Social Investment Forum (SIF) in the USA shows that $2.29 trillion or nearly one out of every ten dollars under professional management in the USA in 2005 was invested on the basis of ethical or ESG criteria (Mitchell & Larson 2006:2). This figure represents a 260 percent increase in SRI since 1995. These figures point to SRI moving from a fringe investment strategy to a mainstream consideration in the USA.
Scholtens and Sprengres (2001) caution that the SIF’s definition of SRI should be kept in mind when comparing the size of the US market with SRI markets elsewhere in the world. The SIF’s definition includes funds which are based on shareholder activist strategies, whereas SRI in lesser-developed markets is often seen as including only screened funds.

Irrespective of the definition of SRI used, several authors state that growth in the US SRI market, as measured in terms of the number and size of SRI funds, was faster than that of the overall retail mutual fund market over comparable periods (Madden 2001:12; Abbott 2003). They further note that SRI funds have been able to attract more capital than conventional funds despite depressed financial markets in the US in the late 1990s. Scheuth (2003:189) states that the SRI sector in the US has matured to a point where virtually any investment need can be met through a portfolio that integrates an investor’s personal values and ESG concerns with their financial requirements.

Outside the USA, the most rapid growth in SRI has occurred in the UK. The first SRI fund in the UK was launched in June 1984 and by December 2005 approximately £2.8 trillion was invested in SRI funds (Luther et al. 1992:558; UK Social Investment Forum 2006). As in the USA, SRI funds in the UK have become the fastest growing sector of the UK retail mutual fund market.

Western Europe has also witnessed rapid growth in SRI, especially in the Netherlands and Sweden (Socially responsible investment taking root in Europe 2002:17). A survey of European institutional investors in 2003 showed that 45 percent of respondents have invested 10 percent or more of their total assets in screened SRI funds (Whitten 2004:20). A 2006 European SRI survey shows that the SRI market in Europe changed considerably since 2003 and was valued at over €1 trillion in December 2005 (European Social Investment Forum 2006).

According to the International Finance Corporation only 0.1 percent or $2.7 billion of global SRI funds was invested in emerging markets in 2003, mainly
upcoming Asian markets (Baue 2003c). According to Holland (2002:49), SRI in the Asia-Pacific region is still seen as a niche market although it has experienced considerable growth since the turn of the millennium. Australia and Japan are seen as the two most developed and promising SRI markets in this region and experts claim that these markets are well positioned for further growth (Baue 2003a,c). The findings of a global SRI survey in 2005 show that 44 percent of institutional investors in Australia and 33 percent in Singapore anticipate an increase in the integration of ESG considerations into investment decision making over the next three years (2006 Fearless Forecast: What do investment managers think about responsible investment? 2006:7). Outside South Africa, almost no SRI takes place on the African continent.

Of the variables listed in the comprehensive conceptual model (Figure 1.3 of Chapter One), the following variables have been identifies as having an impact on the demand for SRI funds in international markets, most notably the USA and UK:

- the historic performance of SRI funds (Guerard 1997a:11, 1997b:31; Goldreyer & Diltz 1999:23; Bauer et al. 2005:1751);
- growing consumerism among investors (Rosen & Sandler 1991:223; Solomon et al. 2002:4);
- changes in the profile of the investment community (McGeer 2004:7; McLachlan & Gardner 2004:13; Kalideen 2004);
- the far reaching consequences of corporate scandals (Mansley 2000:1; Wilcox 2001:1; Clarke 2002:44);
- changing views on the role of business in society (Bosch et al. 2006:729; Friedman 1970:33);
- a better educated investment fraternity (Madden 2001:12);
- improved triple bottom line reporting (Line et al. 2002:69);
- more and better quality research becoming available to SRI investors (Solomon et al. 2002:3; Madden 2001:12; McGeer 2004:7);
- the development of stock market indices dealing with ethical and ESG considerations (Scheuth 2003:190; Hussein & Omran 2005:105);
- pension fund legislation (Schwartz 2003:197; Sparkes & Cowton 2004:50);
- greater stakeholder advocacy i.e. increased pressure exerted by NGOs,
lobby groups and trade unions on material ESG considerations (Luther et al. 1992:57; Solomon et al. 2002:4); and

- the development of global SRI investment guidelines (UN Principles for Responsible Investment 2006:1).

These variables will be explored next.

5.2.2 Variables driving SRI internationally

(a) Historic performance of SRI funds

Statman (2000:30) argues that the risk-adjusted performance of SRI funds is the most important variable influencing its demand, particularly as far as institutional investors are concerned. Although international research on the risk-adjusted performance of SRI funds is mixed, it seems that SRI funds tend to underperform broad market indices yet perform at least as well as conventional (non-SRI) funds (Hamilton et al. 1993:62; Guerard 1997a:11, 1997b:31; Reyes & Grieb 1998:1; Goldreyer & Diltz 1999:23; Bauer et al. 2005:1751). A detailed exposition of SRI fund performance is given in Section 6.4 of Chapter Six.

(b) Growing consumerism among investors

De Cleene and Sonnenberg (2004:7) state that the amount of cash injected into SRI funds worldwide over the past decade reflects a growing awareness amongst first world citizens of the importance of global issues such as climate change, loss of biodiversity, human rights and sustainable development. They argue that the connection between the investor and consumer is an important one and claim that greener consumption patterns are partly mirrored by an increase in the number of ‘green’ SRI funds internationally.

Solomon et al. (2002:4) also argue that SRI is driven by a growing awareness among the investing public regarding the broader consequences of how their investments are managed. It has been claimed that SRI is a natural extension
of socially responsible buying in that socially oriented consumers are now also considering the impact of their investments on the environment and society at large (Heal 2001).

According to Rosen and Sandler (1991:223) many socially responsible investors were found to be actively involved in socially oriented activities, such as donating funds and volunteering time to cause-related groups. Hutton et al. (1998:282) likewise report that socially responsible investors have been found to express a preference for goods and services produced by socially responsible companies. These investors furthermore invest time, money and energy in changing their consumption patterns, for example by recycling more waste and driving less. SelCraig (2006:101) attributes the rise in consumerism, and SRI by extension, to a higher and more luxurious standard of living in developed countries.

Scheuth (2003:191) claims that the impressive growth in the US SRI sector is a direct result of increased consumerism among investors. He shows that the vast majority of the nearly 800 US investment companies that offered SRI portfolios in 2002 weren’t offering them in the early 1990s, with very few expressing an interest in doing so at that time. His research strongly suggests that most of these investment companies started developing SRI products purely as a strategy to retain and grow their market share.

(c) Changes in the profile of the investment community

Researchers have found that increasing numbers of women and younger people have entered into the global financial markets in the past decade (McGeer 2004:7). Scheuth (2003:195) argues that women have a natural affinity for values-based investing and that it is therefore not surprising that more women invest in socially responsible companies and SRI funds. This argument by Scheuth (2003:195) corresponds with Gilligan’s feminist model of moral development and the ethics of care, topics presented in Sections 4.3.3 and 4.7.4 of Chapter Four. McLachlan and Gardner (2004:13) as well as Hutton et al. (1998:282) likewise point out that socially responsible investors
typically tend to be younger, better educated and higher income earners as compared with conventional investors.

Kalideen (2004) highlights another important trend which is emerging in the international investment community, namely a growing Islamic investor base outside traditional Muslim countries. Kalideen (2004) is of the opinion that Muslim investors, who wish to invest according to the tenets of their faith, are becoming a force to be reckoned with. In 2003, financing approved by the Islamic Shari’ah law was growing at a rate of 17 percent annually and accounted for $200 billion globally. This figure is estimated to double by 2009 (Islamic banking could ‘double’ 2003).

As the Islamic law prohibits the payment of interest and insurance premia, financial institutions have to offer Muslim clients alternative financing methods to purchase property and vehicles. Bonds, mortgages, car loans and stock market investments (such as screened SRI funds) thus have to be tailored to meet the needs of Islamic clients. Exhibit 3.1 in Chapter Three contained two extracts from the Qur’an which highlighted the dire consequences for believers who ignored these prescriptions. In this regard, Islamic investors have been quoted as saying that they are willing to pay more for Shari’ah compliant banking, insurance and investment-related products (Stock 2006:10).

(d) The far-reaching consequences of corporate scandals

Clarke (2002:44) points out that the increased media exposure of unethical business practices has eroded investor confidence and has led to them increasingly scrutinising corporate behaviour. Heese (2005:734) states that investors have come to realise that the reputational risk attached to ESG incidents is tremendous, as share prices fall almost instantaneously in reaction to unfavourable news. According to Solomon et al. (2002:4) society has become more conscious of the fact that future social welfare could be seriously jeopardised unless more businesses start to give serious consideration to ESG risks.
Ackerman (2002:8) and Beckwith (2004:8) argue that international scandals, such as Enron and World.com, were exactly what were needed to ‘wake up’ North American investors. It is said that US firms have ignored the fact that value is a multifaceted concept embodying more than just the financial dimensions of a business. In 1999, Ciccotello and Grant (1999:29) predicted that North American investors might need such a ‘wake up call’ as they, in contrast to their European counterparts, neglected corporate governance in favour of security selection based purely on short-term financial performance.

Mansley (2000:1) and Wilcox (2001:1) directly attribute the increase in the number of socially responsible investors, both institutional and individual, to the spate of corporate scandals in recent times. They state that private investors in particular have become more interested in how their savings are invested, and have begun to question existing investment policies and practices. Scandals have also rekindled the debate on corporate governance initially introduced in 1932 by Berle and Means in their seminal book *The Modern Corporation and Private Property* (1932). These authors focused on the developments which took place in free market societies during the late capitalistic period (1870 to 1930).

(e) Changing views on the role of business in society

The late capitalistic period was characterised by the rise of ‘the large corporation’ and the subsequent separation of ownership and management (Bosch et al. 2006:729). Professional managers assumed more responsibility in corporate decision making whereas shareholders adopted a more passive role. Unfortunately, the motives and goals of this new group of professional managers often differed from those of classic entrepreneurs. The ramifications of the stock market crash in 1929 and the subsequent depression in the 1930s led to a questioning of the responsibilities of managers and boards alike.

In response to increasing calls for companies to promote social and environmental causes, economists such as Friedman (1970:32) fervently
argued that “…the business of business is business” i.e. that the goal of shareholder wealth maximisation should reign supreme. Views have since changed providing greater support for sustainable business practices where more attention is given to the needs of a wide variety of corporate stakeholders other than the beneficial owners. Initiatives such as the UN Global Compact (2000) and the UN Principles for Responsible Investing (2006:1) have been instrumental in fostering a new mindset among business leaders and investors on the role of business in society.

(f) Improved triple bottom line reporting

Triple bottom line reporting, also referred to as ‘sustainability reporting’ and ‘social accounting’, encompasses the growing trend among businesses to report on financial (economic) as well as social and environmental performance (Rossouw 2004a:253). A 2002 KPMG International Survey of Corporate Sustainability Reporting, based on the evaluation of more than 2 000 companies’ sustainability reports, shows that global reporting rates are increasing, specifically among large companies in the USA, Japan, Germany, France and the UK (KPMG International Survey of Corporate Sustainability Reporting 2002).

The report also notes an increase in the number and types of issues addressed in these reports. A global survey by Line et al. (2002:69) likewise notes a shift away from mere environmental reporting to a reporting approach which takes cognisance of a variety of stakeholders’ values and concerns.

Rossouw (2004a:253) points out that two international standards are emerging which are aimed at creating some consistency with regard to the voluntary process of sustainability reporting. These two standards are the AA1000 Framework (a management framework that focuses on the quality of the accounting process) and the Sustainability Reporting Guidelines of the Global Reporting Initiative (GRI).
The AA1000 Framework guides the managerial process of engaging with stakeholders by identifying issues and priorities, defining performance metrics and targets and deals with the processes of accounting, auditing and reporting. The GRI’s focus is on developing and disseminating globally applicable sustainability reporting guidelines for companies who wish to report on the non-financial dimensions of their activities, products and services. The GRI guidelines, published in 2002, provide detailed information on the suggested structure and contents of sustainability reports (Global Reporting Initiative 2006).

Heese (2005:733) foresees that new legislation on ESG reporting, which is emerging in a number of countries worldwide, will create further momentum for SRI in the global arena as it provides socially responsible investors with the necessary information upon which to base their decisions.

(g) SRI research and information

Solomon et al. (2002:3) point out that socially responsible investors no longer experience the same difficulties in obtaining relevant information on non-financial corporate performance as they did in the past. McGeer (2004:7) agrees and states that more and better quality information is becoming available, allowing for the cost-efficient evaluation of companies’ overall performance. This development can be attributed to a significant rise in the number of SRI research agencies, discussion forums and consultancies which have been established in recent years (Scheuth 2003:192).

Madden (2001:12) claims that the better informed and knowledgeable investors are, the more responsible their investment decisions and ownership practices tend to be.

(h) The development of stock market indices dealing with moral and ESG considerations
Besides better disclosure by companies on their triple bottom line performance and the rise in SRI research and information available, the international SRI sector has further benefited from stock market indices evaluating companies’ products, policies and practices on moral and ESG grounds. According to Reilly and Brown (2000:154) a stock market index reflects the overall performance of an aggregate market or some component thereof. The constituents of an index generally exhibit very similar characteristics such as market capitalization or industry classification. As such, stock market indices serve as benchmarks against which the performance of individual companies or portfolios with comparable features can be measured.

Since the launch of the Domini 400 Social Index in 1990, a number of other stock market indices, such as those listed in Table 5.1, have been developed focusing on companies’ policies and practices with regard to ESG considerations.

In response to growing interest in Shari‘ah compliant investments, The Dow Jones Islamic index series came into existence in 1999 (Hussein & Omran 2005:107). These indices exclude producers of alcohol and pork-related products, providers of conventional financial services (such as banking and insurance) and providers of entertainment services (hotels, casinos, cinemas and producers of pornography and music). Tobacco manufacturers as well as defence and weapons companies, although not strictly forbidden for investment under Islamic law, are also excluded from the indices. In addition to industry screens, companies are furthermore subjected to a series of financial ratio screens dealing with excessive levels of debt and interest income (Hussein & Omran 2005:110).

Scheuth (2003:190) argues that the emergence of the abovementioned indices has greatly assisted socially responsible investors in benchmarking the performance of individual companies and SRI funds.
TABLE 5.1: Prominent international ESG stock market indices

<table>
<thead>
<tr>
<th>Indices</th>
<th>Kinder, Lydenberg &amp; Domini (KLD) indices</th>
<th>FTSE4GOOD indices</th>
<th>Dow Jones Sustainability indices</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Domini 400 social index</td>
<td>- UK Index</td>
<td>- Dow Jones Sustainability World Index</td>
<td></td>
</tr>
<tr>
<td>- Broad US market social index</td>
<td>- UK 50 Index</td>
<td>- Dow Jones Sustainability World Index ex Alcohol, Tobacco, Gambling, Armaments and Firearms</td>
<td></td>
</tr>
<tr>
<td>- Large capitalization US social index</td>
<td>- Europe Index</td>
<td>- Dow Jones STOXX Sustainability Index</td>
<td></td>
</tr>
<tr>
<td>- Select US social index</td>
<td>- Europe 50 Index</td>
<td>- Dow Jones STOXX Sustainability Index ex Alcohol, Tobacco, Gambling, Armaments and Firearms</td>
<td></td>
</tr>
<tr>
<td>- Nasdaq social index</td>
<td>- US Index</td>
<td>- Dow Jones EURO STOXX Sustainability Index</td>
<td></td>
</tr>
<tr>
<td>- Catholic values 400 index</td>
<td>- US 100 Index</td>
<td>- Dow Jones EURO STOXX Sustainability Index ex Alcohol, Tobacco, Gambling, Armaments and Firearms</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Global Index</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Global 100 Index</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Japan Index</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Sources: KLD Indexes (2006); FTSE4GOOD Indices (2006); Dow Jones Sustainability Indexes (2006)

(i) Pension fund legislation

SRI experts like Mansley (2000:1), Schwartz (2003:197) and Sparkes and Cowton (2004:50) are of the opinion that one of the most influential forces driving SRI internationally has been amendments made to pension fund legislation. Pension fund regulations in the UK and several European countries now mandate all institutional pension fund trustees to incorporate the following considerations into their fund’s statement of investment principles:

- the extent (if at all) to which ESG considerations are taken into account in the selection, retention and realisation of investments; and
- their policy (if any) in relation to the exercise of rights (including voting rights) attached to investments.

The first wave of legislative amendments appeared in the UK in 2000 followed by changes in France, the Netherlands and Sweden in 2001, Austria and Germany in 2002, Spain in 2003 and Belgium and Italy in 2004. Tranchimand (2006:7) states that this kind of legislation has encouraged pension fund
trustees in Europe to develop SRI policies. In Australia pension fund legislation has been taken a step further to include all pension fund trustees (not just institutional pension fund trustees) and has been extended to include labour-related considerations along with other ESG concerns (De Cleene & Sonnenberg 2004:38).

(j) Greater stakeholder advocacy

As indicated in Sections 3.4 and 3.6 of Chapter Three, NGOs as well as political, environmental and human rights lobby groups are increasingly engaging with management boards to influence corporate decision making (Luther et al. 1992:57; Guay et al. 2004:132). Research by Solomon et al. (2002:4) even rank the influence of lobby groups as the most important driver of SRI in the UK.

In an extensive survey in the USA, Ambachtsheer et al. (2006:4) found that approximately 40 percent of NGOs already invest in accordance with SRI principles and that a further 12 percent intended to do so before 2008.

(k) The development of global SRI investment guidelines

In 2005 the UN Secretary-General, Kofi Annan, called on a group of leaders in the international investment community to develop a set of global best-practice principles for SRI. This initiative was based on a growing acknowledgement that current investment decision making and ownership practices do not sufficiently reflect ESG considerations. Annan expressed the wish that these principles would address the long-standing mismatch between corporate responsibility (as a broadly stated management imperative) and the actual behaviour of financial markets (which are often guided by short-term considerations at the expense of long-term objectives).

Leaders in the global investment community further acknowledged that, with rare exceptions, companies’ efforts in terms of managing ESG risks are not recognised nor rewarded by the financial community.
They attributed this not to a lack of interest or desire on the part of investors but rather to the absence of a set of common guidelines that can be used to fully assess risks and opportunities. By formulating the UN Principles for Responsible Investment (shown in Exhibit 5.1) industry leaders attempted to address the abovementioned concerns.

It is encouraging to know that the South African Government Employees Pension Fund is a signatory to these Principles.

A careful analysis of the drivers of global SRI described in (a) to (k) above reveals that most drivers are ‘external’ in nature. This is unfortunate, for if SRI is to have a sound future, investors themselves should drive the process.

EXHIBIT 5.1: The UN Principles for Responsible Investment

As institutional investors we have a duty to act in the best long-term interests of our beneficiaries. In this fiduciary role, we believe that environmental, social and corporate governance (ESG) issues can affect the performance of investment portfolios (to varying degrees across companies, sectors, regions, asset classes and through time). We also recognise that applying these principles may better align investors with the broader objectives of society. Therefore, where consistent with our fiduciary duties, we commit to the following:

- We will incorporate ESG issues into investment analysis and decision making processes.
- We will be active owners and incorporate ESG issues into our ownership policies and practices.
- We will seek appropriate disclosure on ESG issues by the entities in which we invest.
- We will promote acceptance and implementation of the Principles within the investment industry.
- We will work together to enhance our effectiveness in implementing the Principles.
- We will each report on our activities and progress towards implementing the Principles.

Source: UN Principles for Responsible Investment (2006:4)

In recognition of the benefits of SRI (for both investors and society at large), the World Economic Forum (WEF) set out to identify the main obstacles impeding the wider acceptance of SRI by global institutional investors. As pointed out earlier the ‘buy-in’ of institutional investors is crucial as they
manage the majority of assets in the global investment arena. The WEF report identified several variables as having a negative impact on the growth and development of SRI globally. The three most important variables (which feature in the comprehensive conceptual model) include:

- the widespread use of short-term performance benchmarks;
- trustees’ fiduciary duties; and
- a lack of skills among global investment analysts and fund managers.

These impediments are outlined next.

5.2.3 Variables impeding the growth of SRI internationally

(a) The use of short-term performance benchmarks

The WEF report points out that ‘beneficial owners’, i.e. those who ultimately benefit from share ownership, are no longer a wealthy privileged few but the large majority of workers who have their pensions and other life savings invested in financial securities. As these investors mainly wish to provide for their retirement and other long-term financial needs, and tend to live longer than previous generations, their funds ought to be invested in securities which yield stable, long-term financial returns. According to the WEF report this is not currently the case nor is performance benchmarked using long-term performance measures (Mainstreaming Responsible Investing 2005:4).

The report shows that the pension fund industry makes widespread use of short-term performance benchmarks, which fail to consider the long-term impact of ESG factors on corporate performance. As was pointed out in Section 3.3.2(a) of Chapter Three, the management of ESG risks can in fact be quite significant contributors to long-term corporate financial performance. Fund managers justify this practice by stating that their clients are actually the ones calling for the use of short-term performance benchmarks. One fund manager reportedly said: “…as long as client mandates (e.g. from pension fund trustees) require us to deliver performance benchmarked against short-
term market tracker indices, we will remain short-term in our outlook” (Mainstreaming Responsible Investing 2005:8). Analysts likewise argue that they could rarely advance ESG issues as long as their clients (i.e. fund managers) are only concerned with the drivers of short-term corporate performance.

Surely, such viewpoints are unacceptable in terms of real wealth creation and should be challenged.

(b) Trustees’ fiduciary duties

The WEF report shows that new regulations regarding trustees’ fiduciary duties, specifically the need for demonstrable compliance with clients’ performance objectives, have heightened their sensitivity toward risk taking and have encouraged inertia around ‘tried and tested’ approaches (Mainstreaming Responsible Investment 2005:9).

A fiduciary duty refers to the legal relationship between two or more parties, i.e. a ‘fiduciary’ or ‘trustee’ and a ‘principal’ or ‘beneficiary’. A ‘fiduciary’ is a person who holds in trust an estate in which another has a beneficial interest or person who receives and controls the income of another (Wikipedia Encyclopedia 2006f). Fiduciary duties generally include taking all reasonable steps to ensure that the interests of members are protected at all times, acting with due care, diligence and in good faith, as well as avoiding conflicts of interest.

The WEF report states that: “…if left unchecked, the need for demonstrable compliance is likely to encourage a further clustering of fund managers’ performance around narrowly defined benchmarks and will discourage the adoption of broader, longer-term perspectives in fund managers’ investment decisions”.

Since the classic British case of Cowan vs Scargill in 1985, a number of other cases have been heard in the UK and USA on trustees’ fiduciary obligations with regard to ESG criteria. In the Cowan vs Scargill case the courts held that
pension fund trustees had an overriding duty to invest with the primary objective of increasing a pension fund's value for its beneficiaries, despite the trustees' personal views or moral reservations on the choice of the most suitable investments (Pensions at work 2006).

The court specifically stated that: “Trustees may have strongly held political or social views... they may object to any form of investment in companies concerned with alcohol, tobacco, armaments, or many other things. In the conduct of their own affairs, of course, they are free to abstain from making any such investments. Yet under a trust, if investments in this type would be more beneficial to the beneficiaries than other investments, the trustees must not refrain from making the investments by reason of the views that they hold”.

Akin to the WEF report, Ambachtsheer and Steward (2006:19) state that there continues to be an assumption among trustees that investing in SRIs will hurt financial performance and as such will constitute a breach of their fiduciary duties. It is however foreseen that this view will diminish with time as investment professionals realise that attention to ESG issues actually protect and enhance long-term financial performance and that, in fulfilling their fiduciary duties, they consequently need to give appropriate consideration to these issues. This viewpoint is strongly supported in this research.

A third major impediment to SRI in the global arena relates to the limited ability of fund managers and investment analysts to evaluate non-financial criteria.

(c) A lack of skills among global investment analysts and fund managers

The WEF report states that the current generation of mainstream analysts is not able to factor ESG issues into their analyses as they neither understand these factors nor their relationship to the longer-term economic forces that
drive individual companies and entire sectors (Mainstreaming Responsible Investment 2005:26).

It is convincingly argued that most analysts are focused on creating and selling information to fund managers who are mainly interested in free cash flow, major short-term risks and opportunities and the likely behaviour of other fund managers.

(d) Other impediments

A number of other issues have been identified in the WEF report as obstructing the growth of SRI globally (Mainstreaming Responsible Investing 2005:9). These are:

- The manner in which sell-side analysts are compensated. It is argued that sell-side analysts’ reluctance to move their research horizon beyond the foreseeable and the quantifiable represents a concern that such analyses fall short of being ‘commercial’.
- The fact that buy-side analysts, who have spent years sharpening their analytical skills and industry knowledge, are typically removed from specialist roles and placed into more general fund management positions. As a result they have less scope to conduct in-depth, differentiating research on companies’ long-term business models and drivers of growth.
- The practice of pension funds to rigidly split the functions of ownership and portfolio trading. The responsibilities to vote and monitor ESG risks often fall within the jurisdiction of the compliance or legal divisions, while professionals doing the buying and selling of securities are rarely encouraged to gain knowledge and experience on how ESG risks affect the performance of particular companies.

Based on the observed obstacles, a number of recommendations have been formulated by the WEF, the most pertinent of which are outlined in Table 5.2. The outstanding recommendations of the WEF report centre on the building of competencies in the industry as well as the adoption of investment strategies that will optimise long-term returns.
TABLE: 5.2: Recommendations to mainstream SRI

| Modify incentives | - Establish an international set of good governance principles for pension funds – a voluntary Fund Governance Code – that ensures accountability (disclosure of votes, policies and management relationships) and professionalism (training, representation) on the part of boards of trustees. The aim of these principles should be to ensure the representation of long-term beneficiary interests in intent, capability and practice.
- Modify pension fund fiduciary rules which discourage or prohibit explicit trustee consideration of social and environmental aspects of corporate performance.
- Increase the average duration of asset manager mandates to lend momentum to current experimentation with fund manager compensation arrangements linked to superior long-term performance.
- Increase disclosure of fund manager compensation structures to encourage a better linkage between pay and long-term performance.
- Develop new business models for research on non-financial issues by analysts and incorporate this into the current regulatory review of the sell-side analyst function in diversified investment houses.
- Require that the analysis of material ESG factors be included in pension fund mandates to asset managers.
- Develop new performance assessment models that enable trustees to support long-term investment strategies while complying with fiduciary obligations.

| Build competencies | - Pay, train and empower pension fund trustees more like corporate directors in order to increase the capacity of boards to exercise independent judgement in the long-term interests of beneficiaries.
- Create a specific professional competency for non-financial analysis either through increased training of existing investment analysts or the establishment of a new category of specialists.
- Increase the emphasis on non-financial aspects of corporate performance in graduate business schools and mid-career analyst educational programmes.

| Improve information | - Improve the consistency of the content, collection and assurance of material non-financial information.

Source: Mainstreaming Responsible Investment (2005:10)

Despite the growth in the international SRI market, progress in South Africa has been less remarkable. This can be attributed to the unique development of the local SRI market and a number of challenges facing the sector. These issues are explored next.

5.3 THE SRI SECTOR IN SOUTH AFRICA

5.3.1 Current size of the local SRI sector

As mentioned before, international shareholder activism targeted at banks and companies with South African operations in the 1970s and 1980s sparked global interest in SRI. In South Africa, growing resistance to apartheid during
the late 1980s and early 1990s also gave birth to one of the first local SRI funds, namely the Community Growth Equity Fund. This fund was established as a result of trade unions’ refusal to invest their members’ funds in companies that were supportive of the apartheid regime or those that practised poor industrial relations.

Over the research period (1 June 1992 to 31 March 2006), a total of 43 local SRI funds have been launched in South Africa employing a variety of SRI strategies (more details on these strategies were provided in Section 3.7 of Chapter Three). Figure 5.1 provides an illustration of the SRI funds established and discontinued in South Africa over the research period.

**FIGURE 5.1: Number of SRI funds established and discontinued over the research period (1 June 1992 – 31 March 2006)**

![Graph showing the number of SRI funds established and discontinued over the research period](image)

Source: Researcher’s own construct based on data sourced from Alexander Forbes Asset Consultants

Establishing the exact size of the SRI sector in South Africa is complicated given the diverse definitions of SRI used by research agencies and practitioners. The best estimate therefore is that SRI funds represent approximately R18 billion or 0.7 percent of the total investment capacity in South Africa (AFAC TDI Manager Watch Survey 30 September 2006). It should however be noted that this figure excludes multi-managers and private equity funds (Personal communication Canter & Davids 2006).
The variables which have contributed to the growth of SRI in South Africa since 1992 include:
- the launch of the FTSE/JSE SRI Index (Wadula 2004; Du Preez 2005:34; Matthews 2005);
- broad-based BEE legislation, sector charters and scorecards, particularly the Financial Sector Charter (De Cleene & Sonnenberg 2004:ix; Leeman 2005:9);
- improved triple bottom line reporting by local JSE-listed companies (Visser 2005:29);
- sustained stakeholder advocacy, particularly by local trade unions and NGOs (Segal 1997; Seeds of new asset management 2002:18; Personal communication Adsetts 2006);
- changes in the profile of the local investment community (Kalideen 2004; ABSA steps up Islamic banking 2006; FNB opens up for Muslims 2005);
- increased incidents of fraud in South Africa (KPMG Africa Fraud and Misconduct Survey 2005:11); and
- changing views on the role of business in society (Murray & Nathan 2005).

These variables, some of which correspond with the drivers of SRI in the international arena, will now be explored in more detail. One variable, namely macro-economic conditions, has had both a positive and negative impact on the demand for SRIs in South Africa. This variable will however only be discussed in Section 5.3.4 (after mention has been made of the variables which impede the growth and development of SRI in South Africa).

5.3.2 Drivers of SRI in South Africa

(a) The launch of the FTSE/JSE SRI Index

In May 2004 the JSE launched a tradeable SRI stock market index, the first of its kind in an emerging market and the first in the world to be launched by a stock exchange (Wadula 2004). After a lengthy period of consultation with stakeholders in the industry it was agreed upon that the index would measure
JSE-listed companies’ policies, performance and reporting in relation to the three pillars of the triple bottom line.

As corporate governance was seen to be the foundation of the triple bottom line approach, it would be measured separately. It should be noted that the index views broad-based BEE considerations as a critical element of social sustainability.

According to Du Preez (2005:34), the FTSE/JSE SRI Index serves numerous goals. Firstly, to focus the debate on triple bottom line practices initiated in the King II report (2000), secondly, to recognise the tremendous efforts already made by South African companies in this area, and thirdly, to keep abreast with international stock market developments.

It is further said that the index illustrates the local financial service sector’s recognition of the fact that ESG issues impact on corporate financial performance and makes it easier for investors to identify secondary SRI opportunities (Wadula 2004).

The index is made up of companies that are included in the FTSE/JSE All Share Index. Of the 74 listed companies that applied for inclusion in 2004, only 51 companies met the screening criteria. Participation in the screening process is voluntary, implying that companies which do not feature in the index haven’t necessarily failed to comply with the criteria.

The companies contained in the index represent all sectors of the market and show a very strong correlation with both the FTSE/JSE All Share and Top 40 indices. Du Preez (2005:35) points out that there is a good representation among small and medium capitalisation companies in the index, which shows that these companies are also beginning to take sustainability seriously.

According to the developers of the index, more demanding screening criteria were formulated for the 2005 review (Personal communication Johnston & Le Roux 2006). They state that the focus in 2004 was merely on whether
companies had sustainable economic as well as ESG policies in place, whereas the emphasis in 2005 shifted to an understanding of how companies implemented these policies.

Fifty-eight companies participated in the 2005 review, with 49 meeting the screening criteria. The fact that 85 percent of companies succeeded in getting onto the index in 2005 (compared with 69 percent in 2004) indicates that South African companies are starting to realise what sustainability entails and are actively embracing the triple bottom line concept (The triple bottom line – the JSE’s SRI Index one year on… 2005:49).

Matthews (2005) reports that applicants in the 2005 review complained of receiving too little public recognition for qualifying and raised concerns about whether inclusion on the index had any noteworthy influence on local and foreign fund managers’ investment decisions. Others reported that the questionnaire, though difficult, added value by forcing them to focus on the management of ESG risks.

The launch of this index is seen as the most important driver of SRI in South Africa.

(b) Broad-based BEE legislation, sector charters and scorecards

The promulgation of the broad-based BEE Act (Act No 53 of 2003), as well as the creation of a number of BEE sector charters and scorecards, can be seen as promoting SRI in South Africa. According to Bosch et al. (2006:69) these developments have created a greater awareness of and commitment by companies to increase:

- the number of Black people who have ownership and control of existing and new businesses (where ‘black people’ refers to all Africans, Coloureds and Indians who are South African citizens including women, workers, youth, people with disabilities and people living in rural areas);
- the number of Black empowered and Black engendered businesses; and
- the number of Black people in senior management positions in the
According to Leeman (2005:9), the launch of the Financial Sector Charter has given significant impetus to the local SRI market. The charter was launched in 2003 and commits its signatories (South African banks, insurance companies and pension funds) to mobilising considerable resources for cause-based (targeted) investments. Leeman (2005:9) is particularly encouraged by the fact that the charter calls for greater shareholder activism and foresees that this will lead to improved social and environmental performance among local companies.

Recent (2006) statistics show that South African banks are on track to reach their 2008 charter targets in terms of BEE, transformational infrastructure, affordable housing, SMMEs and emerging agriculture, but show that pension funds are lagging far behind (Personal communication Canter 2006). Despite the current lack of action on the part of local pension funds, the Financial Sector Charter is seen to remain one of the main drivers of SRI in South Africa.

(c) Improved triple bottom line reporting

Visser (2005:29) claims that greater pressure on local companies to demonstrate a concern for ESG factors has encouraged them to follow the international trend of codification i.e. adopting standards and guidelines as a form of voluntary self-regulation on triple bottom line reporting. The developments which have had the greatest impact on ESG reporting in South Africa include the ISO14004 standard for environmental management, the King II report (2000) and the Sustainability Reporting Guidelines of the Global Reporting Initiative (GRI).

Over the past decade, triple bottom line reporting in South Africa has steadily broadened from an initial focus on philanthropy and environmental management to reports on health and safety, corporate governance, community and broader socio-economic issues (Visser 2005:31). The
Trialogue survey of the top 100 South African companies in 2004 revealed that all of them regarded corporate citizenship as a priority, with 52 percent giving it *absolute priority* status and 32 percent giving it *high priority* status.

Data compiled from KPMG’s annual sustainability reporting surveys over the period 1997 to 2002 provide a good impression of the development of triple bottom line reporting in South Africa. These trends are reflected in Table 5.3.

**TABLE 5.3: Sustainable reporting trends of the top 100 South African companies**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Annual financial reports</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Environment</td>
<td>48%</td>
<td>49%</td>
<td>52%</td>
<td>55%</td>
<td>49%</td>
<td>68%</td>
</tr>
<tr>
<td>Health and safety (including HIV/AIDS)(a)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>52%</td>
<td>40%</td>
<td>81%</td>
</tr>
<tr>
<td>Social / Community investment</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>60%</td>
<td>45%</td>
<td>75%</td>
</tr>
<tr>
<td>Codes of ethics / codes of conduct</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>84%</td>
<td>87%</td>
<td>77%</td>
</tr>
<tr>
<td>Human capital development / training</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>81%</td>
<td>-</td>
<td>78%</td>
</tr>
<tr>
<td>Sustainability issues</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>57%</td>
<td>-</td>
<td>85%</td>
</tr>
<tr>
<td><strong>Separate public reports</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Environmental, social or sustainability reports</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>10%</td>
<td>16%</td>
<td>20%</td>
</tr>
</tbody>
</table>

(a) Top 100 industrial companies  
Source: Visser (2005:31)

The trends indicated in Table 5.3 mirror the changing attitudes of local business leaders, in firstly increasing the number of issues on which they report, and secondly in highlighting prominent ESG issues in South Africa. This trend corresponds to findings by Line *et al.* (2002:69) in relation to the triple bottom line reporting trends observed among international companies.

Towards the end of 2004, only 24 South African companies were listed on the GRI’s website as having declared the use of its reporting guidelines. However, Trialogue’s research among the top 100 local companies shows that more than 40 percent claim to already be using the Sustainability Reporting Guidelines of the GRI, while a further 50 percent claim that they intended doing so in future. Despite clear progress in terms of triple bottom line reporting in South Africa, indications from the annual KPMG surveys suggest that reporting the country however still lags behind global trends (Visser 2005:37).

(d) *Stakeholder advocacy*
A fourth variable, namely sustained stakeholder advocacy, has also been identified as a driver of SRI in South Africa. Local trade unions and NGOs have been particularly active in this regard (Segal 1997; Seeds of new asset management 2002:18; Personal communication Adsetts 2006; Petersen 2006:5). Even greater stakeholder advocacy in South Africa is encouraged.

(e) Changes in the profile of the local investment community

According to Kalideen (2004), the principles of Islam are rapidly gaining ground outside traditional Muslim countries, including South Africa. In response to this growing trend, two major South African banks, namely ABSA and First National, have developed a full range of Shari’ah complaint banking services and products for the Muslim community in South Africa (ABSA steps up Islamic banking 2006; FNB opens up for Muslims 2005).

Cameron (2003:21) points out that the growth in Shari’ah compliant funds in South Africa also bears testimony to the fact that the local financial markets have recognised the need for and market potential of such products. This trend is foreseen to gain further momentum in South Africa in future.

(f) Increasing incidents of fraud in South Africa

It was argued in Section 5.2.2 (d) of this chapter that the devastating consequences of corporate scandals have raised interest in SRI internationally. South Africa has not been without its fair share of corporate scandals as companies such as Leisurenet, Macmed, African Regal Bank and Saambou made local headlines. It is anticipated that a growing awareness of fraud in South Africa will also serve as an important driver of SRI locally. Increased awareness is however foreseen to be more on the level of individual investors than on that of institutional investors.
Balia and Mavuso (1999:29) state that fraud is not always perceived as a serious problem as there is no loss of life or immediate danger to the economy. It is however estimated that approximately R80 billion or 6.6 percent of gross domestic product (GDP) is lost annually due to fraud in South Africa (Kennaugh 2000:21). Clearly, this issue should feature on the SRI agenda.

It should be emphasized that fraud is prevalent in businesses of all sizes in South Africa. A KPMG Africa Fraud and Misconduct Survey (2005:11), for example, shows that 65 percent of respondents employed by JSE-listed companies viewed fraud as a major problem in corporate South Africa. This figure (65 percent) was higher than that recorded in the 2002 survey and is seen by respondents to increase in the future. Fraud, which can be defined as “…a deliberate deceit, planned and executed, with the intent to deprive another of property or rights”, was seen as an even greater threat to Small Medium and Micro Enterprises (SMMEs) as 81 percent of SMME owners/managers perceived fraud as a serious and escalating problem in South Africa (May & Viviers 2006:61).

It is disconcerting to note that 69 percent of the respondents in the KPMG survey and 80 percent of SMME owners/managers attributed the increase in fraud in South Africa to a weakening of society’s values (KPMG Africa Fraud and Misconduct Survey 2005:13; May & Viviers 2006:64). This weakening of society’s values is also prevalent in terms of increasing incidents of violent crime and corruption in the country. This situation calls for strong leadership to improve the educational and justice systems in South Africa. More importantly, leaders should model the kind of ethical behaviour which they would like to observe from their fellow citizens. Furthermore, children need to assimilate moral values in their homes and schools and need to see that those who engage in morally unacceptable behaviour received the proper punishment.
A notable change has been observed over the past twenty years in the views held by investors of the role that local businesses ought to play in South African society. In this regard Murray and Nathan (2005) distinguishing between two extreme viewpoints. They state that at the one extreme companies are expected to be ‘free market proponents’ which focus purely on the pursuit of shareholder wealth maximisation, whereas, on the other end of the spectrum, companies are expected to be ‘social reformers’. ‘Social reformers’ are expected to embrace the concept of corporate social responsibility in its broadest sense.

This debate is relevant in South Africa as the government is struggling to fulfil its social obligations, such as ensuring citizen’s safety and health. A succinct example in South Africa relate to the HIV/AIDS pandemic. A report by UNAIDS, the United Nations’ agency dealing with HIV/AIDS, shows that approximately 5,5 million South Africans were living with HIV in 2005, an increase of about 200 000 new infections since 2003 (Peng 2006). A spokesperson for UNAIDS commented that Southern Africa’s crisis was “moving with terrible velocity” and attributed this, in part, to a lack of political will to prioritise HIV/AIDS.

Murray and Nathan (2005) argue that although it is important for local companies to initiate HIV/AIDS programmes “…it should remain clear that the realisation of socio-economic rights ultimately remains the government’s responsibility”.

The view expressed in this research is that local companies can and should play a crucial role in addressing the socio-economic problems of South Africa. Companies, including financial institutions, can only benefit in the long run from improved socio-economic conditions in the country. The mechanisms provided by SRI, such as shareholder activism and cause-based (targeted) investing, are ideally suited to achieve this goal.
Besides these positive developments in the local SRI market, several impediments to the growth and development of the local SRI sector have been identified.

5.3.3 Variables impeding the growth of SRI in South Africa

As indicated in the comprehensive conceptual model (Figure 1.3 of Chapter One), a number of variables have negatively impact on the demand for local SRI funds. These include:

- the historic performance of local SRI funds (De Cleene & Sonnenberg 2004:x; Hirsh 2005, Thomas 2004; Personal communication Forster & Mafolo 2003);
- the lack of a proper definition of SRI in the South African context (Du Preez 2005:39; Leeman 2005:9; Wierzycka 2004; Heese 2005:730; Petersen 2006:9);
- the lack of clarity regarding proposed amendments to pension fund legislation (Rose 2004a:15; De Cleene & Sonnenberg 2004:x; Strong investment case for SRI 2005:58; Wierzycka 2004, 2005: Personal communication Jackson 2003);
- the lack of new SRI opportunities, asset classes and SRI funds (Social responsibility must be put on agenda 2005; De Cleene & Sonnenberg 2004:x; Personal communication Plaistowe, Canter & Dinan 2003; Personal communication Davids & Adsetts 2006);
- the lack of SRI skills among local investment analysts and fund managers, particularly with regard to cause-based investments (Healing 2005:18; Personal communication Adsetts, Davids, Johnston & Palframan 2006; De Cleene & Sonnenberg 2004:x);
- the lack of appropriate benchmarks (Leeman 2003; Du Preez 2005:38; De Cleene & Sonnenberg 2004:x); and

These issues and a number of less significant impediments to the growth of SRI in South Africa will be explored next.

(a) The historic performance of local SRI funds
As pointed out in Section 3.7.1 of Chapter Three many of the early SRI funds established in South Africa financed BEE deals by means of Special Purpose Vehicles (SPVs). The SPV structure proved unsustainable in the aftermath of the emerging market crises in 1998 and led to the demise of several SRI funds in the months thereafter (Bridge 1999; Hirsh 2005). As a result of these losses local pension funds have become very reluctant to adopt SRI strategies (Bacher 2004:4; Visser 2004:3; Thomas 2004).

Heese (2005:734) raised the question of whether SRI is a concept that is affordable and sufficiently flexible for adoption by South African pension funds. She argues that it is not, and justifies this claim by referring to the seemingly inadequate provision of social security in South Africa (and the resultant obligation on pension funds to ensure adequate pension fund returns).

A number of industry experts are of the opinion that the demand for SRI funds in South Africa will only grow once SRI fund managers have been able to establish strong performance track records (Personal communication Forster & Mafolo 2003; Personal communication Palframan, Davids, Adsetts & Sonnenberg 2006).

(b) The lack of a proper definition of SRI in the South African context

Several authors have called for a clarification of the definition of SRI in South Africa, particularly in terms of how it relates to the promotion of broad-based BEE (Du Preez 2005:39; Leeman 2005:9; Wierzycka 2004; Heese 2005:730). Although the Financial Sector Charter (2003:4) has provided some clarification, specific issues still remain unclear. Pension fund trustees, for example, require further guidance on what types of investments will meet the objectives of the charter. Specific questions have been raised as to whether the financing of toll roads through the issue of inflation-linked bonds are deemed acceptable; whether investments in companies contained in the FTSE/JSE SRI Index qualify as SRIs, and whether RSA government bonds
represent investments in infrastructural development (Social responsibility must be put on agenda 2005).

The view expressed in this research is that investments in inflation-linked bonds and companies contained in the FTSE/JSE SRI Index could be viewed as SRIs as such investments form part of two conventional SRI strategies, namely cause-based investing and positive screening. With regard to investments in government bonds, it is suggested that the individual investor decide based on his/her own moral convictions as these investments pose an ethical dilemma.

On the one hand, it can be argued that such investments are unethical as the government finances defence-related activities which could lead to a violation of the basic right to life (Arthur 1999:41). Alternatively, it could be argued that the citizens of a country have the right to be protected and that the focus should rather be on the positive outcomes of the government’s public works’ programmes. The view held in this research is that government bonds offer a low-risk investment opportunity with a strong developmental impact which classifies them as SRIs.

Differences have also been noted in the definitions of ‘SRI’ and ‘targeted investing’ as set out in the Financial Sector Charter and the BEE Codes of Good Practice of the Department of Trade and Industry (DTI) (Wierzycka 2005b:16). As the charter has not been gazetted, Wierzycka (2005b:16) foresees that its scoring criteria and definitions will have to be re-aligned with those of the DTI. Socially responsible investors should be mindful of these developments, particularly in as far as the legislative implications are concerned.

De Cleene and Sonnenberg (2004:3) note that some ‘socially responsible’ investors simply invest in BEE businesses irrespective of the wider social impact that these businesses may be having. They question the value of doing so without examining the downstream impacts that these businesses may have including their wider contribution to society. In other words, are they
truly servicing the interests of the poor majority? De Cleene and Sonnenberg (2004:4) further oppose the practice whereby ‘socially responsible’ investors only examine the social benefits of potential investments without evaluating the chosen companies’ shareholder and management compositions.

The view expressed in this research is that a comprehensive definition of SRI in South Africa be adopted to allow for the integration of broad-based BEE considerations in screening, shareholder activism and cause-based investment strategies. The adopted definition of a ‘socially responsible investor’ in South Africa should therefore include investors who:

- screen investment opportunities in terms of their moral and/or religious convictions;
- screen investment opportunities based on a range of ESG and broad-based BEE considerations;
- engage with management boards on a range of ESG broad-based BEE considerations; and
- finance specific social, environmental, empowerment or infrastructural developments causes by investing in them.

(c) The lack of clarity regarding proposed amendments to the Pension Funds Act

Healing (2005:18) attributes the low level of SRI in South Africa to the lack of legislative clarity and argues that the situation is unlikely to change unless regulators provide more guidance to the pension fund industry. In the words of the author: “With about 13 700 self-administered and insured pension schemes operating in the country, it is difficult to encourage consensus thinking other than through legislation”. Two kinds of legislation, namely prescribed asset allocation and SRI policy disclosure, will be highlighted in this regard.
(i) Prescribed asset allocation

For some time the National BEE Advisory Council and the African Institute of Corporate Citizenship have suggested prescribed asset allocation as a means of channeling more capital into areas of national priority (De Cleene 2002:25). This would imply that pension funds are forced to allocate a certain percentage of their capital to SRIs. The only legislation governing asset allocation in South Africa at present (January 2007) is Regulation 28 (the Prudential Investment Guidelines) which stipulates that no more than 25 percent of a pension fund’s assets can be invested in private equity and no more than 75 percent in listed equities (The Pension Funds Act No 24 of 1956 as amended).

In June 2004, business, labour and government representatives agreed to work toward investing five percent of institutional funds in the ‘real economy’. President Thabo Mbeki even highlighted this objective in his 2004 state of the nation address by saying that: “…we will engage with our social partners to implement the decision that five percent of the funds held by institutional investors are to be invested in areas of national priority”.

In December 2004, South Africa’s Treasury Department however published a discussion document regarding retirement fund reform that does not obligate retirement funds to invest in SRIs (Du Preez 2005:37). The rewriting of Regulation 28 instead proposes that pension funds be allowed to invest up to a maximum of ten percent in socially desirable investments. This could be done through collective investments or private equity schemes, as long as their returns match the country’s inflation rate during the period of the investment.

If the Treasury’s recommendations are adopted, they will give scope and guidance to pension fund trustees considering SRI. However, it will also give those who want to ignore SRI the scope to do so, a move strongly opposed by organised labour and the National BEE Advisory Council (Rose 2004a:15; Strong investment case for SRI 2005:58).
Two schools of thought exist regarding the need for compulsory social investing (Rose 2004b:2). Some, such as the Institute of Retirement Funds, believe that it is a golden opportunity to propel more capital into SRIs and at the same time assist the government in addressing the need for socio-economic development. Other advocates of prescribed asset allocation regulation likewise argue that it will have positive spin-off benefits such as long-term social development as well as job and wealth creation. This in turn will translate into better local economic and investment performance and yield better returns for institutional investment managers (Wierzycka 2004, 2005a).

There are however others in the industry who oppose any form of compulsory SRI. They claim that there is no other country in the world where SRI is mandatory and state that “…it would be a setback to regulate SRI in South Africa as it would be seen as a grudge investment that can only survive because of regulation” (Rose 2004b:2). Opponents of SRI legislation argue that pension funds should want to invest in SRIs not due to regulation but because of their perceived superior performance and associated socio-economic benefits.

Wierzycka (2004, 2005a) and Heese (2005:733) provide a further counterargument to prescribed asset allocation regulation by stating that pension funds constitute the only savings mechanism for retirement for many South Africans. They therefore question whether pension funds should have any aims other than the maximisation of investment returns in a country such as South Africa with minimal social welfare and where most people retire with inadequate savings.

De Cleene and Sonnenberg (2004:viii) also state that the local SRI sector is far from ready to take advantage of forced asset allocation. They argue that there simply are not enough viable investment opportunities in South Africa, and that regulation will therefore create an artificial demand for a specific asset class.
Most SRI fund managers and industry experts interviewed were of the opinion that prescribed asset allocation is unlikely in the near future given the current size and nature of the SRI market (Personal communication Jackson, Forster & Mafolo 2003; Personal communication Adsetts, Davids & Sonnenberg 2006). They do however foresee that unless the financial services sector makes a voluntarily and significant move in the direction of more SRI, prescription may follow. The wish is however expressed that such legislation would be similar to legislation in the UK, Europe and Australia which calls for the disclosure of pension funds’ SRI policies.

(ii) SRI policy disclosure legislation

As indicated earlier in this chapter (Section 5.2.2(i)), legislation in the UK, Europe and Australia requires of all pension fund trustees to disclose the extent (if at all) to which ESG and labour considerations are taken into account in the selection, retention and realisation of investments; as well as the fund’s policy (if any) in relation to the exercise of voting rights (Du Preez 2005:37). De Cleene and Sonnenberg (2004:viii) argue that by not being prescriptive, but by rather by mandating greater disclosure and transparency, such legislation could be an important driver of SRI in South Africa.

Bonorchis (2006b) and Healing (2005:18) state that there is broad support for the suggestion that the rules governing pension funds should be changed to encourage SRI. Up to January 2007 no decisions have been taken by the National Treasury on the most appropriate action to take. Besides the lack of regulatory clarity and support, a shortage of new SRI opportunities, asset classes and funds has also been noted as a considerable challenge to SRI growth.

The view expressed in this research is that legislation should only be considered as a last resort.
(d) A shortage of new SRI opportunities, asset classes and funds

It has been argued that retirement fund trustees would not be unwilling to allocate a portion of their funds’ assets towards SRIs in South Africa if more investment opportunities, asset classes and funds were introduced to provide efficient portfolio diversification (Social responsibility must be put on agenda 2005).

A ‘lack of opportunities’ should be viewed in terms of the different social agendas which have evolved in the local SRI market over the years - some goals are too broad to appeal to the specific interests of any one group, whereas others are too narrow to attract enough support to be financially viable (Investors must navigate minefield of socially acceptable offerings 2003:18).

Local SRI fund managers and industry experts were of the opinion that this variable represents one of the major obstacles in growing SRI in South Africa. With regard to cause-based investing in South Africa it was repeatedly said that money is not a problem but rather finding suitable (i.e. financially viable) investment opportunities (Personal communication Plaistowe, Mafolo & Jackson 2003; Adsetts & Davids 2006).

Horsely (2004:16) and Jackson (2006:4) suggest that investments in municipal bonds is one avenue which could offer new opportunities to socially responsible investors in South Africa. This suggestion could be viable when considering the growth of municipal bond issues in South Africa and calls for more research. The growth in Shari’ah compliant funds in South Africa since 2005 also bears testimony to the fact that the financial markets have recognised the need for and market potential of such products.

(e) The lack of skills among local investment analysts and fund managers

According to industry experts, one of the major obstacles in promoting SRI in South Africa, and cause-based investing in particular, relates to the lack of
skills among local investment analysts and asset managers (Personal communication Adsetts, Davids, Johnston & Palframan 2006). Healing (2005:18) and Heese (2005:733) likewise state that there are very limited skills, experience and track records in this specialist area in South Africa. De Cleene and Sonnenberg (2004:2) state that it is critical for South African asset managers to develop the necessary skills to minimise ESG risks in their portfolios as these issues assume ever greater significance. Several recommendations in this regard are offered in Section 9.4.3 of Chapter Nine.

As indicated earlier, this variable is also one of the main inhibitors of SRI internationally, as is the next barrier to growth, namely the lack of appropriate benchmarks.

(f) The lack of appropriate SRI benchmarks

Besides the lack of standardised benchmarks in South Africa, a tendency to evaluate SRI fund performance in terms of short-term benchmarks has also been noted. Du Preez (2005:38) states that South African asset managers often take a short-term view of investment performance and do not appear to “…appreciate the fact that, unless there are fundamental changes to the local economy, all retirement income is at risk”. Leeman (2003) however argues that there are very few incentives for local pension fund trustees and institutional asset managers to behave differently. If the SRI market in South Africa is to grow, this issue definitely needs to be addressed.

(g) Other impediments

Heese (2005:734) identified local investors’ scepticism regarding the impact of SRI funds on socio-economic development and corporate behaviour as a potential hindrance to the wider acceptance of SRI funds. Investors are particularly concerned about how the impact should be measured, verified and communicated to stakeholders, especially as positive results may take several years to manifest (Personal communication Christodoulou 2003; Horsley 2004:5). Leeman (2003) argues that rather than being sceptical, institutional
asset managers are “simply ignorant” in that they don’t recognise the power they have to promote social upliftment and change corporate behaviour by means of SRI.

A number of other variables which impact on the growth of SRI in South Africa, many of which are intertwined with those discussed above, were identified by De Cleene and Sonnenberg (2004:x). These include:

- the lack of rigorous and defensible research to refute the belief that SRIs yield lower financial returns as compared with conventional investments and to identify key areas of materiality in terms of social and environmental sustainability. An overview of the problem statement and research objectives of this study illustrates that the research in question strives to address this shortcoming;
- the lack of an industry-based association to assist in research, education and the appropriate dissemination of information;
- the absence of industry agreed-upon sustainability banking and investing principles;
- the absence of industry agreed-upon guidelines for the valuation and performance measurement of SRIs;
- the lack of appropriate SRI engagement frameworks around key areas of materiality e.g. HIV/AIDS, broad-based BEE and sustainable resource utilisation;
- the absence of a viable culture of shareholder activism;
- the absence of a secondary market in SRIs; and
- currency volatility.

As indicated in the comprehensive conceptual model, macro-economic conditions also impact on the demand for SRI funds. In South Africa this variable has had both a negative and positive impact on the growth and development of the SRI market. Pertinent issues in this regard will be highlighted next.
5.3.4 Macro-economic conditions in South Africa over the research period

An overview of the prevailing macro-economic conditions over the research period led to the identification of three distinctive sub-periods, namely 1 June 1992 – 31 August 1998, 1 September 1998 – 31 March 2002 and 1 April 2002 – 31 March 2006. A brief overview of each of these sub-periods as well as their impact on the SRI sector in South Africa will be outlined next.

(a) Sub-period one: 1 June 1992 to 31 August 1998

From negative economic growth in the third and fourth quarters of 1992, Gross Domestic Product (GDP) increased to 7.71 percent in the second quarter of 1996 (South African Reserve Bank 2006). GDP remained positive for the remainder of this sub-period and resulted in many small and medium-sized companies raising capital on the JSE (Lea 2006). The high interest rates prevalent during this period led to a small and mid cap listings boom on the JSE from 1996 onwards (Van der Merwe 2006). As indicated in Figure 5.2, prime interest rates during the first sub-period fluctuated between 15.25 and 24 percent.

FIGURE 5.2: Prime interest rate over the research period

Source: Constructed from on-line data available on the website of the South African Reserve Bank (2006)
As indicated in Table 5.4, equities under-performed bonds twice during this sub-period. The weak performance of the FTSE/JSE All Share Index and government loan stock in the last three months of this sub-period (1 June 1998 to 31 May 1998) can be ascribed to the impact of the emerging market crisis. In May 1998, almost a year after the start of the crisis in Thailand, foreign investors began fleeing South Africa in response to erroneous rumours about the dismissal of the Reserve Bank governor and an impending devaluation of the Rand (Harsch 1998). During this volatile period the South African Reserve Bank increased interest rates five times. This spike in interest rates is clearly visible in Figure 5.2.

Relatively sound macro-economic conditions during this sub-period could thus have attributed, amongst other variables described earlier, to the launch of 19 new SRI funds in South Africa.

### TABLE 5.4: The performance of equities versus bonds during sub-period one

<table>
<thead>
<tr>
<th>Sub-period</th>
<th>Geometric mean return (%) of the FTSE/JSE All Share Index</th>
<th>Geometric mean return (%) of the yield on long-term government loan stock&lt;sup&gt;a&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 June 1992 to 31 May 1993</td>
<td>6.97</td>
<td>-5.19</td>
</tr>
<tr>
<td>1 June 1993 to 31 May 1994</td>
<td>35.17</td>
<td>-8.27</td>
</tr>
<tr>
<td>1 June 1994 to 31 May 1995</td>
<td>1.40</td>
<td>23.18</td>
</tr>
<tr>
<td>1 June 1995 to 31 May 1996</td>
<td>26.13</td>
<td>-2.48</td>
</tr>
<tr>
<td>1 June 1996 to 31 May 1997</td>
<td>1.33</td>
<td>-2.48</td>
</tr>
<tr>
<td>1 June 1997 to 31 May 1998</td>
<td>7.93</td>
<td>-10.74</td>
</tr>
<tr>
<td>1 June 1998 to 31 August 1998&lt;sup&gt;b&lt;/sup&gt;</td>
<td>-0.09</td>
<td>10.19</td>
</tr>
<tr>
<td><strong>Average sub-period one</strong></td>
<td><strong>11.26</strong></td>
<td><strong>-0.60</strong></td>
</tr>
</tbody>
</table>

<sup>a</sup> This fixed interest instrument was used for comparison purposes as data on the BEASSA All Bond Index only became available from 1 January 1999 onwards. A risk premium should ideally be added to the return in each year to reflect the higher risk associated with corporate debt instruments as compared with gilts.

<sup>b</sup> As this period does not represent a full year, the respective values were annualised. **Source:** Calculations based on on-line data available on the website of the South African Reserve Bank (2006) and data sourced from I-Net Bridge

**Sub-period two: 1 September 1998 to 31 March 2002**

The ramifications of the emerging market crash on the JSE on 31 August 1998, coupled with extremely high interest rates during the first months of this sub-period, resulted in the demise of several SRI funds, most of which were structured as SPVs. As dividends from the SPVs’ underlying investments
often failed to cover debt, additional debt was added to their loan capital, forcing the BEE partners to raise cash or give up some of the underlying shares in order to relinquish debt (Bridge 1999). The resultant losses led to intense scepticism and conservatism among investors and might explain why only six new SRI funds were launched during this sub-period. Table 5.5 provides some evidence on the performance of equities and bonds during sub-period two.

**TABLE 5.5: The performance of equities versus bonds during sub-period two**

<table>
<thead>
<tr>
<th></th>
<th>Geometric mean return (%) of the FTSE/JSE All Share Index</th>
<th>Geometric mean return (%) of BEASSA All Bond Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Sept 1998 - 31 August 1999</td>
<td>48.96</td>
<td>23.15&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
<tr>
<td>1 Sept 1999 - 31 August 2000</td>
<td>25.30</td>
<td>23.62</td>
</tr>
<tr>
<td>1 Sept 2000 to 31 August 2001</td>
<td>6.28</td>
<td>27.38</td>
</tr>
<tr>
<td>1 Sept 2001 to 31 March 2002&lt;sup&gt;b&lt;/sup&gt;</td>
<td>13.34</td>
<td>-2.6</td>
</tr>
<tr>
<td><strong>Average sub-period two</strong></td>
<td><strong>23.47</strong></td>
<td><strong>17.89</strong></td>
</tr>
</tbody>
</table>

<sup>a</sup> As data on the BEASSA All Bond Index was only available from 1 January 1999, the geometric mean return for the index in this period had to be annualised

<sup>b</sup> As this period does not represent a full year, the respective values were annualised.

*Source: Calculations based data sourced from I-Net Bridge*

Note that both equities and bonds performed better during sub-period two compared with sub-period one. As indicated in Figure 5.3, the Rand significantly weakened against the US Dollar. As a result, exporting companies, such as mining and resource companies, reported exceptionally high profits during this sub-period.
Figure 5.3: The ZAR (in cent) per US Dollar over the research period

Source: Constructed from on-line data available on the website of the South African Reserve Bank (2006)

(c) Sub-period three: 1 April 2002 to 31 March 2006

Improved economic conditions, which already started in sub-period two, led to strong growth in the local equity market. This is evident in Figure 5.4 and Table 5.6.
FIGURE 5.4: Total value of the FTSE/JSE All Share Index over the research period

Source: Constructed from on-line data available on the website of the South African Reserve Bank (2006)

TABLE 5.6: The performance of equities versus bonds during sub-period three

<table>
<thead>
<tr>
<th></th>
<th>Geometric mean return (%) of the FTSE/JSE All Share Index</th>
<th>Geometric mean return (%) of BEASSA All Bond Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 April 2002 to 31 March 2003</td>
<td>-30.28</td>
<td>27.29</td>
</tr>
<tr>
<td>1 April 2003 to 31 March 2004</td>
<td>39.23</td>
<td>12.32</td>
</tr>
<tr>
<td>1 April 2004 to 31 March 2005</td>
<td>24.37</td>
<td>15.21</td>
</tr>
<tr>
<td>1 April 2005 to 31 March 2006</td>
<td>53.04</td>
<td>12.85</td>
</tr>
<tr>
<td>Average sub-period three</td>
<td>21.59</td>
<td>16.92</td>
</tr>
</tbody>
</table>

Source: Calculations based on data sourced from I-Net Bridge

As can be seen from Table 5.6, the returns on local bonds also increased significantly during sub-period two. The South African economy showed strong growth during sub-period three boosted by low interest and inflation rates, a series of tax cuts and high levels of consumer and investor confidence. The returns on equities and bonds were however marginally lower during this period as compared with those in sub-period two.

As from 2000 onwards, and specifically from April 2002, residential and commercial property prices in the country also rose rapidly (Rust 2005;
Hilsenrath & Barta 2005; Sigonyela 2006). This development bode well for local SRI funds as many invested heavily in infrastructural development.

5.4 SUMMARY AND CONCLUSIONS

In the light of what has been presented in this chapter, it is clear that several variables drive the growth of the international SRI market. It could be argued that the most prominent of these include growing consumerism among investors, amendments to pension fund legislation and increased stakeholder advocacy. The three most important obstacles to the growth and development of the SRI sector internationally include the use of short-term performance benchmarks, increased scrutiny of trustees’ fiduciary duties and a lack of skills among global investment analysts and fund managers.

In South Africa these three obstacles have also stifled the demand for SRIs, along with the lack of a proper definition of SRI and the lack of clarity regarding amendments to the Pension Funds Act. Poor returns on SPVs in the late 1990s have also led to higher levels of risk aversion among trustees. The main drivers of SRI in South Africa have been identified in this research as:
- the launch of the FTSE/JSE SRI Index;
- the introduction of the Financial Sector Charter;
- improved triple bottom line reporting by local companies;
- sustained stakeholder advocacy by local NGOs and trade unions;
- increased incidents of corporate fraud;
- changes in the profile of the investment community in South Africa; and
- changing views on the role of business in the South African society.

It is foreseen that these developments will continue to support the growth and development of the SRI sector in South Africa in future.

It is disconcerting to note that, in more than ten years of democracy, very little has been done by local pension funds to support the cause of SRI in the country. This is very unfortunate given the dire need for socio-economic development, a task which the government cannot be expected to bear alone.
Although prescribed asset allocation could channel significant amounts of capital into areas of national priority, it should be seen as a last resort. Should legislation be inevitable, it is suggested that it be similar in nature to regulations in the UK, Europe and Australia which call for greater disclosure of pension funds' SRI policies (or the lack thereof).

Although legislation can, to a certain extent, curb unethical behaviour, the view expressed by Plato in 407BC is appropriate to the research in question. Plato stated that "...good people do not need laws to tell them to act responsibly, while bad people find a way around the law".

It is suggested that a local Social Investment Forum be established akin to those in the UK and Europe, as such a forum would be instrumental in addressing several of the key challenges outlined in this chapter.

Having outlined the current status of SRI in South Africa and abroad, the following chapter will highlight a number of risk-adjusted portfolio performance measures along with the findings of leading international studies on SRI fund performance.
CHAPTER SIX

PORTFOLIO PERFORMANCE EVALUATION

6.1 INTRODUCTION

In the preceding chapters much has been said regarding the definition, history, ethical premises and current status of SRI, both locally and internationally. It was highlighted that the historic (ex post) performance of SRI funds is a prime variable impacting on the demand for SRIs. This chapter thus focuses exclusively on the evaluation of historic (ex post) SRI fund performance. It more specifically addresses secondary research objectives two (e) and two (f) (as stated in Section 1.5.2 of Chapter One), namely to conduct an extensive review of the literature on:

- the measures used to evaluate the risk-adjusted performance of investment portfolios; and
- the financial performance of SRI funds.

In the first section of this chapter a number of measures will be presented which investors can employ to evaluate the historic risk and return profile of an investment portfolio. Next the Sharpe ratio, M² measure, Sortino ratio and the Upside-potential ratio will be presented. These are followed by a brief overview of the Capital Asset Pricing Model (CAPM) which serves as the basis for the single-factor Jensen’s alpha, the Information ratio and the Treynor ratio. Given the problems associated with the CAPM, an alternative asset pricing theory suggested by Ross (1976:341), namely the arbitrage pricing theory (APT) will also be highlighted. One particular application of the APT within the South African context, namely the two-factor APT model developed by Van Rensburg and Slaney (1997:1), will also be presented. The focus of the chapter then shifts to the findings of leading international studies on SRI fund performance.
6.2  MEASURING HISTORIC INVESTMENT RETURNS AND RISK

Secondary sources make a distinction between the approaches used to calculate historic (ex post) and expected (ex ante) returns and risk measures. As the objective of this study is to analyse the historic returns of local SRI funds, the focus in this section will only be on ex post returns and risk measures.

6.2.1 Calculating a portfolio’s historic (ex post) rate of return

An investment’s realised rate of return, also called its holding period rate of return (HPR), can be calculated over a single period (e.g. one year) or over multiple periods (e.g. over several years).

As indicated in Equation 6.1, a single-period HPR signifies a change in wealth over the time period during which the investment is held (Reilly & Brown 2000:6).

\[
HPR = \frac{\text{Ending value of investment}}{\text{Beginning value of investment}} = \frac{(P_1 - P_0) + \text{cash distributions}}{P_0} \ldots \ldots \text{(Eq 6.1)}
\]

where:
- \( P_1 \) = Price of the investment at the end of the holding period
- \( P_0 \) = Price of the investment at the beginning of the holding period
- Cash distributions = Any cash distributions received during the holding period (such as interest, dividends or rental income)

When looking specifically at portfolios, \( P_1 \) refers to the Net Asset Value (NAV) price of a fund at the end of the holding period, whereas \( P_0 \) refers to the fund’s initial NAV price. The NAV price of a unit at any point in time can be determined according to Equation 6.2.
where $NAV_i$ in Equation 6.2 is a function of the market value of the fund’s underlying investments less any liabilities due by the fund (such as administration costs not yet paid) (Oldert 2006:50).

As such, the HPR of a portfolio, say portfolio $i$, can be written as:

$$
HPR_i = \frac{(NAV_{price, i} - NAV_{price, -1}) + \text{cash distributions}}{NAV_{price, -1}} 
$$

As HPR equals the total proceeds derived from an investment per one Rand initially invested, its value will always be greater than zero (Bodie et al. 2002:807). Although HPR expresses the change in an investment’s value, investors generally prefer to evaluate returns in percentage terms. As indicated in Equation 6.4, this conversion to a Holding Period Yield (HPY) is simply done by subtracting one (1) from the annual HPR.

$$
HPY_i = HPR_i - 1
$$

When a portfolio is held over multiple periods (e.g. over several years), a historic mean rate of return has to be calculated. Reilly and Brown (2000:8) point out that an investment, held over a number of periods, is likely to yield high rates of return during some periods and low (and sometimes negative) rates of return during other periods. Although attention should be given to individual observations (such as periodic HPYs), investors should also calculate a summary measure that will indicate an investment’s ‘typical’ rate of return over the entire holding period. This ‘typical’ or average rate of return is often used as an indicator of the rate of return which the investor could expect to receive if he/she owned the investment over an extended period of time. To do so two averaging techniques, namely the arithmetic mean ($\bar{r}_{AM}$) return and the geometric mean ($\bar{r}_{GM}$) return, can be employed.
Both the arithmetic and geometric means can be calculated from a given set of periodic HPYs. Equation 6.5 indicates that the arithmetic mean of fund $i$ simply divides the sum of the annual holding period yields by the number of periods ($n$) over which the investment is held.

$$\bar{r}_{AMi} = \frac{\sum HPY_i}{n}$$ \hspace{1cm} (Eq 6.5)

where:
- $\bar{r}_{AMi}$ = The arithmetic mean of fund $i$
- $\sum HPY_i$ = The sum of fund $i$'s annual holding period yields
- $n$ = Number of periods over which the investment is held

In contrast, the geometric mean determines the $n^{th}$ root of the product of the HPYs for $n$ periods. The geometric mean is based on the principle of compounding which assumes that cash distributions are reinvested in the portfolio for the lifespan of the investment.

$$\bar{r}_{GMi} = \left[\prod HPY\right]^{1/n} - 1$$ \hspace{1cm} (Eq 6.6)

where:
- $\bar{r}_{GMi}$ = The geometric mean of fund $i$
- $\prod HPR$ = The product of fund $i$'s annual holding period yields i.e. $(HPY_1) \times (HPY_2)\ldots(HPY_n)$
- $n$ = Number of periods over which the investment is held

The geometric mean will only equal the arithmetic mean when the HPYs are the same for all the periods. However, if HPYs vary over time, the geometric mean will always be lower than that of the arithmetic mean. This is due to the fact that poor returns have a greater influence of the averaging process when using the geometric technique as compared with the arithmetic approach (Bodie et al. 2002:809).
The selection of the most appropriate averaging technique depends on whether the investor wishes to evaluate historical or expected returns. The geometric average is the best indicator of past performance as it represents the constant rate of return which the investor would have had to earn in each year to match the investment’s actual performance over some past holding period. However, if the investor’s focus is on future performance, the arithmetic mean is the more appropriate statistic as it presents an unbiased estimate of the portfolio’s expected future return (assuming that the expected return does not change over time) (Bodie et al. 2002:811). For the purpose of this research geometric means were calculated for the SRI funds contained in the sample as well as the constituents of the three benchmark categories.

The geometric mean return is also called a **time-weighted return** as it measures the compound growth rate of a portfolio and eliminates the distorting effects created by inflows of new investments (Investopedia 2006). When calculating a time-weighted return, the effect of varying cash inflows is eliminated by assuming a single investment at the beginning of a period and measuring the growth (or loss) in market value at the end of the period. This approach assumes that all cash distributions are reinvested and that exactly the same periods are used for comparisons.

Alternatively, a **Rand-weighted return** approach determines the internal rate of return of an investment. This rate of return equates the present value of future cash flows (including the final market value of an investment) to the current market price of the investment (Investorwords 2006b).

In order to compare the historic returns of different portfolios, reference is often made to their **annualised** returns. This calculation is simply done by raising the fund’s geometric mean return with its yearly annualisation factor \[\left(\frac{12}{n}\right)\] and subtracting one (assuming that \(n\) refers to months).
6.2.2 Calculating a portfolio’s historic (ex post) standard deviation

A fund’s risk profile can be determined by calculating its realised or ex post standard deviation (\( \sigma \)). As shown in Equation 6.7, this measure indicates by how much fund \( i \)'s returns have deviated from the arithmetic mean return over time. The greater the standard deviation, the greater the dispersion around the mean return and the higher the risk associated with the investment (Reilly & Brown 2000:14).

\[
\sigma_i = \sqrt{\frac{\sum (HPY_i - \overline{HPY})^2}{n}}
\]

(Eq 6.7)

where:
- \( \sigma_i \) = Fund \( i \)'s historic standard deviation
- \( \sigma_i^2 \) = Fund \( i \)'s historic variance
- \( HPY_i \) = Fund \( i \)'s HPY during period \( t \)
- \( \overline{HPY} \) = Fund \( i \)'s arithmetic mean HPY
- \( n \) = Number of periods over which the investment is held

If performance is measured on a monthly basis, the standard deviation of a fund can be annualised by multiplying its standard deviation (\( \sigma_i \)) with \( \sqrt{12} \).

Although the ex post standard deviation is widely used as a measure of risk, Padgette (1995:175) warns that it should be used with caution as:

- it assumes that data points are normally distributed. Padgette argues that although this assumption is reasonably valid for most investments, it may not be true for investments involving options, commodities and other derivative securities.
- the standard deviation can change over time. As such, investors should not blindly assume that an investment’s future standard deviation will be the same as its historic (ex post) standard deviation(s).
the amount of data required for an accurate calculation of the standard deviation is critical. Padgette (1995:175) suggests that analyses should span a minimum of three years, preferably five years of observations (even if the data are monthly) to capture the effect of different market cycles.

- the standard deviation does not make a distinction between upside and downside risk. Research has shown that investors are more concerned with downside risk than total as measured by standard deviation. Consequently, a new measure of risk, called downside deviation, has been developed to focus on returns below a threshold or minimum acceptable return value (a more detailed description of downside deviation is provided in Section 6.3.3 of this chapter).

In the light of the above, attention will now shift to a number of risk-adjusted portfolio performance measures.

6.3 MEASURES OF RISK-ADJUSTED PORTFOLIO PERFORMANCE

A host of risk-adjusted portfolio performance measures were identified in secondary sources. However, for the purpose of this research only eight measures were selected for discussion and consideration for possible implementation in the empirical analysis. They include the Sharpe ratio, M^2 measure, Sortino ratio, Upside-potential ratio, Jensen’s alpha, Information ratio and Treynor ratio.

6.3.1 The Sharpe ratio

Sharpe’s (1966:119) measure of risk-adjusted portfolio performance rests upon the Markowitz mean-variance theory which firstly assumes that the distribution of one-period portfolio returns is normal, and secondly that the mean and standard deviation of the distribution are sufficient statistics for the evaluation of a portfolio’s risk-adjusted performance.

Although Sharpe originally called his measure the *reward-to-variability ratio*, reference is often made in the literature to the *Sharpe Index*, the *Sharpe*
Measure and the Sharpe ratio (Sharpe 1994:49). The ratio has gained considerable acceptance over its 40 years of existence and although it has undergone some refinements and augmentations, the basic concept has remained intact.

While Sharpe intended the ratio to be used *ex ante*, it has been widely implemented as an *ex post* measure to record and rank historic portfolio performance. As indicated in Equation 6.8, the *ex post* Sharpe ratio divides the average annualised differential return of fund $i$ by its annualised standard deviation (Sharpe 1966:120). Clearly, the higher the ratio, the better.

$$\text{Sharpe}_i = \frac{\bar{r}_i - \bar{r}_f}{\sigma_i}$$  
(Eq 6.8)

where:

$\bar{r}_i$ = The mean annualised rate of return of fund $i$ during a specified time period  
$\bar{r}_f$ = The mean annualised rate of return of a risk-free asset during the same time period  
$\sigma_i$ = The annualised standard deviation of the rate of return of fund $i$ during the specified time period

As the Sharpe ratio only produces a relative ranking of portfolio performance researchers cannot say with certainty whether any differences in performance between funds are statistically significant. To address this issue, a variant of the Sharpe ratio was proposed by Graham and Harvey in the early 1990s and was later popularised by Leah Modigliani and her grandfather Franco Modigliani, past winner of the Nobel prize for economics (Bodie *et al.* 2002:869). Their approach, called the $M^2$ measure for Modigliani squared, will be highlighted next.

### 6.3.2 The $M^2$ measure

Like the Sharpe ratio, the $M^2$ measure focuses on total volatility as a measure of risk, but this risk-adjusted measure has the straightforward interpretation of
a differential return relative to the market index (Modigliani & Modigliani 1997:45). To compute the $M^2$ measure, a managed portfolio, $i$, is mixed with a position in a risk-free asset so that the complete or ‘adjusted’ portfolio matches the volatility of the market index. As the adjusted portfolio, $i^*$, has the same standard deviation as the market index, performance is evaluated by simply comparing the returns of the hypothetical fund with those of the market.

Equation 6.9 indicates the equation for calculating the $M^2$ value of portfolio $i$ as:

$$M_i^2 = r_i^* - r_M$$

(Eq 6.9)

where:

$r_i^*$ = The return on a hypothetical portfolio consisting of portfolio $i$ and a risk-free asset

$r_M$ = The return on the market portfolio of risky assets

A graphical representation of the $M^2$ measure appears in Figure 6.1 and shows that $M^2$ is the vertical distance (the difference in expected returns) between $i^*$ and M. In Figure 6.1 risk is measured on the x-axis (in terms of standard deviation) whereas returns are measured on the y-axis. Both the Capital Market Line (CML) and the Capital Allocation Line (CAL) have a y-intercept equal to the risk-free rate of return ($r_f$).
Clearly investors would favour portfolios which yield positive $M^2$ values and the higher the values, the better.

Another main criticism of the Sharpe ratio holds that it uses a non-directionally biased measure of volatility, i.e. the standard deviation, to adjust for risk. As such, the Sharpe ratio actually punishes a fund for periods of exceptionally high performance. For many investors, this type of volatility is not only acceptable, but very desirable. A new ratio was thus developed by Sortino to measure a fund’s excess or differential return per unit of downside deviation (Sortino & Price 1994:59).

6.3.3 The Sortino ratio

By using semi-variance or downside deviation (denoted by the Greek symbol $\delta$) as denominator in Equation 6.10, the Sortino ratio differentiates between ‘good’ and ‘bad’ volatility (Sortino & Price 1994:61; Padgette 1995:177). As indicated in Equation 6.10, the numerator of the Sortino ratio is exactly the same as that of the Sharpe ratio ($r_i - r_f$).
\[
Sortino_i = \frac{\bar{r}_i - \bar{r}_f}{\delta_i}
\]

(Eq 6.10)

where:

\(\bar{r}_i\) = The average annualised rate of return for fund \(i\) during a specified time period

\(\bar{r}_f\) = The average annualised rate of return on a risk-free asset during the same time period

\(\delta_i\) = The annualised downside deviation of the rate of return of fund \(i\) during the specified time period

In order to calculate a fund’s downside deviation (or delta) a threshold or minimum acceptable return (MAR) value needs to be set. In Equation 6.11 \(\tau\) represents the value below which the investor would not like to see his/her investment returns fall.

\[
\delta_i = \sqrt{\int_{-\infty}^{\tau} (\tau - r_i)^2 f(r_i) dr_i}
\]

(Eq 6.11)

where:

\(\tau\) = The investor’s threshold or MAR value

\(r_i\) = The return of fund \(i\) with a probability density function \(f(\cdot)\)

\(\tau\) can be stated as a constant value e.g. 10 percent, zero, the average return of a comparative benchmark index or even the inflation rate (Kaplan & Knowles 2004:3). For the purpose of this research the threshold or MAR value was set at zero as rational investors frown upon negative fund returns.

Practical considerations involved in calculating delta will be discussed in section 8.4.2 of Chapter Eight.

As in the case of the Sharpe ratio, investors prefer a high Sortino ratio. More specifically, a high Sortino ratio is seen as indicating a low risk of 'bad' volatility occurring (and \textit{vice versa}) (Investorwords 2006a). The Sortino ratio
can be further refined by focusing not only on downside deviation but also on a fund’s returns above the investor’s threshold or MAR value. This ratio, developed by Sortino, Van der Meer and Plantinga (1999:50), is called the Upside-potential ratio.

### 6.3.4 The Upside-potential ratio

As shown in Equation 6.12, the Upside-potential ratio (UPR) divides a portfolio’s upside potential (i.e. returns in excess of a specified threshold or MAR value) by its downside deviation. Upside potential is denoted by the Greek symbol theta, \( \theta \).

\[
\text{UPR}_i = \frac{\theta_i}{\delta_i} \tag{Eq 6.12}
\]

where:
- \( \theta_i \) = Fund’s \( i \)'s upside-potential
- \( \delta_i \) = Fund \( i \)'s downside deviation

As in the case of the Sortino ratio, the choice of downside deviation as denominator follows from the argument that investors are mostly concerned with ‘bad’ volatility. Upside-potential (\( \theta \)) can be calculated by using Equation 6.13.

\[
\theta = \int_{\tau'} \bar{r}_i \int_{\tau'} (r_i - \tau) f(r_i) dr_i \tag{Eq 6.13}
\]

where:
- \( \tau \) = The investor’s threshold or MAR value
- \( r_i \) = The return of portfolio \( i \) with a probability density function \( f(.) \)

For the purpose of this research, the threshold or MAR value was set at zero. As in the case of the Sharpe and Sortino ratios, a higher ratio is preferred. Practical considerations involved in calculating theta will be discussed in section 8.4.3 of Chapter Eight.
The Sharpe, Sortino and Upside-potential ratios are often called *market independent* performance measures as they only require a fund’s return series for calculation (Padgette 1995:174). In contrast, a number of measures, such as Jensen’s alpha, the Information ratio and the Treynor ratio, are classified as *market dependent* measures as they evaluate a fund’s performance relative to a broad market index (Padgette 1995:174). The first market measure to be discussed is the single-factor CAPM Jensen’s alpha.

### 6.3.5 The single-factor CAPM Jensen’s alpha

In order to explain this measure properly, a brief overview of the CAPM’s assumptions and characteristics is required. Although the CAPM, derived by Treynor (1961), Sharpe (1964), Litner (1965), and Mossin (1969) does not fully withstand empirical tests, it has become a cornerstone of modern financial economics.

The CAPM assumes that (Bodie *et al.* 2002:263):

- all investors are risk averse;
- all investors are single-period planners who seek to maximise their expected utility over this time horizon;
- all investors evaluate investments solely on the basis of means and standard deviations and seek mean-variance optimal portfolios;
- all investors have homogeneous expectations regarding investment opportunities, that is they all agree on a common input list from security analysis and estimate identical probability distributions for rates of return; and
- all assets are perfectly divisible i.e. it is possible to buy fractional shares of any asset or portfolio.

Hirt and Block (2003:605) show that the CAPM further assume that security markets are large; investors are price takers; there are no taxes or transaction costs; all risky assets are publicly traded; and all investors can borrow and lend any amount at a given risk-free rate.
In the light of these assumptions the CAPM posits that all investors will choose to hold the market portfolio \( (M) \) as their optimal risky portfolio, differing only in the amount invested in \( M \) versus a risk-free asset (Bodie et al. 2002:265). Furthermore, the expected (\textit{ex ante}) risk premium of a security \( [E(r_i) - r_f] \) could be shown to be proportional to the risk premium on the market portfolio \( [E(r_M) - r_f] \). The extent to which a security’s returns move with (or against) the market is illustrated by the beta coefficient (denoted by the Greek symbol beta, \( \beta \)).

As shown in Equations 6.14 and 6.15, beta is formally defined as the covariance of a security’s risk premium with the market portfolio shown as a fraction of the variance of the market portfolio

\[
E(r_i) - r_f = \frac{\text{Cov}(r_i, r_M)}{\sigma_M^2}[E(r_M) - r_f] \quad \text{(Eq 6.14)}
\]

\[
E(r_i) - r_f = \beta_i[E(r_M) - r_f] \quad \text{(Eq 6.15)}
\]

where:

- \( E(r_i) = \) The expected return on security \( i \)
- \( r_f = \) The expected rate of return on a risk-free asset
- \( E(r_M) = \) The expected return on the market index

Equation 6.15, also called the \textbf{expected return-beta relationship}, is the most familiar expression of the CAPM. However, given the vast number of covariance estimates required by this model, a simplifying assumption had to be introduced (Bodie et al. 2002:319). This assumption proposed that all relevant economic factors can be summarised by a single macro-economic indicator which is assumed to move the market as a whole. A further assumption states that beyond this one common effect all remaining uncertainty in security returns is due to uncorrelated firm-specific events. Equation 6.16 summarises the distinction between the macro-economic and firm-specific factors by writing the HPR on security \( i \) as:
The HPR of security \( i \) is thus a function of \( E(r_i) \), the fund’s expected return as stated at the beginning of the holding period, plus \( m_i \) which represents the impact of unexpected macro events on the security’s returns during the period, and \( e_i \) which captures the impact of firm-specific events. A security’s sensitivity or responsiveness to the macro factor, \( F \), can be denoted by \( \beta_i \). Consequently the return on security \( i \) can be depicted as:

\[
 r_i = E(r_i) + \beta_i F + e_i \quad \text{..........................................................(Eq 6.17)}
\]

Equation 6.17 is widely known as the single-factor CAPM model (Bodie et al. 2002:318). However, for this model to be useful the investor has to specify a way in which to measure the macro factor (\( F \)). This is generally done by using the rate of return on a broad index of securities, such as the S&P500 Index in the USA or the FTSE/JSE All Share Index in South Africa. By using a market index as proxy for the common or systematic factor, a model similar to the single-factor model (Equation 6.17) emerges. The single-index model, as it is called, shows that the realised excess rate of return on a security, \( r_i - r_f \), can be stated as:

\[
 r_i - r_f = \alpha_i + \beta_i (r_m - r_f) + e_i \quad \text{..........................................................(Eq 6.18)}
\]

where:

\[
 \alpha_i = \text{The stock’s expected return if the market is neutral, that is, if the market’s excess return, } r_m - r_f, \text{ is zero}
\]

\[
 \beta_i (r_m - r_f) = \text{The component of return due to movements in the overall market; } \beta_i \text{ being the security’s responsiveness to market movements}
\]

\[
 e_i = \text{The unexpected component due to unexpected events that are relevant only to this security (firm-specific)}
\]
It is important to note that the single-index model is shown in terms of **excess returns** over a risk-free rate rather than in terms of **total returns**. This rationale follows from the argument that the level of stock market returns only represents the state of the macro-economy in as far as it exceeds (or falls short of) the rate of return on a risk-free instrument (Bodie *et al.* 2002:320). This issue is of particular relevance for the research in question as the returns on a risk-free instrument in South Africa were often higher than that of the FTSE/JSE All Share Index.

When denoting excess returns over a risk-free rate by a capital letter $R$, the single-index model can be restated as:

$$R_i = \alpha_i + \beta_i R_m + e_i \quad \text{………………………………………………………………..}(\text{Eq 6.19})$$

The single-index model can be estimated by applying a regression analysis to the excess rates of return (Reilly & Brown 2000:12). As illustrated in Equation 6.20, the slope of the regression line, called the Security Market Line (SML), is the beta of the security, whereas the intercept is the security’s alpha during the same period.

$$R_{it} = \alpha_i + \beta_i R_{mt} + e_{it} \quad \text{………………………………………………………………..}(\text{Eq 6.20})$$

The CAPM predicts that $\alpha_i$ will be zero for all assets. This prediction should however be seen in the light of the fact that the CAPM is a statement about the *expected* returns of a fairly priced security. From an *ex post* perspective some securities would inevitably have done better or worse than expected.

Jensen (1968:381) showed that if a portfolio manager can consistently forecast market changes or select undervalued securities he/she can indeed earn higher premia than those implied by the CAPM. Such a portfolio manager will yield a consistently positive random error term because the actual returns for his/her portfolio will exceed the expected returns implied by the CAPM. Jensen (1968:383) demonstrates that consistent positive differences (superior performance) will bring about a positive intercept,
whereas consistent negative differences (inferior performance) will cause a negative intercept.

Another risk-adjusted performance measure which is premised on the single-factor CAPM, namely the Information ratio, is described next.

### 6.3.6 The Information ratio

As indicated in Equation 6.21, the Information ratio, also known as the Appraisal ratio, measures a portfolio’s average return in excess of its benchmark index divided by the standard deviation of this excess return (Reilly & Brown 2000:1143).

\[
IR_i = \frac{\bar{r}_i - \bar{r}_b}{\sigma_{ER}}
\]

(Eq 6.21)

where:

- \(\bar{r}_i\) = The mean annualised return for portfolio \(i\) during the specified time period
- \(\bar{r}_b\) = The mean annualised return for the fund’s benchmark index, \(b\), during the same period
- \(\sigma_{ER}\) = The standard deviation of portfolio \(i\)’s excess return during the period

The mean excess return in the numerator represents the fund manager’s ability to use his/her talent and information to generate a portfolio return that differs from that of the benchmark index against which his/her performance is being measured. Conversely, the denominator measures the amount of residual (unsystematic) risk that is incurred in pursuit of those excess returns. The coefficient \(\sigma_{ER}\) is sometimes called the tracking error of the portfolio and represents the cost of active management in the sense that fluctuations in the periodic (realised) \(ER_i\) values represent random returns beyond the investor’s control.
Reilly and Brown (2000:1143) show that if excess portfolio returns are estimated with historical data using the same single-factor regression model used to compute Jensen’s alpha (Equation 6.20), the Information ratio simplifies to:

\[
IR_i = \frac{\alpha_i}{\sigma_U} \quad \text{(Eq 6.22)}
\]

where:
\(\sigma_U\) = the standard error of the regression

In this form the Information ratio measures abnormal returns per unit of unsystematic risk that, in principle, could be diversified away by holding a market index portfolio (Bodie et al. 2002:868). A third performance measure derived from the single-factor CAPM is that of the Treynor ratio, outlined next.

### 6.3.7 The Treynor ratio

Treynor (1965:65) reasoned that since the unique returns from individual securities, \(e_u\), cancel out in a completely diversified portfolio, investors only need to consider market (or systematic) risk as measured by beta. Beta not only provides information on the direction of the correlation between a fund’s returns and that of the market index (i.e. positive or negative), it also indicates the strength of the correlation where a beta larger than one indicates greater volatility (or risk) and a value less than one lower volatility (Besley & Brigham 2005:180).

Using beta as a measure of risk, the \textit{ex post} Treynor ratio can be expressed as follows:

\[
\text{Treynor}_i = \frac{\bar{r}_i - \bar{r}_f}{\beta_i} \quad \text{(Eq 6.23)}
\]
where:
\[
\bar{r}_i = \text{The average annualised rate of return for fund } i \text{ during a specified time period}
\]
\[
\bar{r}_f = \text{The average annualised rate of return on a risk-free asset during the same time period}
\]
\[
\beta_i = \text{The beta coefficient of portfolio } i
\]

Since the Treynor ratio indicates a portfolio’s excess return per unit of market risk, the larger the ratio the better (Reilly & Brown 2000:1137). This measure of risk-adjusted portfolio performance is best suited in cases where funds are well diversified (which are often not the case with SRI funds).

Although risk-adjusted portfolio performance is widely analysed by means of CAPM-based measures such as Jensen’s alpha, the Information ratio and the Treynor ratio, these measures all have an inherent weakness in that they require the use of a market portfolio (Roll 1977:129; 1978:1051). The CAPM model stipulates that the market portfolio should consist of a value-weighted portfolio of all assets considered by investors as a potential investment.

Theoretically speaking the selection of a market portfolio is straightforward. Empirically speaking this is however very difficult as investors can include foreign bonds, real estate, coins, precious metals, stamps, antiques and non-traded assets, such as human capital, in their portfolios (Shukla & Trzinka 1992:23).

As indicated earlier, the practical compromise has been to use a widely available market index, such as the S&P500 Index in the USA or the FTSE/JSE All Share Index in South Africa. Roll (1977:129; 1978:1051) showed that if the proxy for the market portfolio is not a truly efficient portfolio, the SML using this proxy might not be the true SML i.e. the true SML would have a steeper slope. A portfolio which plotted above the SML using the ‘poor’ proxy, could thus in actual fact be inferior when compared to the true market portfolio.
Roll’s criticism regarding the use of CAPM-based performance measures has led to the development of alternative measures, such as multi-factor models based on the Arbitrage Pricing Theory (APT).

6.3.8 The multi-factor APT Jensen’s alpha

The APT model developed by Ross (1976:341) moved away from the ‘risk versus return’ logic of the CAPM by exploiting the notion of ‘pricing by arbitrage’ to its fullest possible extent. Ross (1976:343) noted that the theoretical reasoning underpinning the APT was not unique to his particular theory but that it in fact served as the underlying logic and methodology of virtually all of finance theory. Although not entirely relevant to the discussion at hand, it is still interesting to note that Ross, a committed Marxist, gave up a promising career in physics in the 1970s due to a concern that he might contribute to the development of weapons (Wikipedia Encyclopedia 2006g). This raises the question as to how Prof Ross might have invested his personal savings…

The concept of arbitrage essentially refers to a trading strategy designed to generate a guaranteed profit from a transaction which requires no capital commitment or risk bearing on the part of the trader (Reilly & Brown 2000:1197). An example of an arbitrage trade is the simultaneous purchase and sale of the same security, currency or commodity in different markets at different prices (Oldert 2006:131).

The APT holds that the expected return of a security or fund can be modelled as a linear function of various macro-economic factors or theoretical market indices, where sensitivity to changes in each factor is represented by a factor specific beta coefficient (Hirt & Block 2003:617). The rate of return derived in this manner can then be used to price a security. If the price is different from the expected end of period price discounted at the rate implied by the model, arbitrage should bring it back into line.
SRI researchers Bauer et al. (2005:1761) developed a four-factor APT model to evaluate the risk-adjusted performance of 103 SRI funds in the USA, UK and Germany. Their multi-factor model was based on the model developed by Carhart (1997:57) which is essentially an extension of the Fama and French (1993:3) three-factor APT model. The four-factor APT model used by Bauer et al. (2005:1761) is presented in Equation 6.24.

\[
R_{it} = \alpha_{it} + \beta_{0i}R_{Mt} + \beta_{1i}SMB_{it} + \beta_{2i}HML_{it} + \beta_{3i}MOM_{it} + \epsilon_{it} \quad \text{(Eq 6.24)}
\]

where \( t = 1, 2, \ldots, T \) and:

- \( R_{it} \): The risk premium of fund \( i \) during period \( t \), determined by \( r_{it} - \bar{R} \)
- \( \alpha_{it} \): The intercept of the regression representing the alpha coefficient of fund \( i \)
- \( \beta_{0i} \): The sensitivity of fund \( i \) to the market risk premium
- \( R_{Mt} \): The market risk premium during period \( t \), determined by \( r_{M} - \bar{R} \)
- \( \beta_{1i} \): The sensitivity of fund \( i \) to the factor measuring the impact of market capitalisation
- \( SMB_{it} \): The difference in return between a small capitalisation portfolio and a large capitalisation portfolio at time \( t \)
- \( \beta_{2i} \): The sensitivity of fund \( i \) to the factor measuring the impact of fund objective
- \( HML_{it} \): The difference in return at time \( t \) between a portfolio containing ‘value’ stocks (with a high book-to-market ratio) and one consisting of ‘growth’ stocks (with a low book-to-market ratio)
- \( \beta_{3i} \): The sensitivity of fund \( i \) to the factor measuring the impact of performance persistence
- \( MOM_{it} \): The difference in return between a portfolio of past 12 month winners and a portfolio of past 12 month losers at time \( t \)
- \( \epsilon_{it} \): The stochastic error term of fund \( i \) in period \( t \)

During the initial planning phase of this research, Bauer et al.’s (2005:1761) model was earmarked for implementation due to its inherent strength and applicability to SRI. This model could however not be used as the sample of
local SRI was too small (n = 24), several SRI funds had very short track
records and data on fund size and book-to-market ratios were not readily
available.

One application of the APT model that will be tested in this study is the two-
factor model developed by Van Rensburg and Slaney (1997:1) This model
grew out of concerns regarding the suitability of the FTSE/JSE All Share Index
as a proxy for the market index in South Africa (Correia & Uliana 2004:67).
Local researchers’ main concern regarding the use of the FTSE/JSE All Share
Index relates to its skewed nature.

As illustrated in Table 6.1, this index is heavily skewed towards resource and
mining companies.

**TABLE 6.1: Market capitalisation of JSE sectors on 31 December 2005**

<table>
<thead>
<tr>
<th>Sectors</th>
<th>Market capitalisation on 31 December 2005 (R million)</th>
<th>% of JSE total market capitalisation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resources(a)</td>
<td>1 195 793</td>
<td>33.35</td>
</tr>
<tr>
<td>Financials</td>
<td>789 972</td>
<td>22.03</td>
</tr>
<tr>
<td>Specialist Securities</td>
<td>458 516</td>
<td>12.79</td>
</tr>
<tr>
<td>Non-Cyclical Consumer Goods</td>
<td>271 954</td>
<td>7.58</td>
</tr>
<tr>
<td>Cyclical Services</td>
<td>254 977</td>
<td>7.11</td>
</tr>
<tr>
<td>Non-Cyclical Services</td>
<td>213 064</td>
<td>5.94</td>
</tr>
<tr>
<td>Cyclical Consumer Goods</td>
<td>174 552</td>
<td>4.87</td>
</tr>
<tr>
<td>Basic Industries</td>
<td>116 076</td>
<td>3.24</td>
</tr>
<tr>
<td>General Industrials</td>
<td>86 400</td>
<td>2.41</td>
</tr>
<tr>
<td>Information Technology</td>
<td>18 367</td>
<td>0.51</td>
</tr>
<tr>
<td>Venture Capital</td>
<td>4 307</td>
<td>0.12</td>
</tr>
<tr>
<td>Alt*</td>
<td>1 938</td>
<td>0.05</td>
</tr>
<tr>
<td>Development Capital</td>
<td>197</td>
<td>0.01</td>
</tr>
<tr>
<td><strong>JSE Total</strong></td>
<td><strong>3 586 112</strong></td>
<td><strong>100.00</strong></td>
</tr>
</tbody>
</table>

(a) Mining companies represent 86.3 percent of the market capitalisation of this sector, with gold
companies representing almost one fifth thereof (17.6%)

Source: JSE 2005 Annual Report

Correia and Uliana (2004:66) point out that the CAPM, as conventionally
specified by South African academics and practitioners (i.e. by using the
FTSE/JSE All Share Index as market proxy), is seriously flawed. *The question
then becomes - which index or combination of indices is the most appropriate
proxy for the market index in South Africa?*
This question was first addressed by Bowie and Bradfield (1993:6) who suggested that the JSE Actuaries Financial and Industrial Index (predecessor of the present day FTSE/JSE Financial and Industrial Index) ought to be used when empirically testing the CAPM in South Africa. They justified this argument by stating that many investors regard mining shares (and more particularly gold shares) as representing a different type of risk and hence a different market altogether. They argued that if a segmentation between the Mining and Industrial sectors on the JSE was indeed evident (as was suggested by Campbell (1979) and Gilbertson & Goldberg (1981:40)), securities should be priced to compensate investors for bearing the risk of the two indices separately.

Research by Van Rensburg and Slaney (1997:1) on this topic revealed that a two-factor APT model using the JSE Actuaries All Gold and Industrial indices provided the best explanation of the return generating process on the JSE. Their two-factor APT model was specified as follows:

\[ R_i = \alpha_{iT} + \beta_{iT}R_{GOLDt} + \epsilon_{it} \]  \hspace{1cm} \text{(Equation 6.25)}

where \( t = 1, 2, \ldots T \) and:

- \( R_i = \) The risk premium of fund \( i \) during period \( t \), determined by \( r_i - r_f \)
- \( \alpha_{iT} = \) The intercept of the regression representing the alpha coefficient of fund \( i \)
- \( R_{GOLDt} = \) The risk premium of the JSE Actuaries All Gold Index in period \( t \) (predecessor of the present day FTSE/JSE Gold Mining index) over and above the risk-free rate of return
- \( R_{INDt} = \) The risk premium the JSE Actuaries Industrial Index in period \( t \) (predecessor of the present day FTSE/JSE Industrials Index) over and above the risk-free rate of return
- \( \epsilon_{it} = \) The stochastic error term of fund \( i \) in period \( t \)

Von Wielligh and Smit (2001:120) extended this model to a three-factor APT model, but found that the majority of the cross-sectional variation in returns could be explained by the two-factor Van Rensburg and Slaney APT model.
Against this background on portfolio performance measurement, attention will now shift to the findings of leading international studies on SRI fund performance. Besides summarising the findings of pertinent studies, specific attention will be paid to the measures of risk-adjusted portfolio performance used by the respective researchers.

6.4 THE RISK-ADJUSTED PERFORMANCE OF SRI FUNDS

Given the importance assigned to the financial performance of SRI funds in the comprehensive conceptual model (Figure 1.3 of Chapter One), the next section will be devoted to summarising the findings of prominent international studies on this topic. As mentioned before, no academic research in South Africa has focused on the risk-adjusted performance of local SRI funds. From a review of the literature it seems that international SRI studies can be categorised into three groups namely:

(i) studies comparing the performance of artificially constructed SRI funds vis-à-vis market and conventional indices;
(ii) studies investigating the performance of ESG stock market indices against market and conventional indices; and
(iii) studies evaluating the performance of actual SRI funds vis-à-vis market indices, other benchmark indices and conventional (non-SRI) funds.

The most prominent international SRI studies in these three categories are shown in Table 6.2. It should be noted that Table 6.2 does not present an exhaustive list of SRI studies conducted abroad but merely contains a number of pertinent ones, the main findings of which will be explored in the sections to follow.
### TABLE 6.2: Overview of pertinent international SRI studies

<table>
<thead>
<tr>
<th>Date and country of publication</th>
<th>Author(s)</th>
<th>Title of article</th>
<th>Journal</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Studies comparing the performance of screened artificially constructed SRI funds vis-à-vis market and conventional indices</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1979; USA</td>
<td>Rudd, A.</td>
<td>Divestment of South African equities: how risky?</td>
<td>The journal of portfolio management, 5(3):5-10</td>
</tr>
<tr>
<td>1995; USA</td>
<td>Diltz, J.D.</td>
<td>The private cost of socially responsible investing</td>
<td>Applied financial economics, 5:69-77</td>
</tr>
<tr>
<td>1997a; USA</td>
<td>Guerard, J.B.</td>
<td>Is there a cost to being socially responsible in investing?</td>
<td>The journal of investing, 6(2):11-19</td>
</tr>
<tr>
<td>1997b; USA</td>
<td>Guerard, J.B.</td>
<td>Additional evidence in the cost of being socially responsible in investing</td>
<td>The journal of investing, 6(4):31-35</td>
</tr>
<tr>
<td><strong>Studies investigating the performance of ESG stock market indices vis-à-vis market and conventional indices</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1997; USA</td>
<td>Sauer, D.A.</td>
<td>The impact of social responsibility screens on investment performance: evidence from the Domini 400 social index and Domini equity mutual fund</td>
<td>Review of financial economics, 6(2):137-150</td>
</tr>
<tr>
<td>2000; USA</td>
<td>Statman, M</td>
<td>Socially responsible mutual funds</td>
<td>Financial analyst journal, 56(3):30-39</td>
</tr>
<tr>
<td>Date and country of publication</td>
<td>Author(s)</td>
<td>Title of article</td>
<td>Journal</td>
</tr>
<tr>
<td>--------------------------------</td>
<td>-----------</td>
<td>------------------</td>
<td>---------</td>
</tr>
<tr>
<td><strong>Studies evaluating the performance of actual SRI funds vis-à-vis market indices, other benchmark indices and conventional (non-SRI) funds</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1994; UK</td>
<td>Luther, R.G. &amp; Matatko, J.</td>
<td>The performance of ethical unit trusts: choosing an appropriate benchmark</td>
<td>British accounting review, 26:77-89</td>
</tr>
<tr>
<td>1995; USA &amp; Germany</td>
<td>White, M.A.</td>
<td>The performance of environmental mutual funds in the United States and Germany: is there hope for “green” investors</td>
<td>Research in corporate social performance, (supplement 1):323-344</td>
</tr>
<tr>
<td>1998; USA</td>
<td>Reyes, M.G. &amp; Grieb, T.</td>
<td>The external performance of socially responsible mutual funds</td>
<td>American business review, 16(1):1-7</td>
</tr>
<tr>
<td>2000; USA</td>
<td>Statman, M</td>
<td>Socially responsible mutual funds</td>
<td>Financial analyst journal, 56(3):30-39</td>
</tr>
<tr>
<td>2005; USA, UK &amp; Germany</td>
<td>Bauer, R., Koedijk, K. &amp; Otten, R.</td>
<td>International evidence on ethical mutual fund performance and investment style</td>
<td>Journal of banking and finance, 29(7):1751-1767</td>
</tr>
</tbody>
</table>

**Sources:** As indicated
6.4.1 Studies comparing the performance of artificially constructed SRI funds vis-à-vis market and conventional indices

The first researchers who undertook studies of this nature faced two challenging problems: firstly, very few retail SRI funds existed at the time (the late 1970s and early 1980s) and secondly, of those retail SRI funds which existed, most had very short track records. As a result most SRI researchers resorted to constructing their own artificial SRI portfolios.

Rudd (1979:5) as well as Grossman and Sharpe (1986:15) evaluated the performance of a ‘South Africa Free’ portfolio versus a market index in this manner. In both cases hypothetical portfolios were constructed by excluding banks and companies with South African operations. Although the studies differed slightly in terms of sample size, research period and methodology, both found that the ‘South Africa Free’ portfolio exhibited size, leverage and industry classification biases.

Based on the single-factor CAPM Jensen’s alpha, Rudd (1979:5) found that the ‘South Africa Free’ portfolio was only marginally more risky than the S&P500 Index and found that the exclusion of banks and companies operating in South Africa did not have a significant effect on portfolio performance. The penalty in terms of portfolio performance was only 3.7 basis points of annual return. In contrast, Grossman and Sharpe (1986:15) found that the risk-adjusted ‘South Africa Free’ portfolio outperformed the NYSE All Share Index by 0.18 percent per annum over the research period (January 1960 – December 1983). They attributed their finding entirely to the fact that companies in the ‘South Africa Free’ portfolio were, on average, smaller than those included in the NYSE All Share Index.

Although the anti-South Africa screen was the most widely used exclusionary screen in the USA during the 1970s and 1980s, other environmental and social screening criteria also began to feature on the SRI agenda (both exclusionary and inclusionary in nature). This led researchers such as Diltz (1995:67) and Guerard (1997a:11; 1997b:31) to investigate the cost
associated with a screening approach. Both researchers constructed hypothetical portfolios by screening firms on a comprehensive range of non-financial criteria. Diltz (1995:70), calculating Jensen’s alphas and cumulative average abnormal returns, found that screening neither contributed to nor detracted from portfolio performance. His results did however show that the market rewarded good environmental performance, charitable giving and the absence of nuclear energy and defence involvement, whereas it penalised firms that provided family related benefits such as parental leave, job sharing and dependent care assistance.

Guerard (1997a:11; 1997b:31) examined the financial characteristics of screened and unscreened portfolios by means of a composite stock selection model and found no statistically significant difference in the returns of socially screened samples versus unscreened ones. Guerard also found that screened portfolios were biased towards high growth companies, firms with higher price-to-book ratios and smaller market capitalisations.

In addressing the need for SRI research on screened bond portfolios, Hutton et al. (1998:281) constructed a socially screened bond portfolio and benchmarked its performance against a broad bond index. The screened portfolio consisted of bonds from companies included in the Domini 400 Social Index. Their analysis, based on the Information ratio and conducted over the period 1 May 1990 to March 1996, showed that there is no significant cost associated with investing in an SRI bond portfolio. The screened bond portfolio was however found to be more sensitive to changes in interest rates than a broad bond index.

6.4.2 Studies investigating the performance of ESG stock market indices vis-à-vis market and conventional indices

As was pointed out in section 5.2.2(h) of Chapter Five, a number of stock market indices have been developed to evaluate companies’ ESG policies and practices. The first index of this nature, the Domini 400 Social Index (DSI), was launched on May 1990 and consists of 400 stocks that have
passed a number of ethical as well as ESG screens. The launch of the index greatly facilitated SRI research in the USA in that it gave rise to a number of studies investigating the index's performance against market portfolios (such as the S&P500 Index) and other conventional indices. The findings of three pertinent studies are highlighted next.

Given the substantial level of interest the DSI, Kurtz and DiBartolomeo (1996:35) set out to determine whether the DSI outperformed the S&P500 Index over the period May 1990 to September 1993. Based on the Sharpe and Treynor ratios as well as the single-factor CAPM Jensen's alpha the authors reported no difference between the performance of the index and the S&P500 Index. Statman (2000:30), employing a longer research period (January 1990 – December 1998), likewise found that the DSI performed no differently than did the S&P500 Index. Statman (2000:31) based his calculations on the single-factor CAPM Jensen's alpha as well as a measure called 'excess standard deviation adjusted return'.

Using the single-factor CAPM Jensen's alpha and the Sharpe ratio, Sauer (1997:137) compared the performance of the DSI with two unrestricted benchmark portfolios, one being the S&P500 Index and the other being the Chicago Center for Research in Securities Prices value weighted market index. The latter index was chosen in order to minimise the small cap bias apparent in the DSI. A hypothetical backdated series of returns for the DSI was constructed from 1986 to 1 May 1990 whereas a live run series was used for the period after 1 May 1990 to December 1994. As in the previous two studies no statistically significant difference was detected in the performance of the socially screened DSI versus the two unrestricted indices.

Although the FTSE/JSE SRI Index in South Africa is still in its infancy, methodologies similar to those employed by Sauer (1997:137), Kurtz and DiBartolomeo (1996:35), and Statman (2000:30) could be considered in future to evaluate the index's performance vis-à-vis the FTSE/JSE All Share Index.
As more SRI funds saw the light during the 1980s and track records of SRI funds became longer, researchers turned their focus from the construction and evaluation of hypothetical SRI funds to that of real SRI funds. Performance was typically compared with market indices, other benchmark indices and conventional (non-SRI) funds. The findings of a number of noteworthy studies are presented next.

6.4.3 Studies evaluating the performance of actual SRI funds *vis-à-vis* market indices, other benchmark indices and conventional (non-SRI) funds

As SRI markets differ from one country to the next, the findings of SRI studies will be described per country, rather than in a chronological order. The findings of two cross-country studies will also be outlined.

(a) Studies on the performance of SRI funds in the UK

Luther *et al.* (1992:57) were the first UK researchers to investigate the risk-adjusted performance of SRI funds in this country. They evaluated the performance of 15 SRI funds *vis-à-vis* the performance of the Financial Times (FT) All Share Index as well as the Morgan Stanley Capital International (MSCI) World Index. Using the Sharpe and Treynor ratios as well as the single-factor CAPM Jensen’s alpha they found weak evidence of SRI fund over-performance, particularly against the MSCI World Index. Luther *et al.* (1992:60) however warned that investments in SRI funds are too varied and too closely correlated with low yield and small companies to allow for a simple evaluation of an ‘ethical effect’.

As a result, Luther and Matatko (1994:77) set out two year later to evaluate SRI fund performance against the FT All Share Index, a small market capitalisation index and a combination of these two indices. After adjusting for risk they found that eight out of nine SRI funds had negative single-factor CAPM Jensen’s alphas compared with the FT All Share Index, but that eight out of nine had positive alphas when compared with the small cap index. As
none of the alphas were significantly different from zero, Luther and Matatko (1994:80) concluded that there was no evidence of general over- or underperformance. They did however find that the systematic risk component of SRI fund returns appears to be better described by the composite index than by either of the indices individually.

Given the rapid growth of SRI funds in the UK in the early 1990s, Mallin et al. (1995:483) also set out to evaluate SRI fund performance, but based their comparison on a matched sample of conventional (non-SRI) funds. Based on the three traditional risk-adjusted measures (i.e. the Sharpe ratio, Treynor ratio and single-factor CAPM Jensen’s alpha), Mallin et al. (1995:483) concluded that SRI funds only marginally outperformed conventional (non-SRI) funds. Both SRI funds and conventional (non-SRI) funds underperformed the UK market (as measured by the FT All Share Index), during the research period (January 1986 – December 1993).

Gregory, Matatko and Luther (1997:705) refined Mallin et al.’s study by using a size and risk-adjusted benchmark index for comparative purposes. They also presented cross-sectional estimates employing both ‘small company exposure’ and ‘fund value’ to evaluate the relative importance of the two effects. The application of a cross-sectional regression approach allowed for the use of a larger number of conventional (non-SRI) funds than a matched pairs approach. Their analysis shows that SRI funds in the UK indeed had a greater exposure to ‘small firm’ risk than conventional (non-SRI) funds and furthermore illustrated that SRI funds underperformed conventional (non-SRI) funds.

When regressing the adjusted Jensen’s alpha on a number of explanatory variables it was found that neither fund size nor ethical status was capable of explaining the relative performance of the SRI funds in question. Some evidence did however reveal that SRI funds with shorter track records were the weakest performing funds.
In contrast to evaluating a sample of UK SRI funds, Mill (2006:131) examined the performance of a single fund which was initially launched as a conventional fund and later adopted SRI principles. Mill (2006:135) criticised the matched pairs approach used by previous researchers such as Mallin et al. (1995:483) and Gregory et al. (1997:705). He argued that such an approach was unnecessarily restrictive given the fact that more than two thousand unit trusts and open-ended investment schemes operate in the UK. Mill therefore compared the performance of the ‘switched’ fund with three similar conventional funds whose investment objectives remained unchanged over the research period (March 1982 to March 2004) as well as the FT All Share Index. Changes in the ‘switched’ fund’s variability over time were modelled using a generalised autoregressive conditional heteroscedasticity model.

The ‘switched’ fund’s returns become more volatile after the adoption of SRI principles but steadily declined to pre-adoption levels after approximately four years (Mill 2006:137). The increase in variability is attributed to the adoption of SRI principles whereas the subsequent reduction in variability is explained by two factors, namely:

- the spread of corporate social responsibility initiatives undertaken by the firms in which the fund invested after adopting the SRI principles; and
- a learning effect.

As pointed out in Section 3.3.2(a) of Chapter Three research evidence seems to support the argument that companies which respond to the ESG concerns of their stakeholders are more profitable than their conventional counterparts who don’t (McWilliams & Siegel 2000:603; Hillman & Keim 2001:125; Orlitzky, Schmidt & Rynes 2003:409). The second explanation for the reduction observed in the ‘switched’ fund’s variability refers to the notion that the fund’s managers first had to gain hands-on experience in the field of SRI before generating returns similar to those obtained before adopting SRI principles.

From the above it seems as if SRI funds in the UK underperformed the UK market index, a finding which is consistent with the premise of the Efficient
Market Hypotheses (EMH) which holds that active managers cannot beat the market (Hirt et al. 2006:91). It was further found that SRI funds in the UK exhibit a small capitalisation bias and that SRI fund performance improves over time, providing evidence of a learning effect in the UK SRI market.

(b) Studies on the performance of SRI funds in the USA

Hamilton et al. (1993:62) were the first researchers to investigate the claim made by American SRI advocates that socially responsible investors could ‘do well by doing good. Their sample, consisting of 32 SRI funds, was divided into two groups, namely those established before 1985 and those established thereafter. A comparison against two benchmarks consisting of conventional (non-SRI) funds for the corresponding time periods, showed that socially responsible investors would have done just as well as conventional investors. As the SRI funds’ risk-adjusted performance (based on the single-factor CAPM Jensen’s alpha) were not statistically different from those of conventional (non-SRI) funds, Hamilton et al. (1993:66) concluded that a screening approach neither harms nor enhances investment returns.

A few years later Reyes and Grieb (1998:1) extended Hamilton et al.’s study. They used a smaller sample of only 15 SRI funds and evaluated these funds’ performance against four peer group indices. These consisted of conventional (non-SRI) funds with similar investment objectives. They found that none of the 15 SRI funds were co-integrated with their peer funds i.e. they did not share a common underlying trend. Stated differently, the application of non-financial screens caused SRI portfolios to behave quite differently from their respective peer groups. The Sharpe ratio indicated that only four (out of the 15) SRI funds outperformed their peers in terms of this ratio. An application of the Jobson-Korkie significance test however revealed that the risk-adjusted performance of SRI funds was not statistically significantly different from their peer groups. Reyes and Grieb (1998:5) therefore confirmed Hamilton et al.’s (1993:62) earlier findings which showed that there is no statistically significant difference between the performance of SRI funds and conventional (non-SRI) funds.
Goldreyer and Diltz (1999:23) evaluated 49 SRI funds partitioned according to investment objective and a two-way table based on three portfolio size categories, and three systematic risk categories. Using traditional performance measures such as the Sharpe ratio, Treynor ratio and single-factor CAPM Jensen’s alpha they found that screened portfolios neither outperform nor underperform conventionally selected portfolios. Similar findings were also reported by Kurtz and DiBartolomeo (1996:35) and Sauer (1997:137).

Statman (2000:30) applied a different approach to evaluating the performance of SRI funds in the USA. He compared the performance of 31 SRI funds to the S&P500 Index, the Domini 400 Social Index and 62 conventional (non-SRI) funds. Using the single-factor CAPM Jensen’s alpha and the M² measure, Statman found that socially responsible funds did worse than the S&P500 Index and the Domini 400 Social Index over the period May 1990 to September 1998, but no worse than conventional (non-SRI) funds.

On balance US studies on the risk-adjusted performance of SRI funds thus show that they marginally underperform broad market indices in the USA, but performed on a par with conventional (non-SRI) funds.

(c) Studies on the performance of SRI funds in Australia

As the Australian SRI market is one of the upcoming SRI markets in the world, more attention is being paid to the performance of SRI funds in this country. Cummings (2000:79) investigated the performance of SRI funds in Australia by comparing the risk-adjusted returns of seven Australian SRI funds with a smaller companies index, the funds’ respective industry average indices and the general Australian equity market as measured by the All Ordinaries Accumulation Index. Based on the Sharpe ratio, Treynor ratio and the single-factor CAPM Jensen’s alpha, it was found that Australian SRI funds outperformed their industry averages but underperformed the smaller companies index and the Australian equity market. These differences were however not statistically significant.
Although Cummings (2000:80) found that no short or medium-term financial advantage resulted from the screening of investments, she did however find that SRI funds are successful over the long term. Her findings highlighted a high level of multi-collinearity between older SRI funds, and clearly showed that older SRI funds tended to perform better than younger funds. Cummings (2000:82) argued that the lower risk associated with SRI funds might retard short-term returns, but may be beneficial over the long term as ethical and socially responsible companies have a lower risk of incurring costs such as labour disputes and environmental clean-ups and fines.

In contrast, Tippit (2001:170) found that the average of the three largest Australian SRI funds significantly underperformed the All Ordinaries index by 1.5 percent per annum over the period 1991 to 1998. Ali and Gold (2002:19) likewise found that, over a seven year period (ending 2001), Australian investors avoiding shares in ‘sinful’ industries sacrificed approximately 0.70 percent of return per annum.

A comprehensive study undertaken in Australia by Bauer et al. (2006:33) reveals new evidence on the performance and investment style of retail SRI funds in this country. Using the single-factor CAPM as well as a conditional, four-factor APT model (Equation 6.26) they compared the performance of 25 SRI funds against the Australian All Ordinaries Index, a small cap index, an environmental index and a group of conventional (non-SRI) funds. Based on the CAPM, Australian SRI fund performance is not statistically different from the general equity market.

After controlling for investment style, time-varying betas, bond exposure and home bias, Bauer et al. (2006:7) found no evidence of significant differences in the risk-adjusted returns of SRI funds vis-à-vis conventional (non-SRI) funds during the research period (November 1992 to April 2003). The researchers caution that their results were sensitive to the chosen time period. During the period 1992 to 1996 domestic Australian SRI funds, for example, underperformed their conventional counterparts, whereas they matched the performance of their conventional peers more closely during the period 1996
to 2003. They argue that this finding is indicative of a learning effect. Akin with Tippit (2001:173), both domestic and international SRI funds in Australia exhibited significantly less market risk compared with conventional (non-SRI) funds, a finding attributed to the conservative mindset of SRI fund managers in Australia.

Based on this most recent study, there seems to be no financial penalty for being a socially responsible investor in Australia.

Although there are slight differences in the application of ethical and ESG screens in different cultures, there are sufficient similarities to allow for cross-country comparisons. Two studies of this nature will be highlighted next.

(d) Cross-country studies on SRI fund performance

In the first cross-country SRI study, White (1995:323) compared the performance of a sample of environmentally screened or ‘green’ funds in the USA with a similar sample in Germany. Based on the Sharpe ratio, Treynor ratio and single-factor CAPM Jensen’s alpha, White found that green investors in the USA earned inferior risk-adjusted returns vis-à-vis both the overall US market and the DSI. As a group, environmental funds in Germany fared better achieving higher risk-adjusted returns than US funds and also generate returns which were not significantly different from the overall German stock market.

In the most comprehensive cross-country SRI study to date, Bauer et al. (2005:1751) investigated whether 103 US, UK and German SRI funds differed from conventional (non-SRI) funds in terms of both risk-adjusted returns and investment style. They evaluated returns based on the single-factor CAPM as well as the four-factor APT model illustrated in Equation 6.26. An analysis over the research period (January 1990 to March 2001) showed that German and US SRI funds underperformed with regard to their relevant market indices as well as conventional (non-SRI) funds, whereas UK SRI funds showed a marginal outperformance. None of these differences were however
statistically significant after controlling for common variables such as size, book-to-market and performance persistence.

When allowing for time-varying betas, German and US SRI funds underperformed while UK funds outperformed conventional (non-SRI) funds (with US and UK findings now becoming statistically significant).

The findings further revealed that ethical indices (such as the DSI and Dow Jones Sustainability Index) performed worse than standard indices (such as the S&P500 Index and FT All Share Index) in explaining SRI fund performance. In terms of investment style, Bauer et al. (2005:1755) found that SRI funds exhibited distinct styles when compared with conventional (non-SRI) funds. German and UK SRI funds, for example, exhibited significantly less market exposure compared with conventional funds and were heavily exposed to small companies. On the other hand, US SRI funds were relatively more invested in large caps. In all three countries SRI funds invested more heavily in growth-oriented than value-oriented companies compared with conventional (non-SRI) funds.

A pronounced learning effect was detected in this study i.e. after a period of strong underperformance older SRI funds caught up, while younger SRI funds continued to underperform both the market and conventional (non-SRI) funds. After controlling for investment style no significant differences in risk-adjusted returns between SRI funds and conventional (non-SRI) funds could be detected.

### 6.5 SUMMARY AND CONCLUSIONS

This chapter is of critical importance for the research in question as it sensitised the researcher to a number of risk-adjusted measures which could be used to evaluate the performance of local SRI funds. Cognisance was taken of the fact that these measures use different definitions of risk and return and some times rank funds differently. The limitations of the CAPM in measuring fund performance in South Africa was also considered.
Seven pertinent conclusions can be drawn from the reviewed literature:

- It seems as if SRI funds, on average, underperform relative to market indices. A finding which confirms the EMH notion that active managers cannot beat the market (Hirt et al. 2006:91).

- SRI funds generally perform on a par with conventional (non-SRI) funds, implying that SRI strategies do not negatively impact on the risk-adjusted performance of SRI funds.

- SRI funds often exhibit small cap and growth biases which complicate researchers’ attempts to distinguish a clear ‘ethical effect’.

- Older SRI funds tend to outperform younger funds, suggesting evidence of a learning effect in global SRI markets. This finding is not surprising given the complexities involved in identifying viable SRIs.

- With the exception of two studies (Bauer et al. 2006:33 & Bauer et al. 2005:1751) all prior studies on SRI fund performance suffer from a survivorship bias. This is a serious shortcoming as the exclusion of discontinued funds has been shown to lead to a significant overestimation of average fund performance (Brown, Goetzmann, Ibbotson & Ross 1992:124; Malkiel 1995:549; Carhart 1997:57). Liang (2000:5) explains that ‘surviving funds’ are most likely to be funds that exhibited stronger performance or indicated superior characteristics for them to stay in business. In contrast, those funds that ceased operations are likely to have been poor performers that failed to satisfy the needs and niches of the mutual fund market.

- Another shortcoming of some of the earlier SRI studies (White 1995:235; Luther & Matatko 1994:78; Mallin et al. 1995:483 Gregory et al. 1997:705; Statman 2000:30) relates to the relatively short research periods investigated, some being as short as three years. Ideally fund performance
should be evaluated over five to ten year periods to capture the full effect of market cycles (Akinjolire & Smit 2003:41).

It should also be noted that virtually all of the studies mentioned in Section 6.4 of this chapter define SRI merely in terms of a screening strategy. It could thus be that different results might have transpired had they used a broader definition of SRI i.e. one that included SRI funds employing shareholder activism and/or cause-based investing strategies.

Collectively, these findings provide a strong base for approaching the quantitative data sourcing and analysis phases of this research (Chapters Seven and Eight respectively).
CHAPTER SEVEN

SAMPLE SELECTION AND PRIMARY DATA SOURCING

7.1 INTRODUCTION

This chapter gives effect to the third and fourth secondary research objectives (as stated in Section 1.5.2 of Chapter One), namely:
- to construct the first complete database of SRI funds in South Africa; and
- to source quantitative primary data.

These research objectives pertain to the positivistic dimension of this study and imply that appropriate procedures for the selection of the sample and the sourcing of primary quantitative data need to be planned and executed. Blumberg et al. (2005:385) point out that the reliability and validity of a study can be seriously jeopardised if incorrect sampling and data collection methods are employed. Consequently, great care was taken to utilise acceptable methods.

This chapter consists of three main sections. Firstly, to set the scene for the sample selection, an overview will be provided of the history, definition and classification of collective investment schemes (CISs) in South Africa. On first sight it might not seem as if this section deals with the stated research objectives, but careful scrutiny will show that this section provides the required background in order to fully comprehend the nature of the sample. Secondly, the *modus operandi* followed in identifying the population, sampling frame and sample units relevant for this study will be highlighted. Thirdly, details will be provided on the sourcing of primary quantitative data.
7.2 COLLECTIVE INVESTMENT SCHEMES (CISs) IN SOUTH AFRICA

7.2.1 History and definition

Although the first CIS was already launched in South Africa in June 1965, the local CIS industry only started showing signs of growth from the early 1980s onwards. Experts attribute this to the ‘Crash of 1969’ which resulted in a cautionary stance being taken by regulatory authorities and investor scepticism (Oldert 2006:23). As indicated in Table 7.1, the local CIS industry has grown consistently over the past decade with assets under management totalling R415 131 million in December 2005.

TABLE 7.1: Growth in South African CISs’ assets from December 1995 to December 2005

<table>
<thead>
<tr>
<th>Year ending</th>
<th>R’million(a)</th>
<th>Growth p.a.</th>
</tr>
</thead>
<tbody>
<tr>
<td>31 December 1995</td>
<td>33 695</td>
<td>-</td>
</tr>
<tr>
<td>31 December 1996</td>
<td>43 790</td>
<td>30%</td>
</tr>
<tr>
<td>31 December 1997</td>
<td>61 652</td>
<td>41%</td>
</tr>
<tr>
<td>31 December 1998</td>
<td>71 279</td>
<td>16%</td>
</tr>
<tr>
<td>31 December 1999</td>
<td>112 780</td>
<td>58%</td>
</tr>
<tr>
<td>31 December 2000</td>
<td>126 907</td>
<td>13%</td>
</tr>
<tr>
<td>31 December 2001</td>
<td>174 588</td>
<td>38%</td>
</tr>
<tr>
<td>31 December 2002</td>
<td>179 826</td>
<td>3%</td>
</tr>
<tr>
<td>31 December 2003</td>
<td>230 344</td>
<td>32%</td>
</tr>
<tr>
<td>31 December 2004</td>
<td>305 945</td>
<td>33%</td>
</tr>
<tr>
<td>31 December 2005</td>
<td>415 131</td>
<td>36%</td>
</tr>
</tbody>
</table>

(a) These values excluded assets managed in foreign and worldwide funds
Source: Oldert (2006:23)

To regulate the establishment and administration of the growing number of CISs in South Africa, the Unit Trust Control Act (Act No 18 of 1947 as amended) was replaced by the more comprehensive Collective Investment Schemes Control Act (Act No 45 of 2002). This Act states that a CIS in South Africa is a “…scheme, in whatever form, including an open-ended investment company, in pursuance of which members of the public are invited or permitted to invest money or other assets in a portfolio, and in terms of which, (a) two or more investors contribute money or other assets to and hold a participatory interest in a portfolio of the scheme through shares, units or any other form of participatory interest; and
(b) the investors share the risk and the benefits of investment in proportion to their participatory interest in the portfolio of a scheme or on any other basis as determined in the deed, but not a collective investment scheme authorised by any other Act”.

A distinction can be made between pooled and segregated CISs, the main characteristics of each set out next.

(a) **Pooled or unitised CISs**

In the case of pooled or unitised funds, the CIS manager pools the funds of many investors and invests it across various asset classes. Pooled portfolios are characterised by multi-client arrangements where the assets are owned by the CIS manager and participatory interests are allocated to the respective clients/investors in the CIS (Hirt, Block & Basu 2006:44). Pooled CISs fall into four main categories, namely unit trusts, investment trusts, open-ended investment companies and life funds.

**Unit trusts** are legally constituted trusts providing investors with income and/or capital growth depending on the trust’s investment objectives (Equinox 2006). The unit trust is overseen by a trustee who is the legal owner of the underlying investments and as such, has a fiduciary duty to ensure that the trust’s capital and income are applied in the best interests of the beneficial owners (i.e. the unit-holders). As indicated in Section 5.2.3(b) of Chapter Five fiduciary duties generally include taking all reasonable steps to ensure that the interests of members are protected at all times, acting with due care, diligence and in good faith, as well as avoiding conflicts of interest.

Unit trusts offer investors a range of advantages such as investment safety, performance reporting, transparency, affordability, professional asset management, competitive cost structures, convenience and liquidity (Oldert 2006:40; Equinox 2006).

Unit trusts are examples of open-ended funds which imply that there is no limit to the number of investors participating in the fund (Reilly & Brown
According to their legal structure open-ended funds are permitted to issue and redeem participatory interests on a continuous basis, thereby allowing new investors to enter the fund and existing ones to leave the fund without restriction (Russell 2006:23). A second feature of open-ended funds is that participatory interests are repurchased at Net Asset Value (NAV) price (see Section 6.2.1(a) of Chapter Six for an explanation of how a fund’s NAV price is determined). The fact that open-ended funds repurchase participatory interests at NAV price implies that demand and supply factors play no role in determining the repurchase price.

**Investment trusts** represent a second type of pooled CIS in South Africa. These funds are not actually trusts but rather limited liability companies with shareholders. Shareholders’ funds are pooled and invested in the securities of other companies with the intention of yielding income and/or capital appreciation. Instead of being overseen by a trustee, as in the case of a unit trust, an investment trust has a custodian who is the registered holder of the trust’s underlying investments. A board of directors manages the trust and generally outsources the asset management and fund administration to specialist fund managers (Russell 2006:18).

Investment trusts are prime examples of closed-ended funds which place a limit on the number of investors participating in the fund (Bodie et al. 2005:108). As a result closed-ended funds do not issue new participatory interests nor do they repurchase outstanding interests. As the shares of investment trusts are themselves traded on a stock exchange, the price of a participatory interest becomes a function of stock market supply and demand. Investors who wish to sell their participatory interests therefore need to find willing buyers in the market, and in the event that there are no willing buyers, they have to decrease the selling price until they can attract willing buyers. As a result the selling price of a closed-ended participatory interest could be set at a discount to NAV price (or premium if demand exceeds supply).

**Open-ended investment companies** represent a third type of pooled CISs and combine features of both unit trusts and investment trusts (Russell
According to the Collective Investment Schemes Control Act (Act No 45 of 2002) an open-ended investment company in South Africa is defined as “…a company with authorised share capital which is structured in such a manner that it provides for the issuing of different classes of shares to investors, each class of share representing a separate portfolio with a distinct investment policy”. As the name suggests, open-ended investment companies are open-ended funds, the features of which have already been explained. ‘Mutual funds’, the term typically used in US literature, refers to open-ended funds such as unit trusts or open-ended investment companies (Mutualfunds 2006b; Investorwords 2006a).

**Life funds**, or insurance managed funds, are created when life insurance companies pool policy holders’ contributions and invest it for the purpose of providing benefits upon death or the expiry of a certain period of time (Shepherd 1987:120; Hirt *et al.* 2005:45). Legal ownership of the fund’s underlying investments vests with the life company which in turn has contracts with the beneficial owners (policy holders in this case).

(b) **Segregated CISs**

In contrast to pooled funds, segregated funds are characterised by an agreement between the asset manager and his/her client, whereby the client specifies certain investment criteria to which the asset manager should adhere (Shepherd 1987:13). As such, segregated funds are designed with a particular client’s needs and risk profile in mind. Assets are owned by the entity (e.g. by a pension fund or high net worth individual). Before a segregated agreement can come into effect, the asset manager has to meet a number of minimum requirements, where fund size is often the overriding criterion (Personal communication Davids 2006).

Irrespective of whether CISs are pooled or segregated, they can all be classified according to a three-tier system, as presented next.
7.2.2 Classification of CISs

As illustrated in Figure 7.1, CISs are firstly categorised according to the domicile of their assets. At the second level of classification, funds are divided into four main groupings: equity, asset allocation, fixed interest and real estate funds. Within each of these four categories funds are further classified according to their investment focus.

**Equity** funds are funds that are obliged to invest a minimum of 75 percent of their assets in equities at all times. The remaining 25 percent can be invested, subject to the mandate of the fund, at the discretion of the fund manager (Oldert 2006:130). Equity funds aim to provide investors with both capital gains and dividend income. As indicated in Figure 7.1, there are ten sub-classifications in this category.

SRI equity funds generally fall within the general equity or varied specialist equity sub-categories. **General Equity** funds invest in selected shares across all industry sectors and across a range of large, medium and smaller capitalisation shares. They do not subscribe to a particular theme or investment style and invest in a mix of value and growth shares. In contrast, **Varied Specialist Equity** funds refer to those funds that have very unique mandates, so much so that they cannot be included in any of the other equity sub-categories. Oldert (2006:130) notes that these ‘themed funds’ range from those focusing on new listings to others which favour investments in high dividend yield shares or empowerment and ethically pure companies.

**Asset Allocation** funds, also called balanced funds, invest in a spread of investments in the equity, capital, money and property markets. These funds generally seek to maximise total returns (i.e. both capital appreciation and income growth) over the longer term. At the third tier, this sector has five sub-categories: prudential funds (high, medium and low equity), flexible funds, as well as targeted absolute and real return funds (Oldert 2006:128).
FIGURE 7.1: Three-tier classification system

(a) Permutations are possible across first and second tiers such as Domestic-Equity, Foreign-Fixed Interest or Worldwide-Asset allocation.

Source: Oldert (2006:125)

The investment strategies of prudential funds are set to conform to legislation governing retirement funds, in particular Regulation 28 of the Pension Funds
Act (Act No 24 of 1956 as amended) which states that retirement funds may not hold more than 75 percent of their assets in equity markets.

As the name suggests Fixed Interest CISs invest in bonds, fixed deposits and other fixed interest bearing instruments. These funds, which could be classified as bond, income or money market funds, offer the potential for capital appreciation along with a regular and high level of income (Oldert 2006:134).

In the Real Estate category only one sub-category exists namely ‘General’. These funds, also called property funds, invest at least 50 percent of their assets in listed securities. The objective of real estate funds is to provide investors with high levels of income and long-term capital appreciation (Oldert 2006:135). Domestic real estate funds mainly invest in shares listed on the ‘Real Estate’ sector of the JSE which includes property loan stock companies, property unit trusts (PUTs) as well as property holding and development companies. PUTs date back to 1969 when two trusts were established and listed on the JSE. In 1976 a separate sector for PUTs was established on the JSE, with the purpose of encouraging investment in property by individuals and small pension funds which lacked the inclination and/or expertise to manage freehold property investments themselves.

Besides the abovementioned second-tier categories which are mainly used for unit trust classification, a fifth category, namely Alternative funds, can be used for the classification of other (non-unit trust) CISs. Alternative funds generally invest in private equity initiatives by means of equity (including preference shares), debt or a combination thereof.

Against this overview of CISs in South Africa, details on the sampling procedure will now be presented.

7.3 SAMPLING PROCEDURE

As indicated in Figure 7.2, several steps were followed to secure a sample of local SRI funds. Although Figure 7.2 presents these steps as a series of
sequential stages, the order of activities did not always follow this particular sequence. Research literature (Blumberg et al. 2005:208; Collis & Hussey 2003:155; Zikmund 2003:372) shows that these stages are often closely interrelated leading to the eventual sourcing of primary (raw) data.

**FIGURE 7.2: Stages in selecting the sample of SRI funds in South Africa**

Sources: Blumberg et al. (2005:208); Collis & Hussey (2003:155); Zikmund (2003:372)

Pertinent issues relating to the identification of the population, sampling frame and sampling units of this research project, will be highlighted next.

**7.3.1 Population of SRI funds in South Africa**

A population or universe is any complete group of people or any collection of items about which conclusions will be drawn (Collis & Hussey 2003:155;
Prior to the commencement of this research the population of SRI funds in South Africa was unknown and thus had to be constructed. It was done by identifying funds, both active and discontinued, which fitted the definition of an SRI fund adopted in this research. As pointed out in Section 1.3.1 of Chapter One, an SRI fund was defined in this study as “any local collective investment scheme that employs a screening, shareholder activism and/or cause-based investment strategy”.

**Active** SRI funds were defined as those local SRI funds which were launched on or after the 1st of June 1992 and which were still operational on the 31st of March 2006. On the other hand, **discontinued** SRI funds were defined as those local SRI funds which were established on or after the 1st of June 1992 but were either closed, merged with other funds, or were funds that changed their investment mandates at some point before the 31st of March 2006.

The population, also called the target population, was identified by means of phenomenological methodologies which included an extensive review of secondary sources as well as in-depth, face-to-face interviews with South African SRI fund managers and industry experts.

Two local SRI surveys served as valuable source documents in the identification of both active and discontinued SRI funds, namely:
- the quarterly Alexander Forbes Asset Consultants Targeted Development Investment Vehicles Manager Watch Survey (hereafter abbreviated as the AFAC TDI Manager Watch Survey), launched in September 2001; and
- the monthly RisCura RisCView SRI Vehicles Survey, first published in August 2003.

A review of Du Preez (2005:38) and interviews with industry experts (Personal communication Johnston, Davids, Alexander & Palframan 2006) led to the further identification of active SRI funds offered by Investment Solutions, Rockland Investment Management, Coris Capital, Sasfin, Investec and African Infrastructure Investment Managers. To ensure that all active SRI funds have been identified,
contact was maintained (via email or telephone) with all the CIS management companies listed in the March 2006 edition of Profile’s Unit Trusts and Collective Investments. As far as could be ascertained none of the following CIS management companies offered pooled or segregated funds with an SRI mandate on 31 March 2006:

- ABSA Fund Managers;
- Allan Gray Unit Trust Management;
- Ankh Analytical;
- Coronation Fund Managers;
- Dynamic Wealth Management;
- Efficient Group;
- Flagship Private Asset Management;
- Foord Unit Trusts;
- Innofin Management Company;
- m-Cubed Unit Trust Management Company;
- Marriott Unit Trust Management Company;
- Orbis Investment Management;
- Prudential Portfolio Managers Unit Trusts;
- PSG Collective Investments;
- Regarding Capital Management;
- RMB Unit Trusts;
- Sage Unit Trusts;
- Tri-Linear Investment Managers; and
- Xhilarator Investment Managers.

Four funds identified in the AFAC TDI Manager Watch Survey and the RisCura RisCView SRI Vehicles Survey were excluded on the grounds that they did not fit the definition of an SRI fund as adopted for this research. These funds were the African Harvest Balanced Benevolent Fund, Umbono As’investe Balanced Fund, Umbono Absolute Return Fund and Investment Solutions Emerging Managers.
Segal (1997) also identified the Capital Alliance Phambili Fund, the Women's Private Equity Fund and the South African Empowerment Fund as local SRI funds. Unfortunately, extensive efforts to uncover information on these three funds have been unsuccessful, resulting in their omission from the sample. No money market funds or any government initiated and/or managed funds, such as the RDP Fund, the Umsobomvu Youth Fund, the National Empowerment Fund or the Public Investment Commissioners' Isibaya Fund, were included in the sample. Although it has been suggested by Wierzycka (2005b:16) that investing in RSA government bonds could be seen as a form of SRI (since the government heavily invests in infrastructural development), it will not be deemed as a socially responsible investment for the purpose of this study. The rationale is that the government also engages in defence activities, which could be seen as morally unacceptable in some SRI circles.

Based on the above considerations, the population of local SRI funds was identified (N = 43). Once the population was identified, all SRI fund particulars were verified with fund managers or knowledgeable company representatives (in the case of discontinued SRI funds where fund managers were often no longer employed by the respective CIS management company).

More details on the population of SRI funds, as well as an indication of whether or not specific SRI funds were included in the sample are given in Tables 7.2 and 7.3. More specifically, Table 7.2 contains details on SRI unit trusts, whereas Table 7.3 sets out details on other pooled (non-unit trusts) and segregated SRI funds. The population was split into these two categories as public data on unit trusts is readily available, whereas this is not the case for other types of pooled and segregated CISs. In both tables SRI funds are listed in alphabetical order according to their second-tier classification.

Full details on each fund’s status (active or discontinued), its asset manager, classification, date of inception, size of assets on 31 March 2006 (if still active), date of discontinuance (if applicable), reason for discontinuance (if applicable), name of fund manager(s), benchmark index and fund objectives are outlined in Annexure B.
<table>
<thead>
<tr>
<th>SRI fund name</th>
<th>Status</th>
<th>Classification&lt;sup&gt;(a)&lt;/sup&gt;</th>
<th>Date of inception</th>
<th>Date of discontinuance</th>
<th>Fund size on 31 March 2006</th>
<th>Benchmark index</th>
<th>Included in sample?</th>
<th>Motivation for exclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Community Growth Equity Fund</td>
<td>Active</td>
<td>D-E-G</td>
<td>1-Jun-92</td>
<td>-</td>
<td>R 2 180 002</td>
<td>FTSE/JSE All Share Index&lt;sup&gt;(c)&lt;/sup&gt;</td>
<td>YES</td>
<td></td>
</tr>
<tr>
<td>2. Fraters Earth Equity Fund</td>
<td>Active</td>
<td>D-E-G</td>
<td>4-Oct-01</td>
<td>-</td>
<td>R 635 682</td>
<td>FTSE/JSE All Share Index with a 50% weighting applied to the resources sector</td>
<td>YES</td>
<td></td>
</tr>
<tr>
<td>3. Fraters Islamic Equity Fund</td>
<td>Active</td>
<td>D-E-G</td>
<td>1-Feb-06</td>
<td>-</td>
<td>R 36 754</td>
<td>The company monitors the fund’s performance against the FTSE/JSE All Share Index although this is not seen as its “true” benchmark since the investment universes differ considerably</td>
<td>NO</td>
<td>Track record too short</td>
</tr>
<tr>
<td>4. Futuregrowth Albaraka Equity Fund</td>
<td>Active</td>
<td>D-E-G</td>
<td>1-Jun-92</td>
<td>-</td>
<td>R 545 709</td>
<td>FTSE/JSE All Share Index</td>
<td>YES</td>
<td></td>
</tr>
<tr>
<td>5. Nedbank Sustainability Investing Index Fund</td>
<td>Discontinued</td>
<td>D-E-G</td>
<td>6-Aug-02</td>
<td>31-Oct-03</td>
<td>-</td>
<td>Edward Nathan &amp; Friedland Sustainability Index&lt;sup&gt;(c)&lt;/sup&gt;</td>
<td>YES</td>
<td></td>
</tr>
<tr>
<td>6. Oasis Crescent Equity Fund</td>
<td>Active</td>
<td>D-E-G</td>
<td>31-Jul-98</td>
<td>-</td>
<td>R 1 657 300</td>
<td>FTSE/JSE All Share Index</td>
<td>YES</td>
<td></td>
</tr>
<tr>
<td>7. Oasis Crescent International Fund of Funds&lt;sup&gt;(f)&lt;/sup&gt;</td>
<td>Active</td>
<td>F-E-G</td>
<td>28-Sep-01</td>
<td>-</td>
<td>R 300 200</td>
<td>Dow Jones Islamic Market Index&lt;sup&gt;(g)&lt;/sup&gt;</td>
<td>YES</td>
<td></td>
</tr>
<tr>
<td>8. Sanlam Empowerment Equity Fund</td>
<td>Discontinued</td>
<td>D-E-V</td>
<td>15-Sep-97</td>
<td>30-Apr-03</td>
<td>-</td>
<td>Barings ING Empowerment Index&lt;sup&gt;(h)&lt;/sup&gt;</td>
<td>YES</td>
<td></td>
</tr>
</tbody>
</table>
### TABLE 7.2: Salient features of SRI unit trusts (continued)

<table>
<thead>
<tr>
<th>SRI fund name</th>
<th>Status</th>
<th>Classification(a)</th>
<th>Date of inception</th>
<th>Date of discontinuance</th>
<th>Fund size on 31 March 2006</th>
<th>Benchmark index</th>
<th>Included in sample?</th>
<th>Motivation for exclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>10. Sasfin TwentyTen Fund</td>
<td>Active</td>
<td>D-E-G</td>
<td>1-Nov-05</td>
<td>-</td>
<td>R 14 735 531</td>
<td>Composite benchmark: 25% FTSE/JSE All Share Index &amp; 75% FTSE/JSE Financials and Industrials Index</td>
<td>NO</td>
<td>Track record too short</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>NO Track record too short</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Asset Allocation (Balanced) Funds**

| 11. Fraters Flexible Fund             | Active     | D-AA-F            | 15-Oct-01          | -                      | R 782 188 779               | Composite benchmark: SA Equities (45% FTSE/JSE All Share Index & 25% FTSE/JSE Financials and Industrials Index), SA Bonds (15% BEASSA All Bond Index²), Property (5% Property Unit Trust Index) & Cash (10% Stefi Index¹) | YES                 |                         |

**Fixed Interest Funds**

| 13. Community Growth Gilt Fund        | Active     | D-F-B             | 14-Jul-98          | -                      | R 947 884 644               | BEASSA All Bond Index       | YES                 |                         |
(a) D = Domestic; F = Foreign; E-G = Equity-General; E-V = Equity Varied Specialist; AA-F = Asset Allocation-Flexible; AA-TARR = Asset Allocation-Target Absolute and Real Return; F-B = Fixed Interest-Bond

(b) The FTSE/JSE All Share Index consists of the top 99 percent of eligible listed companies ranked by full market capitalisation (FTSE/JSE Africa Index Series 2006). This index replaced the older JSE Actuarial All Share Index on 24 June 2002.

(c) As monthly data was not available for this benchmark index, the FTSE/JSE SRI Index was used as proxy.

(d) See Section 5.2.2(h) of Chapter Five for more details on this benchmark index.

(e) As monthly data was not available for this benchmark index, the FTSE/JSE SRI Index was used as proxy.

(f) See Section 5.3.2(a) of Chapter Five for more details on this benchmark index.

(g) The Bond Exchange Actuarial Society of South Africa (BEASSA) All Bond Index consists of the top 20 listed bonds on the Bond Exchange of South Africa ranked according to market capitalisation and liquidity. These are mainly issued by the government (RSA loan stock), public utilities and public companies (Van Zyl et al. 2003:280).

(h) Stefi Index = Short TTerm Fixed Interest index

(i) CPIX = Consumer price index excluding interest rates on mortgage bonds

(j) This fund sometimes called the Oasis Crescent International Feeder Fund

Source: Researcher's own construction based on De Vries & De Villiers (1997a:17); Kobokoane (1999); Heese (2002b); Seeds of new asset management (2002:18); First index-based sustainable development unit trust is launched by Nedbank (2002); Thomas (2004); Du Preez (2005:38); Quarterly AFAC TDI Manager Watch surveys (2001, 2002, 2003, 2004, 2005, 2006); Monthly RisCura SRI Vehicles surveys (2003, 2004, 2005, 2006); Heese (2005:735); The website of the South African Venture Capital Association (2006); Investment Solutions Quarterly Bulletin March 2006 (2006); Investment with a conscience (2006:5); FundsData (2006); Websites of the following investment management companies: African Harvest, Fraters, Futuregrowth Specialist Asset Managers, Frater Asset Management, Metropolitan Asset Managers, Oasis Group Holdings, Old Mutual Asset Managers as well as the Sanlam Investment Cluster portal; Personal communication with the following individuals during July and August 2006: Mr Andrew Johnstone (Africa Infrastructure Investment Managers); Ms Heather Jackson (African Harvest); Mr Hilton Davies (AMBFoord); Mr Douglas Davids (OMAM); Mr Terence Craig (Fraters); Ms Angelique Kalam (Futuregrowth); Mr Mark Davids (Alexander Forbes); Mr Adam Alexander (Investec); Mr Godfrey Albertyn (Metropolitan); Mr Paul Hutchinson (BOE); Ms Tisha Powell (Nedbank); Mr Jurie Swart (OMAM); Mr Kenneth Oaker (Rockland Investment Managers); Mr Danie Scholtz (Sanlam Investment Managers); Mr Cobus Forster (Sanlam Investment Managers); Mr Nico Coetzee (Sanlam Multi Managers International); Mr Andrew Steyn (Investment Solutions), Ms Suniti Naran (Investment Solutions) & Ms Nicky Wildt (Investment Solutions)
### TABLE 7.3: Salient features of other pooled (non-unit trust) and segregated SRI funds

<table>
<thead>
<tr>
<th>SRI fund name</th>
<th>Status</th>
<th>Classification(a)</th>
<th>Date of inception</th>
<th>Date of discontinuance</th>
<th>Size on 31 March 2006</th>
<th>Benchmark index</th>
<th>Included in sample?</th>
<th>Motivation for exclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Equity Funds</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. AMB Empowerment Equity Fund</td>
<td>Discontinued</td>
<td>D-E(b)</td>
<td>1-Apr-97</td>
<td>31-Dec-02(c)</td>
<td>-</td>
<td>Could not be established</td>
<td>NO</td>
<td>Only quarterly performance data available</td>
</tr>
<tr>
<td>2. Futuregrowth Anchor Fund</td>
<td>Discontinued</td>
<td>P-D-E</td>
<td>1-Jul-97</td>
<td>31-May-04</td>
<td>-</td>
<td>Composite benchmark: 80% FTSE/JSE Financials and Industrials Index &amp; 20% FTSE/JSE SA Resources Index</td>
<td>YES</td>
<td></td>
</tr>
<tr>
<td>3. Futuregrowth SRI Equity Fund</td>
<td>Active</td>
<td>P-D-E</td>
<td>1-Jul-04</td>
<td>-</td>
<td>R 33 200 000</td>
<td>FTSE/JSE SRI Index + 3%</td>
<td>YES</td>
<td></td>
</tr>
<tr>
<td>4. Rocklands Social Responsible Private Equity Fund</td>
<td>Active</td>
<td>D-Alt(d)</td>
<td>Sometime in 2004</td>
<td>-</td>
<td>Confidential</td>
<td>Could not be established</td>
<td>NO</td>
<td>Performance data confidential</td>
</tr>
<tr>
<td><strong>Asset Allocation (Balanced) Funds</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Community Growth Equity Fund of Funds</td>
<td>Active</td>
<td>P-D-AA</td>
<td>1-Apr-05</td>
<td>-</td>
<td>R 25 000 000</td>
<td>Composite benchmark (no weights indicated): SA Equities (FTSE/JSE All Share Index), SA Bonds (BEASSA All Bond Index), Alternative investments (CPI(d) + 7%) &amp; Cash (Stefi Index),</td>
<td>NO</td>
<td>Track record too short</td>
</tr>
</tbody>
</table>

(a) Classification in terms of risk: D = Decent, P = Poor, A = Average, Alt = Alternative
(b) 1-Apr-97: April 1, 1997
(c) 31-Dec-02: December 31, 2002
(d) Composite benchmark: 80% FTSE/JSE Financials and Industrials Index & 20% FTSE/JSE SA Resources Index
(e) Performance data confidential
(f) Composite benchmark (no weights indicated): SA Equities (FTSE/JSE All Share Index), SA Bonds (BEASSA All Bond Index), Alternative investments (CPI(d) + 7%) & Cash (Stefi Index),
<table>
<thead>
<tr>
<th>SRI fund name</th>
<th>Status</th>
<th>Classification(a)</th>
<th>Date of inception</th>
<th>Date of discontinuance</th>
<th>Size on 31 March 2006</th>
<th>Benchmark index</th>
<th>Included in sample?</th>
<th>Motivation for exclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>6. Futuregrowth Diversified Development Fund</td>
<td>Discontinued</td>
<td>P-D-AA</td>
<td>Sometime in 1997</td>
<td>31-Jul-01</td>
<td>-</td>
<td>CPI + 4%</td>
<td>NO</td>
<td>Lack of performance data</td>
</tr>
<tr>
<td>7. Futuregrowth SRI Balanced Fund</td>
<td>Active</td>
<td>P-D-AA</td>
<td>30-Sep-04</td>
<td>-</td>
<td>R 3 200 000</td>
<td>Composite weighting of the underlying funds' benchmarks</td>
<td>YES</td>
<td></td>
</tr>
<tr>
<td>8. Investec Mafisa Fund</td>
<td>Discontinued</td>
<td>D-ALT(b)</td>
<td>1-Oct-97</td>
<td>31-Aug-02(c)</td>
<td>-</td>
<td>Could not be established – CPI will however be used as a proxy as this fund invested heavily in infrastructural development</td>
<td>YES</td>
<td></td>
</tr>
<tr>
<td>9. Investec Sechaba Fund</td>
<td>Discontinued</td>
<td>D-ALT(b)</td>
<td>1-Aug-00</td>
<td>31-Aug-02(c)</td>
<td>-</td>
<td>Could not be established – CPI will however be used as a proxy as this fund invested heavily in infrastructural development</td>
<td>YES</td>
<td></td>
</tr>
<tr>
<td>10. Metropolitan Futurebuilder</td>
<td>Active</td>
<td>P-D-AA</td>
<td>1-Oct-96</td>
<td>-</td>
<td>R 888 000 000</td>
<td>CPIX + 4%</td>
<td>YES</td>
<td></td>
</tr>
<tr>
<td>11. Metropolitan SRI Fund</td>
<td>Active</td>
<td>P-D-AA</td>
<td>1-Dec-05</td>
<td>-</td>
<td>R 112 000 000</td>
<td>Composite benchmark: SA Equities (60% FTSE/JSE SRI Index); SA Bonds (30% BEASSA All Bond Index); Property (5% CPI + 6%) &amp; Cash (5% Alexander Forbes Money Market Index)</td>
<td>NO</td>
<td>Track record too short</td>
</tr>
<tr>
<td>SRI fund name</td>
<td>Status</td>
<td>Classification</td>
<td>Date of inception</td>
<td>Date of discontinuance</td>
<td>Size on 31 March 2006</td>
<td>Benchmark index</td>
<td>Included in sample?</td>
<td>Motivation for exclusion</td>
</tr>
<tr>
<td>--------------------------------------------------</td>
<td>-----------------</td>
<td>----------------</td>
<td>-------------------</td>
<td>------------------------</td>
<td>-----------------------</td>
<td>---------------------------------------------------------------------------------</td>
<td>---------------------</td>
<td>--------------------------</td>
</tr>
<tr>
<td>12. Momentum Supernation Fund</td>
<td>Active</td>
<td>P-D-AA</td>
<td>1-Oct-02</td>
<td></td>
<td>R 78 900 000</td>
<td>Composite benchmark: SA Equities (60% FTSE/JSE All Share Index); SA Bonds (25% BEASSA All Bond Index); Property (10% CPI + 4%) &amp; Cash (5% Stefi Index)</td>
<td>YES</td>
<td></td>
</tr>
<tr>
<td>13. Sanlam Community Builder Fund</td>
<td>Active</td>
<td>P-D-AA</td>
<td>1-Jan-96</td>
<td></td>
<td>n/a</td>
<td>No benchmark</td>
<td>NO</td>
<td>Not a separate legal investment vehicle</td>
</tr>
<tr>
<td>14. STANLIB Corporate Wealth Development Fund</td>
<td>Active</td>
<td>P-D-AA</td>
<td>1-Jan-97</td>
<td></td>
<td>R 504 000 000</td>
<td>CPI</td>
<td>YES</td>
<td></td>
</tr>
<tr>
<td>15. TopGEAR Fund</td>
<td>Discontinued</td>
<td>P-D-AA</td>
<td>1-Feb-98</td>
<td>30-Sep-02</td>
<td></td>
<td>7% real growth over rolling 3-year periods</td>
<td>YES</td>
<td></td>
</tr>
<tr>
<td><strong>Fixed Interest Funds</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16. African Harvest Infrastructure Bond Fund</td>
<td>Active</td>
<td>S-D-F</td>
<td>1-Jan-01</td>
<td></td>
<td>R 517 100 000</td>
<td>Composite benchmark: 25% Govi Index &amp; 75% Othi Index</td>
<td>YES</td>
<td></td>
</tr>
<tr>
<td>17. Futuregrowth Infrastructure Bond Fund</td>
<td>Active</td>
<td>P-D-F</td>
<td>1-Jan-94</td>
<td></td>
<td>R 3 664 900 000</td>
<td>BEASSA All Bond Index</td>
<td>YES</td>
<td></td>
</tr>
<tr>
<td><strong>Alternative (Private Equity) Funds</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18. AliF African Infrastructure Investment Fund</td>
<td>Active</td>
<td>P-D-ALT</td>
<td>Sometime in 2003</td>
<td></td>
<td>R 80 600 000</td>
<td>7% real growth over rolling 3-year periods</td>
<td>NO</td>
<td>Performance data confidential</td>
</tr>
<tr>
<td>19. AliF South African Infrastructure Fund</td>
<td>Active</td>
<td>P-D-ALT</td>
<td>Sometime in 1996</td>
<td></td>
<td>R 1 320 000 000</td>
<td>7% real growth over rolling 3-year periods</td>
<td>NO</td>
<td>Performance data confidential</td>
</tr>
<tr>
<td>No.</td>
<td>SRI fund name</td>
<td>Status</td>
<td>Classification(a)</td>
<td>Date of inception</td>
<td>Date of discontinuance</td>
<td>Size on 31 March 2006</td>
<td>Benchmark index</td>
<td>Included in sample?</td>
</tr>
<tr>
<td>-----</td>
<td>--------------------------------------------------</td>
<td>--------------</td>
<td>-------------------</td>
<td>-------------------</td>
<td>------------------------</td>
<td>-----------------------</td>
<td>--------------------------------------------------------------------</td>
<td>---------------------</td>
</tr>
<tr>
<td>20</td>
<td>Futuregrowth Structured Empowerment Fund</td>
<td>Active</td>
<td>P-D-ALT</td>
<td>1-Oct-95</td>
<td>-</td>
<td>Not available</td>
<td>CPI + 8%</td>
<td>NO</td>
</tr>
<tr>
<td>21</td>
<td>Investec SRI Life Fund</td>
<td>Active</td>
<td>S-D-ALT</td>
<td>17-Oct-05</td>
<td>-</td>
<td>R 567 898 129</td>
<td>Could not be established</td>
<td>NO</td>
</tr>
<tr>
<td>22</td>
<td>Investment Solutions Sakhisizwe Fund</td>
<td>Active</td>
<td>P-D-ALT</td>
<td>1-Nov-04</td>
<td>-</td>
<td>R 103 927 780</td>
<td>Composite benchmark: SA Equities (20% FTSE/JSE All Share Index), SA Bonds (70% BEASSA All Bond Index) &amp; Cash (10% Stefi Index)</td>
<td>YES</td>
</tr>
<tr>
<td>23</td>
<td>Investment Solutions Shari'ah Fund</td>
<td>Active</td>
<td>P-D-ALT</td>
<td>1-Apr-05</td>
<td>-</td>
<td>R 8 184 304</td>
<td>High equity unit trust category average</td>
<td>NO</td>
</tr>
<tr>
<td>24</td>
<td>OMAM IDEAS Fund</td>
<td>Active</td>
<td>P-D-ALT</td>
<td>1-Jan-99</td>
<td>-</td>
<td>R 1 208 900 000</td>
<td>CPI + 7% over rolling 3-year periods</td>
<td>YES</td>
</tr>
<tr>
<td>25</td>
<td>Prodigy Transformation Fund</td>
<td>Active</td>
<td>D- ALT(b)</td>
<td>Sometime in 1998</td>
<td>-</td>
<td>Not available</td>
<td>Could not be established</td>
<td>NO</td>
</tr>
<tr>
<td>26</td>
<td>Rocklands Growth and Development Fund</td>
<td>Active</td>
<td>D- ALT(b)</td>
<td>Sometime in 2004</td>
<td>-</td>
<td>Confidential</td>
<td>CPI + 5%</td>
<td>NO</td>
</tr>
<tr>
<td>27</td>
<td>Rocklands Social Responsible Balanced Fund</td>
<td>Active</td>
<td>D-AA(b)</td>
<td>Sometime in 2004</td>
<td>-</td>
<td>Confidential</td>
<td>Could not be established</td>
<td>NO</td>
</tr>
<tr>
<td>28</td>
<td>Sanlam Development Fund</td>
<td>Active</td>
<td>P-D-ALT</td>
<td>1-Nov-96</td>
<td>-</td>
<td>Not available</td>
<td>No benchmark</td>
<td>NO</td>
</tr>
<tr>
<td>SRI fund name</td>
<td>Status</td>
<td>Classification(a)</td>
<td>Date of inception</td>
<td>Date of discontinuance</td>
<td>Size on 31 March 2006</td>
<td>Benchmark index</td>
<td>Included in sample?</td>
<td>Motivation for exclusion</td>
</tr>
<tr>
<td>-----------------------------------</td>
<td>--------</td>
<td>-------------------</td>
<td>-------------------</td>
<td>------------------------</td>
<td>-----------------------</td>
<td>-------------------</td>
<td>--------------------</td>
<td>-----------------------</td>
</tr>
<tr>
<td>29. Sanlam Development Fund of Funds</td>
<td>Active</td>
<td>P-D-ALT</td>
<td>1-Jul-02</td>
<td>-</td>
<td>Not available</td>
<td>No benchmark</td>
<td>NO</td>
<td>Not a separate legal investment vehicle</td>
</tr>
<tr>
<td>30. Futuregrowth Community Property Fund</td>
<td>Active</td>
<td>P-D-Prop</td>
<td>1-Jul-96</td>
<td>-</td>
<td>R 488 100 000</td>
<td>CPI + 4%</td>
<td>YES</td>
<td></td>
</tr>
</tbody>
</table>

(a) P = Pooled; S = Segregated; E = Equity; AA = Asset Allocation; F = Fixed interest; ALT = Alternative; Prop = Property
(b) It could not be established whether these funds were pooled or segregated funds
(c) As the exact date of discontinuance could not be established, the date on which the fund was excluded from the AFAC TDI Manager Watch Survey serves as proxy
(d) The Consumer Price Index (CPI) is an index of the prices of a representative ‘basket’ of consumer goods and services bought by a typical South African household and thus reflects the general price level in the economy (Mohr, Fourie & Associates 2004:13)
(e) The Govi Index consists of the most liquid government bonds listed on the Bond Exchange of South Africa (Van Zyl et al. 2003:280)
(f) The Othi Index consists of all other (non-government) bonds found in the BEASSA All Bond Index (Van Zyl et al. 2003:280)

Sources: Same as Table 7.3
Data provided in Tables 7.2 and 7.3 can be summarised in terms of the SRI funds' classification, age and size.

Almost one third (30.2%) of SRI funds in the population are (or were in the case of discontinued ones) classified as **unit trusts**, 48.8 percent as **pooled funds other than unit trusts** and 4.65 percent as **segregated funds**. In seven cases (16.3%) it could not be established whether the SRI funds were pooled or segregated CISs. Most of these funds were discontinued at some point before the 31st of March 2006 complicating the verification of fund particulars.

In terms of first-tier classification only one fund, namely the Oasis Crescent International Fund of Funds, is classified as a **foreign** fund, whereas the rest of the funds in the population are (were) classified as **domestic** CISs. As indicated in Section 7.2.2 of this chapter, domestic funds invest at least 85 percent of their assets in South African financial markets at all times, whereas foreign funds invest 85 percent of their assets outside South Africa at all times. Table 7.4 provides an overview of the second-tier classification of SRI funds in the population.

**TABLE 7.4: Second-tier classification of SRI funds in the population**

<table>
<thead>
<tr>
<th>Second-tier classification</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asset allocation (balanced) funds</td>
<td>17</td>
<td>39.53</td>
</tr>
<tr>
<td>Equity funds</td>
<td>13</td>
<td>30.23</td>
</tr>
<tr>
<td>Alternative (private equity) funds</td>
<td>9</td>
<td>20.93</td>
</tr>
<tr>
<td>Fixed interest funds</td>
<td>3</td>
<td>6.98</td>
</tr>
<tr>
<td>Real Estate (property) funds</td>
<td>1</td>
<td>2.33</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>43</strong></td>
<td><strong>100.00</strong></td>
</tr>
</tbody>
</table>

The average age of active SRI funds up to 31 March 2006 was 5.59 years, whereas the average age of discontinued funds only equalled 4.34 years. The two oldest SRI funds in South Africa, the Futuregrowth Albaraka Equity Fund and the Community Growth Equity Fund, have been in existence for almost 14 years, whereas the youngest SRI fund (the Fraters Islamic Equity Fund) was a mere two months old at the end of March 2006.
As not all CIS managers were willing to provide details on the size of their active SRI funds on 31 March 2006, the fund sizes of only 27 active SRI funds could be established. The average SRI fund size of this group on 31 March 2006 equalled R646 million, whereas the median was lower at R504 million.

Having defined the population for the research in question, it is now necessary to introduce the sampling frame.

### 7.3.2 Sampling frame of SRI funds in South Africa

A study’s sampling frame is generally closely related to its target population. Zikmund (2003:373) points out that a sampling frame refers to a list of elements from which the sample is actually drawn. Babbie and Mouton (2001:184) state that compared with developed countries, researchers in developing countries, such as South Africa, often struggle to acquire adequate sampling frames either because extensive information is not available, or because even if it is available, it is subject to a considerable degree of error. This statement by Babbie and Mouton is highly relevant to the research in question given the undefined nature of the population of SRI funds in the country.

An extensive review of secondary sources and in-depth, face-to-face interviews with South African SRI fund managers and industry experts facilitated the construction of the sampling frame (or database) of SRI funds launched in South Africa during the research period. In the case of this research, the sampling frame mirrors the population from which the sample was selected.

### 7.3.3 Sample of SRI funds in South Africa

Due to time and budget constraints, a representative sample (or subset) of the population is often drawn for empirical testing (De Vos et al. 2002:199). Zikmund (1994:356) however points out that if the total number of elements (sampling
units) contained in the population is fairly small, the entire population can be empirically analysed.

As the population of SRI funds in South Africa only consisted of 43 funds on 31 March 2006, the initial objective was to evaluate the risk-adjusted performance of the entire population. This could however not be achieved as:
- some SRI funds’ track records did not exceed twelve months;
- monthly valuations were not available for a number of SRI funds;
- certain SRI fund managers were not at liberty to disseminate performance data due to confidentiality clauses; and
- some SRI funds were not classified as separate legal investment vehicles.

These practical considerations led to the identification of the sample which, upon closer inspection, reveals clear features of a non-probability sample. In the case of a non-probability sample, elements of the population (i.e. sampling units) are selected on the basis of personal judgement or the availability of data, as was the case in this study (Zikmund 2003:376; Blumberg et al. 2005:214).

As depicted in Figure 7.3, a sample of 24 local SRI funds was identified for further analysis. Stated differently, 24 local SRI funds were suitable for testing the research hypotheses of this study.

Note that the left-hand side of Figure 7.3 corresponds with the 13 SRI unit trusts listed in Table 7.2, whereas the right-hand side of Figure 7.3 corresponds with the other pooled (non-unit trust) and segregated SRI funds presented in Table 7.3.
FIGURE 7.3: SRI population, sampling frame and sampling units

Source: Researcher’s own construct

It is well known that a ‘good’ sample must be large enough to satisfy the needs of the investigation being undertaken. Critics may argue that a sample comprising 24 units of analysis is too small to give effect to the fundamental research requirements of reliability, validity and generalisability. All possible measures were taken to include as many suitable SRI funds in the sample as possible. It should be noted that a number of studies done in the early years of SRI development in the UK and USA also analysed small samples of SRI funds, some even smaller than the 24 evaluated in this study (Luther & Matatko 1994; White 1995; Gregory et al. 1997; Reyes & Grieb 1998).

7.4 PRIMARY DATA SOURCING
As indicated in Section 2.7.1 of Chapter Two, primary data refer to original data collected at the source (Collis & Hussey 2003:160). To test the research hypotheses of this study, quantitative primary data were collected on:

- the 24 SRI funds contained in the sample;
- the 24 SRI funds’ respective benchmark indices;
- a matched sample of twenty conventional (non-SRI) unit trusts;
- a risk-free asset; and
- the proxies used for the market index in South Africa.

Section 7.4.1 provides details on the data providers from whom the respective data sets were sourced, whereas Section 7.4.2 outlines the types of data sourced.

7.4.1 Data providers

(a) Primary data sourcing with regard to the SRI funds contained in the sample

Monthly data for the sample of SRI unit trusts, from their respective dates of inception until 31 March 2006, were sourced from the MoneyMate database. As this database contains only data on active unit trusts, data for the two discontinued SRI unit trusts, namely the Nedbank Sustainability Investing Index Fund and the Sanlam Empowerment Equity Fund, had to be sourced from I-Net Bridge. Monthly data on the other pooled (non-unit trust) and segregated SRI funds were sourced either from Alexander Forbes Asset Consultants or directly from the respective SRI fund managers.

(b) Primary data sourcing with regard to the SRI funds’ respective benchmark indices

Monthly data on the benchmark indices were sourced from data providers such as Bloomberg, I-Net Bridge, Cadiz Securities, Alexander Forbes Asset
Consultants and directly from the respective SRI fund managers. More details on each SRI fund’s respective benchmark index were presented in the footnotes of Tables 7.2 and 7.3, the most prominent being the FTSE/JSE All Share Index, the BEASSA All Bond Index and the inflation rate (CPI).

(c) Primary data sourcing with regard to the matched sample of conventional (non-SRI) unit trusts

In an attempt to establish whether local SRI funds outperform conventional (non-SRI) funds, a matched sample of conventional (non-SRI) funds was drawn. Given the lack of readily available performance data for investment trusts, life funds and segregated funds, the matched sample of conventional (non-SRI) funds was restricted to unit trusts only.

Mallin et al. (1995:483) showed that the use of a matched sample approach helps to eliminate the effect of two specific characteristics which may be endemic to SRI portfolios. These characteristics related to the short lifespan of most SRI funds and the fact that SRI portfolios tend to consist of investments in smaller companies (exposing them to a small firm effect).

Consequently, Mallin et al. (1995:483) constructed a matched sample of conventional (non-SRI) funds in the UK based on fund size and inception date. Gregory et al. (1997:705) refined Mallin et al.’s study by constructing a matched sample of conventional (non-SRI) funds based on the fund classification (general, growth or income), area of investment (local or international), age of the fund and fund size at the end of the formation year.

For the purpose of this research, matching occurred on the basis of each SRI fund’s second-tier classification, date of inception and size of assets under management. For each SRI unit trust two conventional (non-SRI) unit trusts were subsequently identified. The names of the matched conventional (non-SRI) unit trusts are listed in Table 7.5.
Table 7.5: Sample of matched conventional (non-SRI) unit trusts

<table>
<thead>
<tr>
<th>Name of SRI unit trust</th>
<th>Name of first matched conventional (non-SRI) unit trust</th>
<th>Name of second matched conventional (non-SRI) unit trust</th>
</tr>
</thead>
<tbody>
<tr>
<td>Community Growth Equity Fund</td>
<td>Old Mutual Top Companies Fund</td>
<td>STANLIB Prosperity Fund</td>
</tr>
<tr>
<td>Community Growth Gilt Fund</td>
<td>Metropolitan Gilt Unit Trust</td>
<td>Coronation Bond Fund</td>
</tr>
<tr>
<td>Fraters Earth Equity Fund</td>
<td>Analytics Managed Equity Fund</td>
<td>Oasis Management Company General Equity Fund</td>
</tr>
<tr>
<td>Fraters Flexible Fund</td>
<td>Quantum Active Fund</td>
<td>PSG Macro Active FoF</td>
</tr>
<tr>
<td>Fraters Real Income Fund</td>
<td>Kagiso Protector Fund</td>
<td>Nedbank Inflation Beater Fund</td>
</tr>
<tr>
<td>Futuregrowth Albaraka Equity Fund</td>
<td>Old Mutual Top Companies Fund</td>
<td>Metropolitan General Equity Unit Trust</td>
</tr>
<tr>
<td>Nedbank Sustainability Investing Index Fund</td>
<td>Foord Equity Fund</td>
<td>Oasis Management Company General Equity Fund</td>
</tr>
<tr>
<td>Oasis Crescent Equity Fund</td>
<td>Old Mutual High Yield Opportunity Fund</td>
<td>Nedbank Rainmaker Fund</td>
</tr>
<tr>
<td>Oasis Crescent International FoF</td>
<td>Plexus Management International Equity FoF</td>
<td>Nedbank Global Equity Feeder</td>
</tr>
<tr>
<td>Sanlam Empowerment Equity Fund</td>
<td>Nedbank Equity Fund</td>
<td>M Cubed Equity FoF</td>
</tr>
</tbody>
</table>

Monthly data on the twenty conventional (non-SRI) unit trusts were drawn from the MoneyMate database.

(d) Primary data sourcing with regard to the risk-free asset

According to Bodie et al. (2002:200) the risk-free rate of return is a rate that has no default risk and no correlation with other investments. Although there is general consensus that government securities ought to be used as proxies for the risk-free rate, diverse views exists as to whether long or short-term rates ought to be used (Hirt & Block 2003:607).

Cornell, Hirshleifer and James (1997:13) note that academic studies commonly use a short-term Treasury bill rate, whereas practitioners favour a long-term rate. They argue that practitioners do so for two reasons: firstly, as a long-term rate is consistent with the goal of estimating a long-run cost of equity, and secondly, as it is less volatile than a short-term rate.
Correia and Uliana (2004:71) propose another measure for the risk-free rate in South Africa, namely the negotiable certificate of deposit (NCD) rate. This rate is seen as being more applicable in the South African setting given the effect of historic government regulations on the liquidity and pricing of government stock.

In recognition of this distortion, several studies on unit trust performance in South Africa use the NCD rate as a proxy for the risk-free rate (Meyer 1998:102; Von Wielligh & Smit 2000:121; Akinijolire & Smit 2003:46). Akin to these studies, a similar approach was adopted in this research. Monthly data on the three-month NCD rate were sourced from the Bureau of Economic Research at the University of Stellenbosch.

(e) Primary data sourcing with regard to the proxies used for the market index in South Africa

Two asset pricing models, namely the single-factor CAPM and the two-factor APT model suggested by Van Rensburg and Slaney (1997:1), were employed in this study. Based on a recommendation of an investment analyst, monthly data on the adjusted FTSE/JSE All Share Index was sourced as proxy for the CAPM market index (Personal communication Coetzee 2006). The use of an adjusted data set for the FTSE/JSE All Share Index is standard industry practice when evaluating portfolio performance in periods preceding 1 June 2002 as the composition of the index changed on that date.

The application of the two-factor Van Rensburg and Slaney APT model required that monthly data be sourced on the FTSE/JSE All Gold Mining Index and the FTSE/JSE Industrials Index. These indices are used in combination to serve as a proxy for the two-factor APT market index.

Monthly data on all three indices were sourced from I-Net Bridge.
7.4.2 Types of primary quantitative data sourced

A question arises as to what the key features of the collected data sets are. It is necessary to respond to this question, due to the fact that the nature of the data sourced has a direct impact on the statistical procedures which can be employed in the data analysis.

Four assumptions about how numerical symbols correspond to real-world observations can be used to distinguish between four types of data (nominal, ordinal, interval and ratio). These assumptions deal with (Blumberg et al. 2005:372):

- **Classification** – where numbers are used to group or sort responses and where no order exists;
- **Order** – where numbers are ordered and transitivity applies. Transitivity implies that A is greater than (>), less than (<) or equal to (=) B and if A > B > C then A is also greater than C;
- **Distance** – where differences between numbers are ordered. The difference between any pair of numbers is greater than, less than or equal to the difference between any other pair of numbers; and
- **Origin** – where the number series has a unique origin indicated by the number zero.

Table 7.6 provides a summary of the four types of data, their measurement characteristics as well as the statistical procedures which could be employed when analysing each of the four data types.

Each of the four types of data will now be briefly described and contextualised in terms of the primary data sourced in this research.
<table>
<thead>
<tr>
<th>Type of data</th>
<th>Characteristics of data</th>
<th>Basic empirical operation</th>
<th>Appropriate statistical procedures</th>
</tr>
</thead>
</table>
| Nominal     | Classification, but no order, distance or origin | Determination of equality | - Measure(s) of central tendency: mode  
- Measure(s) of dispersion: none  
- Measures of correlation: non-parametric measures such as \( \phi \) and \( \lambda \)  
- Measure(s) of statistical significance: non-parametric measures such as the chi-square test |
| Ordinal     | Classification and order but no distance or unique origin | Determination of 'greater than' or 'lesser than' value | - Measure(s) of central tendency: mode and median  
- Measure(s) of dispersion: percentiles and quartiles  
- Measure(s) of correlation: non-parametric measures such as Spearman's rank order correlation coefficient  
- Measure(s) of statistical significance: non-parametric measures such as the chi-square test, Mann Whitney U test and the Wilcoxon matched pairs test |
| Interval    | Classification, order and distance but no unique origin | Determination of equality of intervals or differences | - Measure(s) of central tendency: mode, median and arithmetic mean  
- Measure(s) of dispersion: standard deviation  
- Measure(s) of correlation: parametric measures such as the Pearson's product moment correlation  
- Measure(s) of statistical significance: parametric measures such as t-tests and F-tests |
| Ratio       | Classification, order, distance and unique origin | Determination of equality of ratios | - Measure(s) of central tendency: the geometric and harmonic mean  
- Measure(s) of dispersion: the standard deviation and coefficient of variation  
- Measure(s) of correlation: parametric measures such as the Pearson's product moment correlation  
- Measure(s) of statistical significance: parametric measures such as t-tests and F-tests |

(a) Nominal data

Leedy and Ormrod (2005:25) explain that the word ‘nominal’ originates from the Latin *nomen*, which means ‘name’. The properties of objects can thus be measured by assigning names to them. Nominal data can be grouped, naturally or by design, into two or more categories that are mutually exclusive and collectively exhaustive (Blumberg *et al.* 2005:374).

As indicated in Table 7.6, nominal data suggest no order or distance relationships and have no arithmetic origin. As such, the only possible arithmetic operation that is appropriate is that of counting the number of objects in each category. This further implies that the researcher is restricted to the use of the mode as a measure of central tendency. No measures of dispersion can be calculated using nominal data. Blumberg *et al.* (2005:374) state that non-parametric measures, such as *phi* and *lambda*, are appropriate measures to determine correlation and indicate that the chi-square test is most commonly used to infer statistical significance.

For the research in question nominal data pertaining to local SRI funds were collected and analysed. SRI funds were, for example, classified (in Table 7.5 of this chapter) according to their second-tier classification as equity, asset allocation, fixed interest, property or alternative CISs. Another example refers to the classification of SRI funds (in Section 3.7 of Chapter Three) according to their investment strategies i.e. as funds employing a screening, shareholder activism or cause-based investment strategy.

(b) Ordinal data

Ordinal data include the characteristics of nominal data plus an indicator of order. Objects are thus arranged based on their magnitude in an ordered relationship (Zikmund 2003:297). Blumberg *et al.* (2005:375) state that ordinal data are possible if the transitivity postulate is fulfilled i.e. “…if A is greater than B and B is
greater than C, then A is greater than C”. Ordinal data do not however supply any information on the distance between A and B or B and C. An ordinal measurement scale is therefore like a rubber yardstick which can stretch by varying amounts at different places along its length. As such, the real difference between ranks 1 and 2 may be more or less than the difference between ranks 2 and 3.

Because ordinal data have only a rank meaning, the appropriate measure of central tendency is the median, whereas dispersion can be measured by calculating percentiles or quartiles (Leedy & Ormrod 2005:26). Correlation measurement is restricted to non-parametric rank order methods such as the Spearman’s rank order coefficient and statistical significance to non-parametric tests such as the chi-square test, Mann Whitney U test and the Wilcoxon matched pairs test (Collis & Hussey 2003:197).

For the research in question no ordinal data were collected.

(c) Interval data

Interval data have the power (abilities) of nominal and ordinal data plus an additional strength, namely that they incorporate the concept of equality of interval (the distance between 1 and 2 equals the distance between 2 and 3, 3 and 4 and so on) (Blumberg et al. 2005:376). Besides the equality described above, interval data also have a zero point or origin that has been established arbitrarily (Leedy & Ormrod 2005:26). Calendar time is one such scale. For example, the time elapsed between 15:00 (3pm) and 18:00 (6pm) equals the time between 16:00 and 19:00. One cannot however say that 18:00 (6pm) is twice as late as 15:00 (3pm) because ‘zero time’ has an arbitrary origin. Centigrade and Fahrenheit temperature scales are other examples of classic interval scales as both have arbitrarily determined zero points.
More advanced statistical procedures can be employed when analysing interval data. The arithmetic mean can be calculated as a measure of central tendency along with the standard deviation as yardstick of dispersion. The degree of correlation between variables can be determined by using the Pearson’s product moment correlation, whereas several parametric measures, such as t-tests and F-tests, can be employed to test for statistical significance (Blumberg et al. 2005:376).

None of the data sourced for this study exhibit interval data characteristics.

(d) **Ratio data**

As shown in Table 7.6, ratio data incorporate all of the above powers (abilities) of the previous data types plus the provision for absolute zero as origin. Measures of physical dimensions such as height, weight, distance and area are examples, as well as monetary values and rates of return (Leedy & Ormrod 2005:27). Besides having zero as an absolute origin, ratio data also have equal measurement units and allow for statements such as “the Sharpe ratio of SRI fund A is twice as large as the Sharpe ratio of SRI fund B”.

All statistical techniques mentioned up to this point are applicable when analysing ratio data. Other manipulations carried out with real numbers, such as multiplication and division, may also be done with ratio data. According to Blumberg et al. (2005:377), the geometric and harmonic means are the most appropriate measures of central tendency and suggest that coefficients of variation may also be calculated.

The monthly data sourced on the SRI funds, the constituents of the three benchmark categories, the risk-free rate and the proxies for the market index can be classified as ratio data.
7.5 SUMMARY AND CONCLUSIONS

In this chapter a brief overview was provided of the definition, history and classification of collective investment schemes (CISs) in South Africa to set the scene for the sample selection.

Secondly, the population, sampling frame and sampling units of the sample in this study were identified. The sentiment expressed by Babbie and Mouton (2001:184) in Section 7.3.2 of this chapter, namely that South African researchers often struggle to acquire adequate sampling frames, strongly manifested itself in this research. The lack of a sampling frame of local SRI funds in South Africa was however overcome by means of an extensive review of secondary sources as well as in-depth, face-to-face interviews with local SRI fund managers and industry experts.

From the sampling frame (which corresponds with the population of 43 active and discontinued local SRI funds), a sample consisting of 24 sampling units was identified. Fund particular were meticulously reported in Tables 7.2 and 7.3. Finally, details were provided on the sourcing of quantitative primary data which mainly carry features of nominal and ratio data.

To ensure validity and reliability, great care was taken in identifying the population, sampling frame and sample of SRI funds in South Africa as well as sourcing quantitative primary data.

The next chapter will focus on the data analysis and empirical findings.
8.1 INTRODUCTION

This chapter reports on the quantitative data analysis and empirical findings. More specifically, effect is given to secondary research objectives five and six (as stated in section 1.5.2 of Chapter One), namely:

- to test the research hypotheses as depicted in the hypothetical model (Figure 1.4 of Chapter One) using the appropriate investment analytical and statistical procedures; and
- to report on the findings of the empirical analysis.

This chapter consists of four main sections. Firstly, monthly returns were calculated for the 24 SRI funds and the constituents of the three benchmark categories, namely the benchmark indices of the SRI funds, a matched sample of conventional (non-SRI) funds and the general equity market in South Africa. Secondly, the unadjusted (raw) returns of the SRI funds were calculated. Thirdly, the risk-adjusted returns of the SRI funds were calculated according to the Sharpe ratio, Sortino ratio, Upside-potential ratio, the single-factor CAPM Jensen’s alpha as well as the two-factor Van Rensburg and Slaney APT Jensen’s alpha. Next, the research hypotheses were tested by calculating appropriate measures of risk-adjusted performance and using suitable tests to establish normality and statistical significance. The chapter concludes with a description of the outstanding findings emanating from the statistical data analysis.

8.2 CALCULATING MONTHLY RETURNS

The first phase of the data analysis entailed the calculation of monthly rates of return for the SRI funds as well as the constituents of the three benchmark categories. As indicated in section 7.4 of Chapter Seven, monthly data were sourced either from MoneyMate, I-Net Bridge, Bloomberg, Alexander Forbes
For the SRI unit trusts, the other pooled and segregated SRI funds and the matched sample of conventional (non-SRI) unit trusts, monthly returns were calculated using Equation 8.1.

$$r_{it} = \frac{NAV_{price_{it}} - NAV_{price_{it-1}}}{NAV_{price_{it-1}}}$$

(Eq 8.1)

where $t = 1, 2, 3...T$ and:

$r_{it}$ = The monthly rate of return of fund $i$ in period $t$

$NAV_{price_{it}}$ = The Net Asset Value (NAV) price of fund $i$ in period $t$

$NAV_{price_{it-1}}$ = The NAV price of fund $i$ in period $t-1$

It is important to note that the NAV prices sourced from the respective data service providers include cash distributions (re-invested on ex-dividend date) and exclude any initial charges.

The monthly rates of return for the benchmark indices (including the FTSE/JSE All Share Index) were calculated using Equation 8.2.

$$r_{bt} = \frac{Index\ value_{bt} - Index\ value_{bt-1}}{Index\ value_{bt-1}}$$

(Eq 8.2)

where $t = 1, 2, 3...T$ and:

$r_{bt}$ = The monthly rate of return of benchmark $b$ in period $t$

$Index\ value_{bt}$ = Index value of benchmark $b$ in period $t$

$Index\ value_{bt-1}$ = Index value of benchmark $b$ in period $t-1$

The same approach was used for the risk-free rate in which case the three-month NCD rate was used as proxy. The choice of this instrument as a proxy for the

Asset Consultants, the Bureau of Economic Research at the University of Stellenbosch or directly from the respective SRI fund managers.
risk-free instrument in South Africa was motivated in section 7.4.1(d) of Chapter Seven.

Monthly rates of return calculated according to Equations 8.1 and 8.2 served as inputs for calculating:
- the unadjusted (raw) SRI fund returns (section 8.3);
- the risk-adjusted returns of the SRI funds (section 8.4); and
- the risk-adjusted returns of the SRI funds and constituents of the three benchmark categories in order to test the research hypotheses (section 8.5).

An assumption is made throughout this analysis that local SRI fund managers consistently apply the SRI criteria by which they evaluate investment opportunities.

**8.3 UNADJUSTED (RAW) SRI FUND RETURNS**

The unadjusted (raw) returns of the local SRI funds were calculated during each of the three identified sub-periods. As indicated in section 1.3.2 of Chapter One and justified in Section 5.3.4 of Chapter Five, these sub-periods are:

- Sub-period one (1 June 1992 to 31 August 1998) also called the ‘establishment period of SRI in South Africa’;
- Sub-period two (1 September 1998 to 31 March 2002) also labelled the ‘decline period of SRI in South Africa’; and
- Sub-period three (1 April 2002 to 31 March 2006) also referred to as the ‘resurgence period of SRI in South Africa’.

The unadjusted (raw) returns of the local SRI funds during the three sub-periods are presented in Table 8.1. Funds are ranked in alphabetical order.
### TABLE 8.1: Unadjusted (raw) SRI fund returns

<table>
<thead>
<tr>
<th>SRI fund name</th>
<th>Status(a)</th>
<th>Annualised return sub-period 1 (%) (b,c)</th>
<th>Annualised return sub-period 2 (%) (b,c)</th>
<th>Annualised return sub-period 3 (%) (b,c)</th>
</tr>
</thead>
<tbody>
<tr>
<td>African Harvest Infrastructure Bond Fund</td>
<td>A</td>
<td>5.683</td>
<td>16.582</td>
<td></td>
</tr>
<tr>
<td>Community Growth Gilt Fund</td>
<td>A</td>
<td>20.247</td>
<td>16.817</td>
<td></td>
</tr>
<tr>
<td>Community Growth Equity Fund</td>
<td>A</td>
<td>15.491</td>
<td>15.275</td>
<td>27.067</td>
</tr>
<tr>
<td>Fraters Earth Equity Fund</td>
<td>A</td>
<td></td>
<td></td>
<td>36.105</td>
</tr>
<tr>
<td>Fraters Flexible Fund</td>
<td>A</td>
<td></td>
<td></td>
<td>29.022</td>
</tr>
<tr>
<td>Fraters Real Income Fund</td>
<td>A</td>
<td></td>
<td></td>
<td>19.598</td>
</tr>
<tr>
<td>Futuregrowth Albaraka Equity Fund</td>
<td>A</td>
<td>12.147</td>
<td>25.769</td>
<td>30.790</td>
</tr>
<tr>
<td>Futuregrowth Anchor Fund</td>
<td>D</td>
<td>-1.847</td>
<td>0.043</td>
<td>13.685</td>
</tr>
<tr>
<td>Futuregrowth Community Property Fund</td>
<td>A</td>
<td>19.591</td>
<td>7.358</td>
<td>15.639</td>
</tr>
<tr>
<td>Futuregrowth Infrastructure Bond Fund</td>
<td>A</td>
<td>12.684</td>
<td>23.796</td>
<td>17.182</td>
</tr>
<tr>
<td>Futuregrowth SRI Balanced Fund</td>
<td>A</td>
<td></td>
<td></td>
<td>33.635</td>
</tr>
<tr>
<td>Futuregrowth SRI Equity Fund</td>
<td>A</td>
<td></td>
<td></td>
<td>50.978</td>
</tr>
<tr>
<td>Investec Mafisa Fund</td>
<td>D</td>
<td>10.245</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Investec Sechaba Fund</td>
<td>D</td>
<td>7.868</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Investment Solutions Sakhisizwe Fund</td>
<td>A</td>
<td></td>
<td></td>
<td>18.842</td>
</tr>
<tr>
<td>Metropolitan Futurebuilder Fund</td>
<td>A</td>
<td>13.418</td>
<td>10.768</td>
<td>25.098</td>
</tr>
<tr>
<td>Momentum Supernation Fund</td>
<td>A</td>
<td></td>
<td></td>
<td>31.168</td>
</tr>
<tr>
<td>Nedbank Sustainability Investing Index Fund</td>
<td>D</td>
<td></td>
<td></td>
<td>3.514</td>
</tr>
<tr>
<td>Oasis Crescent Equity</td>
<td>A</td>
<td>44.175</td>
<td>26.109</td>
<td></td>
</tr>
<tr>
<td>Oasis Crescent International FoF</td>
<td>A</td>
<td></td>
<td></td>
<td>-0.185</td>
</tr>
<tr>
<td>OMAM IDEAS Fund</td>
<td>A</td>
<td>15.624</td>
<td>17.355</td>
<td></td>
</tr>
<tr>
<td>Sanlam Empowerment Equity Fund</td>
<td>D</td>
<td>49.014</td>
<td>-13.082</td>
<td>-3.837</td>
</tr>
<tr>
<td>TopGEAR Fund</td>
<td>D</td>
<td>-2.545</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Average</strong></td>
<td><strong>A</strong></td>
<td><strong>15.874</strong></td>
<td><strong>12.214</strong></td>
<td><strong>21.279</strong></td>
</tr>
</tbody>
</table>

(a) A = Active; D = Discontinued  
(b) Monthly returns were calculated using Equation 8.1  
(c) The geometric return of a fund in a specified period was annualised by raising the fund’s geometric return by its Yearly Annualisation Factor (n/12) minus one

As indicated in Table 8.1 average unadjusted (raw) SRI fund performance decreased from 15.874 percent in sub-period one to 12.214 in sub-period two.
This decline in SRI fund returns might be attributed to poor returns on small caps (Ryan 2002; Derby 2003; Lea 2006). This claim however requires empirical verification. Average unadjusted (raw) SRI fund performance in sub-period three (21.279%) compares very favourably with the average return of the FTSE/JSE All Share Index (25.590%) and BEASSA All Bond Index (16.920%) in sub-period three (these figures are taken from Table 5.6 of Chapter Five).

### 8.4 RISK-ADJUSTED SRI FUND RETURNS

Five measures of risk-adjusted portfolio performance, as identified in the literature, were used to evaluate SRI fund performance over the research period, namely the Sharpe ratio, the Sortino ratio, the Upside-potential ratio, the single-factor CAPM Jensen’s alpha as well as the two-factor Van Rensburg and Slaney APT Jensen’s alpha. A decision was taken not to calculate the $M^2$ measure in this research as it was felt that the Sharpe ratio provided sufficient information.

The Treynor ratio was also not deemed appropriate for this study as the Treynor ratio assumes that portfolios are efficiently diversified. Due to the selective nature of SRI screens, such funds are generally not well diversified (Knoll 2002:681; Scheuth 2003:189). Consequently, the use of beta as an appropriate measure of portfolio risk can be questioned. The Information ratio was not calculated as sufficient information was provided by the two sets of Jensen’s alphas, which served as inputs for this ratio.

For this research an SRI fund had to be active for at least 12 months during a specific sub-period for its risk-adjusted measure to be calculated during that sub-period. In the tables to follow, the best performing SRI fund in each sub-period is highlighted in green, whereas the worst performing SRI fund in each sub-period is highlighted in red.
8.4.1 The Sharpe ratio

As indicated in section 6.3.1 of Chapter Six and shown in Equation 8.3, the Sharpe ratio measures a fund’s risk premium per unit of risk, where risk is measured in terms of a fund’s standard deviation \( \sigma_i \). A higher Sharpe ratio is preferred.

\[
\text{Sharpe}_i = \frac{\bar{r}_i - \bar{r}_f}{\sigma_i}
\]  
\text{(Eq 8.3)}

where:
- \( \bar{r}_i \) = The mean annualised rate of return of fund \( i \) during a specified time period
- \( \bar{r}_f \) = The mean annualised rate of return of a risk-free asset during the same time period
- \( \sigma_i \) = The annualised standard deviation of the rate of return of fund \( i \) during the specified time period

The Sharpe ratios of the SRI funds during the three respective sub-periods are illustrated in Table 8.2.
### TABLE 8.2: Overview of the Sharpe ratios of local SRI funds

<table>
<thead>
<tr>
<th>SRI fund name</th>
<th>Status&lt;sup&gt;(a) &lt;/sup&gt;</th>
<th>Sharpe ratio sub-period 1</th>
<th>Ranking sub-period 1</th>
<th>Sharpe ratio sub-period 2</th>
<th>Ranking sub-period 2</th>
<th>Sharpe ratio sub-period 3</th>
<th>Ranking sub-period 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>African Harvest Infrastructure Bond Fund A</td>
<td>A</td>
<td>0.179</td>
<td>15</td>
<td>1.785</td>
<td>11</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Community Growth Equity Fund A</td>
<td>A</td>
<td>0.343</td>
<td>1</td>
<td>2.168</td>
<td>8</td>
<td>1.760</td>
<td>17</td>
</tr>
<tr>
<td>Community Growth Gilt Fund A</td>
<td>A</td>
<td>1.694</td>
<td>3</td>
<td>1.610</td>
<td>13</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fraters Earth Equity Fund A</td>
<td>A</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fraters Flexible Fund A</td>
<td>A</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fraters Real Income Fund A</td>
<td>A</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Futuregrowth Albaraka Equity Fund A</td>
<td>A</td>
<td>0.241</td>
<td>2</td>
<td>2.039</td>
<td>4</td>
<td>1.858</td>
<td>8</td>
</tr>
<tr>
<td>Futuregrowth Anchor Fund D</td>
<td>D</td>
<td>-0.254</td>
<td>7</td>
<td>0.830</td>
<td>12</td>
<td>1.002</td>
<td>19</td>
</tr>
<tr>
<td>Futuregrowth Community Property Fund A</td>
<td>A</td>
<td>0.178</td>
<td>3</td>
<td>1.799</td>
<td>6</td>
<td>1.818</td>
<td>10</td>
</tr>
<tr>
<td>Futuregrowth Infrastructure Bond Fund A</td>
<td>A</td>
<td>-0.102</td>
<td>4</td>
<td>2.367</td>
<td>2</td>
<td>1.829</td>
<td>9</td>
</tr>
<tr>
<td>Futuregrowth SRI Balanced Fund A</td>
<td>A</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Futuregrowth SRI Equity Fund A</td>
<td>A</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Investec Mafisa Fund D</td>
<td>D</td>
<td>1.303</td>
<td>10</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Investec Sechaba Fund D</td>
<td>D</td>
<td>0.509</td>
<td>13</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Investment Solutions Sakhisizwe Fund A</td>
<td>A</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Metropolitan Futurebuilder Fund A</td>
<td>A</td>
<td>-0.145</td>
<td>5</td>
<td>1.585</td>
<td>9</td>
<td>1.779</td>
<td>12</td>
</tr>
<tr>
<td>Momentum Supernation Fund A</td>
<td>A</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nedbank Sustainability Investing Index Fund D</td>
<td>D</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oasis Crescent Equity Fund A</td>
<td>A</td>
<td>2.969</td>
<td>1</td>
<td>1.729</td>
<td>14</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oasis Crescent International FoF A</td>
<td>A</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OMAM IDEAS Fund A</td>
<td>A</td>
<td>1.992</td>
<td>5</td>
<td>1.630</td>
<td>15</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sanlam Empowerment Equity Fund D</td>
<td>D</td>
<td>0.246</td>
<td>14</td>
<td>-1.438</td>
<td>21</td>
<td></td>
<td></td>
</tr>
<tr>
<td>STANLIB Corporate Wealth Development Fund A</td>
<td>A</td>
<td>-0.209</td>
<td>6</td>
<td>1.792</td>
<td>7</td>
<td>1.613</td>
<td>16</td>
</tr>
<tr>
<td>TopGEAR Fund D</td>
<td>D</td>
<td>0.884</td>
<td>11</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Average</strong></td>
<td></td>
<td><strong>0.007</strong></td>
<td><strong>1.490</strong></td>
<td><strong>1.689</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<sup>(a) A = Active; D = Discontinued</sup>
During sub-period one, four local SRI funds had negative Sharpe ratios implying that these funds’ mean annualised returns were lower than the mean annualised return on a risk-free instrument in South Africa. During sub-period two, no local SRI funds had negative Sharpe ratios, whereas only one local SRI fund, the now discontinued Sanlam Empowerment Equity Fund, had a negative Sharpe ratio in sub-period three.

As indicated in Table 8.2, the average Sharpe ratios of the SRI funds increased over the three sub-periods indicating that the average risk-adjusted performance of local SRI funds improved over the research period. This finding can be attributed to:

- a very large increase in the average risk premia of the SRI funds over the research period (the average increased from -1.259% in sub-period one to 27.215% in sub-period two and 28.622% in sub-period three); and
- a substantial decreased in the total volatility (risk) of the SRI funds over the research period (the average standard deviation decreased from 33.308% in sub-period one to 18.813% in sub-period two and 17.767% in sub-period three).

### 8.4.2 The Sortino ratio

As indicated in Equation 8.4 and described in section 6.3.3 of Chapter Six, the Sortino ratio also measures a fund’s risk premium per unit of risk, but uses downside deviation ($\delta_i$) instead of standard deviation ($\sigma_i$). The higher Sortino ratio is preferred.

$$Sortino_i = \frac{\overline{r}_i - \overline{r}_f}{\delta_i}$$

(Eq 8.4)

where:

- $\overline{r}_i$ = The average annualised rate of return for fund $i$ during a specified time period
- $\overline{r}_f$ = The average annualised rate of return on a risk-free asset during the same time period
\[ \delta_i = \text{The annualised downside deviation of the rate of return of fund } i \text{ during the specified time period} \]

In order to calculate a fund’s downside deviation (or delta) a threshold or minimum acceptable return (MAR) value needs to be set. In Equation 8.5 \( \tau \) represents the value below which the investor would not like to see his/her returns fall.

\[
\delta_i = \sqrt{\int_{-\infty}^{\tau} \frac{\left( \tau - r_i \right)^2 f(r_i) dr_i}{}} \quad \text{(Eq 8.5)}
\]

where:

\( \tau \) = The investor’s threshold or MAR value

\( r_i \) = The return of fund \( i \) with a cumulative probability density function \( f(\cdot) \)

For the purpose of this research the threshold or MAR value was set at zero as rational investors disapprove of negative returns. In this research, delta was calculated by determining the standard deviation of a fund’s negative returns during a specific period. The Sortino ratios of the SRI funds during the three identified sub-periods are illustrated in Table 8.3.
TABLE 8.3: Overview of the Sortino ratios of local SRI funds

<table>
<thead>
<tr>
<th>SRI fund name</th>
<th>Status(^\text{a})</th>
<th>Sortino ratio sub-period 1</th>
<th>Ranking sub-period 1</th>
<th>Sortino ratio sub-period 2</th>
<th>Ranking sub-period 2</th>
<th>Sortino ratio sub-period 3</th>
<th>Ranking sub-period 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>African Harvest Infrastructure Bond Fund A</td>
<td>A</td>
<td>1.724</td>
<td>12</td>
<td>17.419</td>
<td>14</td>
<td>69.782</td>
<td>1</td>
</tr>
<tr>
<td>Community Growth Equity Fund A</td>
<td>A</td>
<td>1.764</td>
<td>3</td>
<td>5.091</td>
<td>3</td>
<td>16.020</td>
<td>18</td>
</tr>
<tr>
<td>Community Growth Gilt Fund A</td>
<td>A</td>
<td>7.362</td>
<td>6</td>
<td>13.292</td>
<td>15</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fraters Earth Equity Fund A</td>
<td>A</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>31.153</td>
<td>5</td>
</tr>
<tr>
<td>Fraters Flexible Fund A</td>
<td>A</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>24.465</td>
<td>8</td>
</tr>
<tr>
<td>Fraters Real Income Fund A</td>
<td>A</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Futuregrowth Albaraka Equity Fund A</td>
<td>A</td>
<td>2.206</td>
<td>2</td>
<td>10.699</td>
<td>2</td>
<td>23.240</td>
<td>9</td>
</tr>
<tr>
<td>Futuregrowth Anchor Fund D</td>
<td>D</td>
<td>0.300</td>
<td>7</td>
<td>0.932</td>
<td>13</td>
<td>8.136</td>
<td>19</td>
</tr>
<tr>
<td>Futuregrowth Community Property Fund A</td>
<td>A</td>
<td>1.418</td>
<td>4</td>
<td>2.843</td>
<td>10</td>
<td>18.120</td>
<td>12</td>
</tr>
<tr>
<td>Futuregrowth Infrastructure Bond Fund A</td>
<td>A</td>
<td>2.245</td>
<td>1</td>
<td>6.302</td>
<td>4</td>
<td>17.914</td>
<td>13</td>
</tr>
<tr>
<td>Futuregrowth SRI Balanced Fund A</td>
<td>A</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>31.433</td>
<td>4</td>
</tr>
<tr>
<td>Futuregrowth SRI Equity Fund A</td>
<td>A</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>36.022</td>
<td>3</td>
</tr>
<tr>
<td>Investec Mafisa Fund D</td>
<td>D</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>6.230</td>
<td>5</td>
</tr>
<tr>
<td>Investec Sechaba Fund D</td>
<td>D</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2.778</td>
<td>11</td>
</tr>
<tr>
<td>Investment Solutions Sakhisizwe Fund A</td>
<td>A</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>26.286</td>
<td>6</td>
</tr>
<tr>
<td>Metropolitan Futurebuilder Fund A</td>
<td>A</td>
<td>1.309</td>
<td>5</td>
<td>3.962</td>
<td>8</td>
<td>19.495</td>
<td>11</td>
</tr>
<tr>
<td>Momentum Supernation Fund A</td>
<td>A</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>45.040</td>
<td>2</td>
</tr>
<tr>
<td>Nedbank Sustainability Investing Index Fund D</td>
<td>D</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>13.937</td>
<td>16</td>
</tr>
<tr>
<td>Oasis Crescent Equity Fund A</td>
<td>A</td>
<td>32.864</td>
<td>1</td>
<td>21.987</td>
<td>10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oasis Crescent International FoF A</td>
<td>A</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3.234</td>
<td>20</td>
</tr>
<tr>
<td>OMAM IDEAS Fund A</td>
<td>A</td>
<td>3.801</td>
<td>9</td>
<td>13.296</td>
<td>17</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sanlam Empowerment Equity Fund D</td>
<td>D</td>
<td>-3.530</td>
<td>15</td>
<td>-9.112</td>
<td>21</td>
<td></td>
<td></td>
</tr>
<tr>
<td>STANLIB Corporate Wealth Development Fund A</td>
<td>A</td>
<td>1.022</td>
<td>6</td>
<td>5.083</td>
<td>7</td>
<td>24.756</td>
<td>7</td>
</tr>
<tr>
<td>TopGEAR Fund D</td>
<td>D</td>
<td>-0.816</td>
<td>14</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Average</strong></td>
<td></td>
<td><strong>1.466</strong></td>
<td></td>
<td><strong>5.688</strong></td>
<td></td>
<td><strong>22.186</strong></td>
<td></td>
</tr>
</tbody>
</table>

(a) A = Active; D = Discontinued
The high Sortino ratios recorded in sub-period three, compared with sub-periods one and two, can be ascribed to the low levels of downside deviation exhibited by some of the SRI funds in the last sub-period. The Fraters Real Income Fund for example had a delta of 0.517 percent and the Momentum Supernation Fund a delta of 0.969 percent resulting in Sortino ratios of 69.782 and 45.040 respectively.

As in the case of the Sharpe ratio, the average Sortino ratios of the SRI funds also improved over the research period. Closer inspection of the data reveals that this is due to:
- a very large increase in the average risk premia of the SRI funds over the research period (the average increased from -1.259% in sub-period one to 27.215% in sub-period two and 28.622% in sub-period three); and
- an even larger decreased in harmful volatility (downside risk) over the research period (the average downside deviation decreased from 9.829% in sub-period one to 2.736% in sub-period two and 1.679% in sub-period three).

8.4.3 The Upside-potential ratio

Equation 8.6 illustrates that the Upside-potential ratio not only considers a fund’s downside deviation ($\delta_i$) but also its upside potential as measured by theta ($\theta_i$). Here too, a higher ratio is preferred.

\[
 UPR_i = \frac{\theta_i}{\delta_i} \tag{Eq 8.6}
\]

The theta of a fund ($\theta_i$) is calculated according to Equation 8.7 and refers to a fund’s returns above a threshold or MAR value set by the investor.

\[
 \theta_i = \int_{\tau}^{\infty} (r_i - \tau) f(r_i) dr_i \tag{Eq 8.7}
\]
where:

\[ \tau = \text{The investor's threshold or minimum acceptable return value} \]
\[ r_i = \text{The return of fund } i \text{ with a cumulative probability density function } f(.) \]

More details on this measure of risk-adjusted portfolio performance were provided in section 6.3.4 of Chapter Six.

For the purpose of this research, the threshold or MAR value was set at zero. In this research theta was calculated by determining the standard deviation of a fund’s positive returns during a specific period. Table 8.4 reflects the Upside-potential ratios of the SRI funds during the three respective sub-periods.

The average Upside-potential ratio of the SRI funds also improved over the research period (as was the case in terms of the average Sharpe and Sortino ratios). The marginal decrease in the SRI funds’ upside potential (theta) was overshadowed by the substantial decrease in the harmful volatility (downside risk) of the SRI funds over the corresponding period. The average theta decreased from 21.134% in sub-period one to 20.392% in sub-period two and 19.932% in sub-period three, whereas harmful volatility (downside risk) decreased from 9.829% in sub-period one to 2.736% in sub-period two and 1.679% in sub-period three.

A comparison of the rankings suggested by the Sharpe, Sortino and Upside-potential ratios in Tables 8.2, 8.3 and 8.4 indicate that these three measures do not provide consistent rankings. Research findings by Leggio and Lien (2003a:82, 2003b:211) also revealed that these three measures did not rank funds in a consistent manner.
### TABLE 8.4: Overview of the Upside-potential ratios of local SRI funds

<table>
<thead>
<tr>
<th>SRI fund name</th>
<th>Status</th>
<th>UPR sub-period 1</th>
<th>Ranking sub-period 1</th>
<th>UPR sub-period 2</th>
<th>Ranking sub-period 2</th>
<th>UPR sub-period 3</th>
<th>Ranking sub-period 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>African Harvest Infrastructure Bond Fund</td>
<td>A</td>
<td>1.952</td>
<td>4</td>
<td>8.980</td>
<td>14</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Community Growth Equity Fund</td>
<td>A</td>
<td>3.418</td>
<td>2</td>
<td>4.846</td>
<td>13</td>
<td>8.720</td>
<td>15</td>
</tr>
<tr>
<td>Fraters Earth Equity Fund</td>
<td>A</td>
<td>22.818</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fraters Flexible Fund</td>
<td>A</td>
<td>16.501</td>
<td>8</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fraters Real Income Fund</td>
<td>A</td>
<td>27.823</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fraters Earth Equity Fund</td>
<td>A</td>
<td>22.818</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fraters Flexible Fund</td>
<td>A</td>
<td>16.501</td>
<td>8</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fraters Real Income Fund</td>
<td>A</td>
<td>27.823</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Futuregrowth Albaraka Equity Fund</td>
<td>A</td>
<td>4.653</td>
<td>1</td>
<td>13.112</td>
<td>14</td>
<td>18.897</td>
<td>5</td>
</tr>
<tr>
<td>Futuregrowth Anchor Fund</td>
<td>D</td>
<td>2.061</td>
<td>4</td>
<td>10.999</td>
<td>3</td>
<td>6.236</td>
<td>20</td>
</tr>
<tr>
<td>Futuregrowth Community Property Fund</td>
<td>A</td>
<td>0.983</td>
<td>6</td>
<td>2.903</td>
<td>6</td>
<td>8.416</td>
<td>18</td>
</tr>
<tr>
<td>Futuregrowth Infrastructure Bond Fund</td>
<td>A</td>
<td>2.203</td>
<td>3</td>
<td>5.874</td>
<td>12</td>
<td>9.318</td>
<td>13</td>
</tr>
<tr>
<td>Futuregrowth SRI Balanced Fund</td>
<td>A</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>13.869</td>
<td>9</td>
</tr>
<tr>
<td>Futuregrowth SRI Equity Fund</td>
<td>A</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>17.811</td>
<td>6</td>
</tr>
<tr>
<td>Investec Mafisa Fund</td>
<td>D</td>
<td>19.231</td>
<td>11</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Investec Sechaba Fund</td>
<td>D</td>
<td>2.321</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Investment Solutions Sakhisizwe Fund</td>
<td>A</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>10.446</td>
<td>12</td>
</tr>
<tr>
<td>Metropolitan Futurebuilder Fund</td>
<td>A</td>
<td>1.112</td>
<td>5</td>
<td>7.526</td>
<td>8</td>
<td>13.532</td>
<td>10</td>
</tr>
<tr>
<td>Momentum Supernation Fund</td>
<td>A</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>22.862</td>
<td>2</td>
</tr>
<tr>
<td>Nedbank Sustainability Investing Index Fund</td>
<td>D</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>6.867</td>
<td>19</td>
</tr>
<tr>
<td>Oasis Crescent Equity Fund</td>
<td>A</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>27.314</td>
<td>15</td>
</tr>
<tr>
<td>Oasis Crescent International FoF</td>
<td>A</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>8.566</td>
<td>17</td>
</tr>
<tr>
<td>OMAM IDEAS Fund</td>
<td>A</td>
<td>3.045</td>
<td>7</td>
<td>8.863</td>
<td>16</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sanlam Empowerment Equity Fund</td>
<td>D</td>
<td>8.065</td>
<td>1</td>
<td>5.660</td>
<td>21</td>
<td></td>
<td></td>
</tr>
<tr>
<td>STANLIB Corporate Wealth Development Fund</td>
<td>A</td>
<td>0.982</td>
<td>7</td>
<td>6.306</td>
<td>9</td>
<td>19.904</td>
<td>4</td>
</tr>
<tr>
<td>TopGEAR Fund</td>
<td>D</td>
<td>5.187</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Average</strong></td>
<td></td>
<td><strong>2.202</strong></td>
<td><strong>8.863</strong></td>
<td><strong>13.551</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(a) A = Active; D = Discontinued
8.4.4 The single-factor CAPM Jensen’s alpha

A fund’s single-factor CAPM Jensen’s alpha can be determined using the regression equation shown in Equation 8.8.

\[ R_{it} = \alpha_{it} + \beta_{it} R_{mt} + \varepsilon_{it} \] (Eq 8.8)

where \( t = 1,2\ldots T \) and:

- \( R_{it} \) = The risk premium of fund \( i \) during period \( t \), determined by \( r_{it} - r_{ft} \)
- \( \alpha_{it} \) = The intercept of the regression representing the alpha coefficient of fund \( i \)
- \( \beta_{it} \) = The slope of the regression representing the beta coefficient of fund \( i \)
- \( R_{mt} \) = The market risk premium during period \( t \), determined by \( r_{mt} - r_{ft} \)
- \( \varepsilon_{it} \) = The stochastic error term of fund \( i \) in period \( t \) representing firm-specific risk

It was shown in section 6.3.5 of Chapter Six, that superior fund performance is associated with a positive alpha coefficient, whereas inferior fund performance is indicated by a negative alpha coefficient. Table 8.5 reflects the single-factor CAPM Jensen’s alphas of the SRI funds during the three respective sub-periods. Data are also provided on each SRI fund’s \( R^2 \) value, or coefficient of determination. \( R^2 \) is a relative measure of the ‘goodness’ of fit of the observed data points in relation to the regression line (Levine, Stephan, Krehbiel & Berenson 2005:525). Stanford (2002) argues that the interpretation of any computed \( R^2 \) statistic is open to dispute due to its subjective nature. Disagreement therefore exists as to how high (toward 1) the \( R^2 \) statistic should be in order to infer the existence and strength of a relationship and how low (toward zero) the \( R^2 \) statistic can be before an inference may be drawn that no statistically identifiable relationship exists between \( X \) and \( Y \).

Stanford (2002) points out that natural scientists often expect \( R^2 \) values in excess of 0.9 (or even higher) to indicate the existence of a useable relationship,
whereas social scientists may defensibly judge an $R^2$ that is in excess of 0.7 to be indicative of a statistically meaningful relationship. Social scientists’ acceptance of a lower $R^2$ statistic is justified by the degree of randomness, unpredictability and ignorance that often characterise human (e.g. fund manager) decision making and behaviour. As shown in Table 8.5, $R^2$ values in sub-periods two and three were below the 0.7 level. These low $R^2$ values indicate that the variables embedded in the CAPM do not adequately explain the risk-adjusted performance of SRI funds.
### TABLE 8.5: Overview of the single-factor CAPM Jensen’s alphas of local SRI funds

<table>
<thead>
<tr>
<th>SRI fund name</th>
<th>Status</th>
<th>Single-factor CAPM Jensen’s alpha sub-period 1</th>
<th>sig (b)</th>
<th>R²</th>
<th>Single-factor CAPM Jensen’s alpha sub-period 2</th>
<th>sig (b)</th>
<th>R²</th>
<th>Single-factor CAPM Jensen’s alpha sub-period 3</th>
<th>sig (b)</th>
<th>R²</th>
</tr>
</thead>
<tbody>
<tr>
<td>African Harvest Infrastructure Bond Fund</td>
<td>A</td>
<td>0.001</td>
<td>0.012</td>
<td>0.13</td>
<td>**</td>
<td>0.385</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Community Growth Gilt Fund</td>
<td>A</td>
<td>0.008</td>
<td>*</td>
<td>0.225</td>
<td>0.013</td>
<td>*</td>
<td>0.377</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Community Growth Equity Fund</td>
<td>A</td>
<td>0.008</td>
<td>0.821</td>
<td>-0.001</td>
<td>0.011</td>
<td>**</td>
<td>0.897</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fraters Earth Equity Fund</td>
<td>A</td>
<td>0.019</td>
<td>**</td>
<td>0.899</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fraters Flexible Fund</td>
<td>A</td>
<td>0.016</td>
<td>**</td>
<td>0.804</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fraters Real Income Fund</td>
<td>A</td>
<td>0.011</td>
<td>*</td>
<td>0.690</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Futhergrowth Albaraka Equity Fund</td>
<td>A</td>
<td>0.006</td>
<td>**</td>
<td>0.797</td>
<td>0.008</td>
<td>**</td>
<td>0.849</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Futhergrowth Anchor Fund</td>
<td>D</td>
<td>0.039</td>
<td>**</td>
<td>0.901</td>
<td>0.007</td>
<td>*</td>
<td>0.946</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Futhergrowth Community Property Fund</td>
<td>A</td>
<td>0.013</td>
<td>0.601</td>
<td>0.016</td>
<td>*</td>
<td>0.056</td>
<td>**</td>
<td></td>
<td>0.012</td>
<td>**</td>
</tr>
<tr>
<td>Futhergrowth Infrastructure Bond Fund</td>
<td>A</td>
<td>0.007</td>
<td>0.756</td>
<td>0.021</td>
<td>**</td>
<td>0.227</td>
<td>**</td>
<td></td>
<td>0.014</td>
<td>**</td>
</tr>
<tr>
<td>Futhergrowth SRI Balanced Fund</td>
<td>A</td>
<td>0.005</td>
<td>0.514</td>
<td>0.007</td>
<td>**</td>
<td>0.944</td>
<td></td>
<td></td>
<td>0.900</td>
<td></td>
</tr>
<tr>
<td>Futhergrowth SRI Equity Fund</td>
<td>A</td>
<td>0.000</td>
<td>0.531</td>
<td>0.013</td>
<td>**</td>
<td>0.876</td>
<td></td>
<td></td>
<td>0.615</td>
<td></td>
</tr>
<tr>
<td>Investec Mafisa Fund</td>
<td>D</td>
<td>0.005</td>
<td>0.282</td>
<td>0.013</td>
<td>**</td>
<td>0.981</td>
<td></td>
<td></td>
<td>0.876</td>
<td></td>
</tr>
<tr>
<td>Investec Sechaba Fund</td>
<td>D</td>
<td>0.002</td>
<td>0.531</td>
<td>0.013</td>
<td>**</td>
<td>0.876</td>
<td></td>
<td></td>
<td>0.615</td>
<td></td>
</tr>
<tr>
<td>Investment Solutions Sakhisizwe Fund</td>
<td>A</td>
<td>0.012</td>
<td>0.812</td>
<td>0.007</td>
<td>**</td>
<td>0.981</td>
<td></td>
<td></td>
<td>0.876</td>
<td></td>
</tr>
<tr>
<td>Metropolitan Futurebuilder Fund</td>
<td>A</td>
<td>0.018</td>
<td>0.812</td>
<td>0.013</td>
<td>**</td>
<td>0.372</td>
<td></td>
<td></td>
<td>0.615</td>
<td></td>
</tr>
<tr>
<td>Momentum Supernation Fund</td>
<td>A</td>
<td>0.015</td>
<td>**</td>
<td>0.876</td>
<td></td>
<td>0.615</td>
<td></td>
<td></td>
<td>0.876</td>
<td></td>
</tr>
<tr>
<td>Nedbank Sustainability Investing Index Fund</td>
<td>D</td>
<td>0.009</td>
<td>**</td>
<td>0.876</td>
<td></td>
<td>0.615</td>
<td></td>
<td></td>
<td>0.876</td>
<td></td>
</tr>
<tr>
<td>Oasis Crescent Equity Fund</td>
<td>A</td>
<td>0.021</td>
<td>**</td>
<td>0.752</td>
<td>0.012</td>
<td>**</td>
<td>0.876</td>
<td></td>
<td>0.615</td>
<td></td>
</tr>
<tr>
<td>Oasis Crescent International FoF</td>
<td>A</td>
<td>0.016</td>
<td>**</td>
<td>0.876</td>
<td></td>
<td>0.615</td>
<td></td>
<td></td>
<td>0.876</td>
<td></td>
</tr>
<tr>
<td>OMAM IDEAS Fund</td>
<td>A</td>
<td>0.016</td>
<td>**</td>
<td>0.876</td>
<td></td>
<td>0.615</td>
<td></td>
<td></td>
<td>0.876</td>
<td></td>
</tr>
<tr>
<td>Sanlam Empowerment Equity Fund</td>
<td>D</td>
<td>0.008</td>
<td>**</td>
<td>0.876</td>
<td></td>
<td>0.615</td>
<td></td>
<td></td>
<td>0.876</td>
<td></td>
</tr>
<tr>
<td>STANLIB Corporate Wealth Development Fund</td>
<td>A</td>
<td>0.009</td>
<td>0.858</td>
<td>0.009</td>
<td>0.380</td>
<td>0.012</td>
<td>*</td>
<td></td>
<td>0.586</td>
<td></td>
</tr>
<tr>
<td>TopGEAR Fund</td>
<td>D</td>
<td>-0.004</td>
<td>0.370</td>
<td>0.013</td>
<td>0.011</td>
<td>0.658</td>
<td></td>
<td></td>
<td>0.876</td>
<td></td>
</tr>
<tr>
<td><strong>Average</strong></td>
<td></td>
<td>0.013</td>
<td>0.792</td>
<td>0.008</td>
<td>0.412</td>
<td>0.011</td>
<td>0.658</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(a) A = Active; D = Discontinued
(b) * significant at the 95% level; ** significant at the 99% level
It should be noted that most of the SRI funds which exhibited inferior performance (i.e. negative alphas) were discontinued SRI funds. One exception is that of the Oasis Crescent International Fund of Funds, an active SRI fund with a negative alpha (-0.007) in sub-period three. As a foreign fund, which invests 85 percent of its assets outside of South Africa at all times, this SRI fund is clearly vulnerable to exchange rate volatility. As indicated in Figure 5.3 of Chapter Five, the ZAR exchange rate strengthened considerably against the US$ and other major currencies during sub-period three.

In contrast with the consistent improvement observed in the risk-adjusted SRI returns (Tables 8.2, 8.3 and 8.4) the average single-factor CAPM Jensen’s alphas declined in sub-period two and improved in sub-period three. This finding mirrors the trend observed in Table 8.1 which illustrated the unadjusted (raw) returns of the SRI funds.

8.4.5 The two-factor Van Rensburg and Slaney APT Jensen’s alpha

A fund’s two-factor Van Rensburg and Slaney APT Jensen’s alpha can be determined by using the regression equation as specified in Equation 8.9:

\[ R_{it} = \alpha_{it} + \beta_{it} R_{GOLDt} + \epsilon_{it} \]

where \( t = 1,2...T \) and:

\( R_{it} \) = The risk premium of fund \( i \) during period \( t \), determined by \( r_{it} - r_f \)

\( \alpha_{it} \) = The intercept of the regression representing the alpha coefficient of fund \( i \)

\( R_{GOLDt} \) = The risk premium of the JSE Actuaries All Gold Index in period \( t \) (predecessor of the present day FTSE/JSE Gold Mining index) over and above the risk-free rate of return

\( R_{INDt} \) = The risk premium the JSE Actuaries Industrial Index in period \( t \) (predecessor of the present day FTSE/JSE Industrials Index) over and above the risk-free rate of return

\( \epsilon_{it} \) = The stochastic error term of fund \( i \) in period \( t \) representing firm-specific risk
This specific two-factor APT model suggested by Van Rensburg and Slaney (1997:1) was used as it considers the skewed nature of the FTSE/JSE All Share Index. It was pointed out in section 6.3.8 of Chapter Six that one-third of the FTSE/JSE All Share Index’s constituents are mining and resource companies. As in the case of the single-factor CAPM, superior fund performance is associated with a positive alpha coefficient, whereas inferior performance is indicated by a negative alpha coefficient.

Table 8.6 reflects the two-factor Van Rensburg APT Jensen’s alphas of the SRI funds during the three respective sub-periods.
### TABLE 8.6: Overview of the two-factor Van Rensburg and Slaney APT Jensen’s alphas of local SRI funds

<table>
<thead>
<tr>
<th>SRI fund name</th>
<th>Status</th>
<th>Two-factor APT Jensen’s alpha</th>
<th>sig(b)</th>
<th>R²</th>
<th>Two-factor APT Jensen’s alpha</th>
<th>sig(b)</th>
<th>R²</th>
<th>Two-factor APT Jensen’s alpha</th>
<th>sig(b)</th>
<th>R²</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>sub-period 1</td>
<td></td>
<td></td>
<td>sub-period 2</td>
<td></td>
<td></td>
<td>sub-period 3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>African Harvest Infrastructure Bond Fund</td>
<td>A</td>
<td>0.023</td>
<td>0.464</td>
<td>0.008</td>
<td>0.381</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Community Growth Gilt Fund</td>
<td>A</td>
<td>0.020</td>
<td>**</td>
<td>0.394</td>
<td>0.007</td>
<td>0.393</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Community Growth Equity Fund</td>
<td>A</td>
<td>0.010</td>
<td>0.705</td>
<td>0.006</td>
<td>0.716</td>
<td>-0.001</td>
<td>0.878</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fraters Earth Equity Fund</td>
<td>A</td>
<td></td>
<td></td>
<td></td>
<td>0.010</td>
<td>*</td>
<td>0.833</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fraters Flexible Fund</td>
<td>A</td>
<td></td>
<td></td>
<td></td>
<td>0.008</td>
<td>0.765</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fraters Real Income Fund</td>
<td>A</td>
<td></td>
<td></td>
<td></td>
<td>0.007</td>
<td>0.628</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Futuregrowth Albaraka Equity Fund</td>
<td>A</td>
<td>0.007</td>
<td>0.674</td>
<td>0.012</td>
<td>0.596</td>
<td>0.008</td>
<td>0.789</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Futuregrowth Anchor Fund</td>
<td>D</td>
<td>0.056</td>
<td>*</td>
<td>0.824</td>
<td>-0.004</td>
<td>0.571</td>
<td>-0.003</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Futuregrowth Community Property Fund</td>
<td>A</td>
<td>0.016</td>
<td>0.837</td>
<td>0.020</td>
<td>*</td>
<td>0.083</td>
<td>0.009</td>
<td>0.380</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Futuregrowth Infrastructure Bond Fund</td>
<td>A</td>
<td>0.006</td>
<td>0.837</td>
<td>0.021</td>
<td>**</td>
<td>0.387</td>
<td>0.008</td>
<td>0.394</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Futuregrowth SRI Balanced Fund</td>
<td>A</td>
<td></td>
<td></td>
<td></td>
<td>0.009</td>
<td>0.774</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Futuregrowth SRI Equity Fund</td>
<td>A</td>
<td></td>
<td></td>
<td></td>
<td>0.008</td>
<td>0.797</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Investec Mafisa Fund</td>
<td>D</td>
<td>0.001</td>
<td>0.378</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Investec Sechaba Fund</td>
<td>D</td>
<td>0.004</td>
<td>0.477</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Investment Solutions Sakhisizwe Fund</td>
<td>A</td>
<td></td>
<td></td>
<td></td>
<td>0.016</td>
<td></td>
<td>0.044</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Metropolitan Futurebuilder Fund</td>
<td>A</td>
<td>0.014</td>
<td>0.826</td>
<td>0.009</td>
<td>0.478</td>
<td>0.006</td>
<td>0.774</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Momentum Supernation Fund</td>
<td>A</td>
<td></td>
<td></td>
<td></td>
<td>0.014</td>
<td>**</td>
<td>0.687</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nedbank Sustainability Investing Index Fund</td>
<td>D</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-0.011</td>
<td></td>
<td></td>
<td></td>
<td>0.911</td>
</tr>
<tr>
<td>Oasis Crescent Equity Fund</td>
<td>A</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.573</td>
<td>0.004</td>
<td>0.798</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oasis Crescent International FoF</td>
<td>A</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-0.009</td>
<td></td>
<td>0.372</td>
<td></td>
<td></td>
</tr>
<tr>
<td>OMAM IDEAS Fund</td>
<td>A</td>
<td>0.020</td>
<td>*</td>
<td>0.183</td>
<td>0.009</td>
<td>0.305</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sanlam Empowerment Equity Fund</td>
<td>D</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-0.017</td>
<td>0.630</td>
<td>-0.008</td>
<td>0.415</td>
<td></td>
</tr>
</tbody>
</table>
TABLE 8.6: Overview of the two-factor Van Rensburg and Slaney APT Jensen’s alphas of local SRI funds (cont.)

<table>
<thead>
<tr>
<th>SRI fund name</th>
<th>Status(^{(a)})</th>
<th>Two-factor APT Jensen’s alpha sub-period 1</th>
<th>sig(^{(b)})</th>
<th>R(^2)</th>
<th>Two-factor APT Jensen’s alpha sub-period 2</th>
<th>sig(^{(b)})</th>
<th>R(^2)</th>
<th>Two-factor APT Jensen’s alpha sub-period 3</th>
<th>sig(^{(b)})</th>
<th>R(^2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>STANLIB Corporate Wealth Development Fund</td>
<td>A</td>
<td>0.012</td>
<td></td>
<td>0.874</td>
<td>0.014</td>
<td>*</td>
<td>0.477</td>
<td>0.007</td>
<td></td>
<td>0.504</td>
</tr>
<tr>
<td>TopGEAR Fund</td>
<td>D</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average</td>
<td></td>
<td>0.017</td>
<td></td>
<td>0.797</td>
<td>0.011</td>
<td></td>
<td>0.458</td>
<td>0.005</td>
<td></td>
<td>0.607</td>
</tr>
</tbody>
</table>

(a) A = Active; D = Discontinued
(b) * significant at the 95% level; ** significant at the 99% level
The statistics contained in Table 8.6 show that:

- more SRI funds (five compared with one) exhibited inferior fund performance in sub-period three compared with the single-factor CAPM;
- improved $R^2$ values are recorded in sub-periods one and two, but a lower $R^2$ value is observed in sub-period three;
- as in the case of the single-factor CAPM, $R^2$ values in sub-periods two and three were below the cut-off level of 0.7;
- higher average Jensen’s alpha values are recorded in sub-periods one and two as compared with the single-factor CAPM, but a much lower average Jensen’s alpha is recorded in sub-period three.

8.5 HYPOTHESIS TESTING

8.5.1 Introductory remarks

As indicated in the hypothetical model (Figure 1.4 of Chapter One), eight pairs of null and alternative hypotheses were formulated. For ease of reading, Figure 1.4 of Chapter One is restated here as Figure 8.1.

As summarised in Figure 8.1, local SRI fund performance is compared with three benchmark categories, namely the respective benchmark indices of the SRI funds, a sample of conventional (non-SRI) funds and the general equity market in South Africa. SRI fund performance was evaluated during the three sub-periods identified earlier. Given difficulties in accessing data, a comparison of SRI fund performance *vis-à-vis* conventional (non-SRI) funds could only be undertaken during sub-periods two and three.

The wording of the hypotheses will be repeated in the relevant sections.
FIGURE 8.1: Hypothetical model underpinning the research
A matched pairs design was used in order to make inferences about the differences between sample means and involved seven steps, namely:

- Step 1: Calculating the risk-adjusted performance of the SRI funds and the constituents of the three benchmark categories.
- Step 2: Calculating the differences of the paired observations.
- Step 3: Calculating the sample mean and standard deviation of the observed differences.
- Step 4: Testing for normality.
- Step 5: Deciding on the most appropriate measure of statistical significance to be used.
- Step 6: Computing the relevant test statistic.
- Step 7: Deciding whether or not to reject the null hypothesis.

Each of these steps will now be explained in more detail.

**Step 1: Calculating the risk-adjusted performance of the SRI funds and the constituents of the three benchmark categories**

Given the benchmark problem associated with market dependent performance measures (such as the Jensen’s alpha, Treynor ratio and Information ratio), a decision was taken to focus exclusively on the Sharpe, Sortino and Upside-potential ratios in terms of testing the hypotheses. The relevant equations for these ratios have already been presented (Equations 8.3, 8.4 and 8.5 respectively).

**Step 2: Calculating the differences of the paired observations**

The second step in testing the hypotheses involved calculating the differences of the paired observations ($D$’s) as indicated in Table 8.7. Contextualised for this research, $X_{1,1}, X_{1,2}, ..., X_{1,n}$ represent the $n$ observations from the first sample (e.g. the Sharpe ratios of the SRI funds during sub-period one), whereas
$X_{1,1}, X_{2,2}...X_{2,n}$ represent the corresponding $n$ matched observations from the second sample (e.g. the Sharpe ratios of the SRI funds’ respective benchmark indices during sub-period one).

**TABLE 8.7: Calculating the differences of paired observations**

<table>
<thead>
<tr>
<th>Observation</th>
<th>Sample 1</th>
<th>Sample 2</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>$X_{1,1}$</td>
<td>$X_{2,1}$</td>
<td>$D_1 = X_{1,1} - X_{2,1}$</td>
</tr>
<tr>
<td>2</td>
<td>$X_{1,2}$</td>
<td>$X_{2,2}$</td>
<td>$D_2 = X_{1,2} - X_{2,2}$</td>
</tr>
<tr>
<td>...</td>
<td>...</td>
<td>...</td>
<td>...</td>
</tr>
<tr>
<td>$n$</td>
<td>$X_{1,n}$</td>
<td>$X_{2,n}$</td>
<td>$D_n = X_{1,n} - X_{2,n}$</td>
</tr>
</tbody>
</table>

**Source:** Levine et al. (2005:404)

$D_1, D_2...D_n$ consequently represent the corresponding set of $n$ difference scores and may be seen as a random sample of observations from a population of differences. For this research $D_1, D_2...D_n$ refers to the difference between the risk-adjusted SRI fund performance and that of the constituents of the three benchmark categories during a specific sub-period. For example Sharpe$_{FUND}$ minus Sharpe$_{FTSE/JSE ALL SHARE INDEX}$ during sub-period 1 (1 June 1992 to 31 August 1998). In order to test for the mean differences, the difference scores ($D_i$’s) were treated as observations from a single sample.

**Step 3: Calculating the sample mean and standard deviation of the observed differences**

Equations 8.9 and 8.10 were used to calculate the mean ($\bar{D}$) and standard deviation ($S_D$) of the single-sample of difference scores (Levine et al. 2005:387):

$$\bar{D} = \frac{\sum_{i=1}^{n} D_i}{n} \quad \text{..................................................(Eq 8.9)}$$
\[ S_D = \sqrt{\frac{\sum_{i=1}^{n} (D_i - \overline{D})^2}{n - 1}} \]  \hspace{1cm} \text{(Eq 8.10)}

where:
\[ \overline{D} = \text{Mean of difference scores} \]
\[ D_i = \text{Individual difference scores} \]
\[ n = \text{Sample size} \]
\[ S_D = \text{Standard deviation of difference scores} \]

In the context of this research, \( \overline{D} \) refers to the average risk-adjusted SRI fund performance and that of constituents of the three benchmark categories during a specific sub-period, whereas \( S_D \) refers to the associated sample standard deviation,

**Step 4: Testing for normality**

The Shapiro Wilk W-test was used to determine the shape of the ‘difference’ distribution. A distribution is normally distributed when the W statistic is insignificant i.e. if the p-value of the W test is higher than 0.05 (STATISTICA Electronic Manual 2006). A significance level (\( \alpha \)) of 0.05 was used consistently throughout the data analysis.

**Step 5: Deciding on the most appropriate measure of statistical significance to be used**

In cases were the ‘difference’ distribution was normally distributed, a single-sample t-test was conducted. In a single-sample t-test, the observed mean (\( \overline{D} \)) is compared with an expected (or reference) mean for the population (\( \mu_D \)) and the variation in the population (\( \sigma_D \)) is estimated based on the variation in the
observed sample ($S_D$) (STATISTICA Electronic Manual 2006). For the purpose of this research the reference mean was set at zero.

In cases where the ‘difference’ distribution was skewed, a Wilcoxon matched pairs test was performed. This non-parametric test is also referred to as the Wilcoxon signed rank test and the Wilcoxon rank sum test (Neter, Wasserman & Whitmore 1993:435; Leedy & Ormrod 2005:274). In a Wilcoxon matched pairs test the observed median of a single-sample ($M_D$) is compared with an expected (or reference) median for the population ($\eta_D$).

Inferences about the population median are important for two main reasons. Firstly, when the population is highly skewed the population median is located more to the centre of the distribution than the population mean and is thus a more meaningful measure of position. Secondly, when the population is symmetrical, the population mean and median coincide and are thus equally meaningful measures of position (Neter et al. 1993:435).

Although the Wilcoxon matched pairs test is not as robust at the t-test, it is still widely used in statistical analyses. According to Levine et al. (2005:484), the Wilcoxon matched pairs test often compares favourably with the t-test which is based on stricter assumptions about the underlying population. In testing the research hypotheses of this study, a conservative stance was adopted by using the most appropriate measure of statistical significance based on the shape of the ‘difference’ distribution.

**Step 6: Computing the relevant test statistic**

The single-sample t-test follows a t-distribution with $n – 1$ degrees of freedom and can be calculated using Equation 8.11 (Levine et al. 2005:387):
\[ t = \frac{\bar{D} - \mu_D}{\frac{S_D}{\sqrt{n}}} \] 
(Eq 8.11)

where:
\( \bar{D} \) = Sample mean
\( \mu_D \) = Expected or reference mean for the population
\( S_D \) = Sample standard deviation
\( n \) = Sample size

The Wilcoxon matched pairs test is performed in five steps:

- Step 1: Obtaining the absolute values of the sample differences \(|D|\).
- Step 2: Ranking the absolute differences.
- Step 3: Attaching a plus or a minus sign to each rank according to whether its associated sample difference \((D_i)\) is positive or negative.
- Step 4: Summing up the signed ranks and denoting the sum by \(T\). If the sample differences are mainly positive, then the positive ranks making up the Wilcoxon sum \(T\) dominate making \(T\) large and positive. Conversely, if the sample differences are mainly negative, then the negative ranks dominate making \(T\) large and negative; and
- Step 5: Calculating a standardised Z-test statistic according to Equation 8.12.

\[ Z = \frac{T}{\sigma[T]} \] 
(Eq 8.12)

where:
\[ \sigma[T] = \sqrt{\frac{n(n+1)(2n+1)}{6}} \]
and where:

\[ T \] = Sum of signed ranks

\[ n \] = Sample size

\[ \sigma^2(T) \] = Standard deviation of signed ranks

**Step 7: Deciding whether or not to reject the null hypothesis**

A null hypothesis was rejected when the p-values of all three risk-adjusted measures’ test statistics were smaller than 0.05. Where conflicting p-values were recorded, a final decision was based on the Upside-potential ratio. This ratio is seen as the most sophisticated of the three risk-adjusted measures in that it considers both upside-potential (theta) and downside risk (delta).

Having described the procedures to be followed in testing the hypotheses, the focus will now shift to the actual testing thereof.

**8.5.2 Testing the null and alternative hypotheses associated with the first benchmark category**

As indicated in Figure 8.1, the first benchmark category deals with an evaluation of SRI fund performance against the SRI funds’ own benchmark indices. Three pairs of null and alternative hypotheses were formulated to correspond with the three sub-periods identified in SRI history in South Africa. More formally these hypotheses can be stated as:

- \( H_{1,0} \): There is no difference between the risk-adjusted performance of South African SRI funds and their respective benchmark indices over the period 1 June 1992 – 31 August 1998 (the establishment period of SRI in South Africa).
- \( H_{1,A} \): There is a difference between the risk-adjusted performance of South African SRI funds and their respective benchmark indices over the period 1

- $H_{2,0}$: There is no difference between the risk-adjusted performance of South African SRI funds and their respective benchmark indices over the period 1 September 1998 – 31 March 2002 (the decline period of SRI in South Africa).

- $H_{2,A}$: There is a difference between the risk-adjusted performance of South African SRI funds and their respective benchmark indices over the period 1 September 1998 – 31 March 2002 (the decline period of SRI in South Africa).

- $H_{3,0}$: There is no difference between the risk-adjusted performance of South African SRI funds and their respective benchmark indices over the period 1 April 2002 – 31 March 2006 (the resurgence period of SRI in South Africa).

- $H_{3,A}$: There is a difference between the risk-adjusted performance of South African SRI funds and their respective benchmark indices over the period 1 April 2002 – 31 March 2006 (the resurgence period of SRI in South Africa).

Tables 8.8, 8.9 and 8.10, which deal with the three abovementioned hypotheses, are structured in the same sequence. In column (1) the names of the SRI funds are listed in alphabetical order. In column (2) the calculated Sharpe ratios of the SRI funds are shown as well as the Sharpe ratios of the benchmark indices in column (3). The SRI funds’ respective benchmark indices were listed in Tables 7.2 and 7.3 of Chapter Seven.

Column (4), labelled “Difference Sharpe” was calculated by taking the difference between the Sharpe ratios of the SRI funds and the Sharpe ratios of their respective benchmark indices. This approach corresponds with step number two as explained in section 8.5.1 of this chapter. In columns (5) and (6) the calculated Sortino ratios of the SRI funds and their respective benchmark indices are reflected. Column (7) was calculated by taking the difference between the Sortino ratios of the SRI funds and the Sortino ratios of their respective benchmark indices. The Upside-potential ratios (UPR) of the SRI funds are shown in column...
(8), that of their respective benchmark indices in column (9) and the differences in column (10). Also contained in the tables are the results of the Shapiro Wilk W-tests and the relevant significance tests.

Based on the Sharpe, Sortino and Upside-potential ratios, SRI funds outperformed their benchmark indices during sub-period one (\(\bar{D}\) equal to 0.382, 0.419 and 0.146 respectively). As only the Sharpe ratio’s t-test yielded a statistically significant finding, a final decision was made based on the Upside-potential ratio (the justification of which was provided earlier). As the Upside-potential ratio’s t-test did not yield a statistically significantly p-value (p = 0.546 > 0.050), \(H_{1,0}\) could not be rejected. This implies that there is no difference between the risk-adjusted performance of South African SRI funds and their respective benchmark indices over the period 1 June 1992 – 31 August 1998 (the establishment period of SRI in South Africa).
TABLE 8.8: SRI funds vis-à-vis benchmark indices in sub-period one (1 June 1992 – 31 August 1998)

<table>
<thead>
<tr>
<th>SRI fund name</th>
<th>Sharpe SRI FUND</th>
<th>Sharpe BENCHMARK</th>
<th>Difference Sharpe</th>
<th>Sortino SRI FUND</th>
<th>Sortino BENCHMARK</th>
<th>Difference Sortino</th>
<th>UPR SRI FUND</th>
<th>UPR BENCHMARK</th>
<th>Difference UPR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Community Growth Equity Fund</td>
<td>0.343</td>
<td>0.011</td>
<td>0.333</td>
<td>1.764</td>
<td>1.732</td>
<td>0.032</td>
<td>3.418</td>
<td>4.142</td>
<td>-0.724</td>
</tr>
<tr>
<td>Futuregrowth Albaraka Equity Fund</td>
<td>0.241</td>
<td>0.011</td>
<td>0.230</td>
<td>2.206</td>
<td>1.732</td>
<td>0.474</td>
<td>4.653</td>
<td>4.142</td>
<td>0.511</td>
</tr>
<tr>
<td>Futuregrowth Anchor Fund</td>
<td>-0.254</td>
<td>-1.027</td>
<td>0.773</td>
<td>0.300</td>
<td>0.870</td>
<td>-0.570</td>
<td>2.061</td>
<td>1.248</td>
<td>0.813</td>
</tr>
<tr>
<td>Futuregrowth Community Property Fund</td>
<td>0.178</td>
<td>-0.134</td>
<td>0.312</td>
<td>1.418</td>
<td>1.243</td>
<td>0.175</td>
<td>0.983</td>
<td>0.669</td>
<td>0.314</td>
</tr>
<tr>
<td>Futuregrowth Infrastructure Bond Fund</td>
<td>-0.102</td>
<td>-0.138</td>
<td>0.036</td>
<td>2.245</td>
<td>2.097</td>
<td>0.148</td>
<td>2.203</td>
<td>2.024</td>
<td>0.180</td>
</tr>
<tr>
<td>Metropolitan Futurebuilder Fund</td>
<td>-0.145</td>
<td>-1.071</td>
<td>0.926</td>
<td>1.309</td>
<td>-1.006</td>
<td>2.316</td>
<td>1.112</td>
<td>1.768</td>
<td>-0.657</td>
</tr>
<tr>
<td>STANLIB Corporate Wealth Development Fund</td>
<td>-0.209</td>
<td>-0.276</td>
<td>0.067</td>
<td>1.022</td>
<td>0.662</td>
<td>0.360</td>
<td>0.982</td>
<td>0.395</td>
<td>0.587</td>
</tr>
</tbody>
</table>

Shapiro Wilk W-test: 0.878 0.791 0.866
p-value Shapiro Wilk W-test: 0.218 0.033 0.171
Reference mean: 0.000 0.000 0.000
Mean of difference scores ($\bar{D}$): 0.382 0.419 0.146
Standard deviation of difference scores ($\bar{S}_D$): 0.341 0.900 0.605
Single-sample t-test: 2.967 - 0.639
p-value single-sample t-test: 0.025 - 0.546
Wilcoxon matched pairs test (Z-value): - 1.352 -

p-value Wilcoxon matched pairs test: - 0.176 -
<table>
<thead>
<tr>
<th>SRI fund name</th>
<th>Sharpe SRI FUND</th>
<th>Sharpe BENCHMARK</th>
<th>Difference Sharpe</th>
<th>Sortino SRI FUND</th>
<th>Sortino BENCHMARK</th>
<th>Difference Sortino</th>
<th>UPR SRI FUND</th>
<th>UPR BENCHMARK</th>
<th>Difference UPR</th>
</tr>
</thead>
<tbody>
<tr>
<td>African Harvest Infrastructure Bond Fund</td>
<td>0.179</td>
<td>0.181</td>
<td>-0.002</td>
<td>1.724</td>
<td>1.670</td>
<td>0.053</td>
<td>1.952</td>
<td>1.999</td>
<td>-0.048</td>
</tr>
<tr>
<td>Community Growth Gilt Fund</td>
<td>2.168</td>
<td>2.240</td>
<td>-0.072</td>
<td>5.091</td>
<td>5.981</td>
<td>-0.890</td>
<td>4.846</td>
<td>5.886</td>
<td>-1.040</td>
</tr>
<tr>
<td>Futuregrowth Albaraka Equity Fund</td>
<td>2.039</td>
<td>1.884</td>
<td>0.154</td>
<td>10.699</td>
<td>12.314</td>
<td>-1.615</td>
<td>13.112</td>
<td>17.261</td>
<td>-4.149</td>
</tr>
<tr>
<td>Futuregrowth Anchor Fund</td>
<td>0.830</td>
<td>1.712</td>
<td>-0.881</td>
<td>0.932</td>
<td>9.465</td>
<td>-8.533</td>
<td>10.999</td>
<td>14.970</td>
<td>-3.971</td>
</tr>
<tr>
<td>Futuregrowth Community Property Fund</td>
<td>1.799</td>
<td>2.308</td>
<td>-0.509</td>
<td>2.843</td>
<td>5.315</td>
<td>-2.472</td>
<td>2.903</td>
<td>3.443</td>
<td>-0.540</td>
</tr>
<tr>
<td>Futuregrowth Infrastructure Bond Fund</td>
<td>2.367</td>
<td>2.240</td>
<td>0.127</td>
<td>6.302</td>
<td>5.981</td>
<td>0.321</td>
<td>5.874</td>
<td>5.886</td>
<td>-0.011</td>
</tr>
<tr>
<td>Investec Sechaba Fund</td>
<td>0.509</td>
<td>0.478</td>
<td>0.031</td>
<td>2.778</td>
<td>3.145</td>
<td>-0.368</td>
<td>2.321</td>
<td>1.593</td>
<td>0.728</td>
</tr>
<tr>
<td>Metropolitan Futurebuilder Fund</td>
<td>1.585</td>
<td>0.889</td>
<td>0.696</td>
<td>3.962</td>
<td>-3.661</td>
<td>7.623</td>
<td>7.526</td>
<td>6.920</td>
<td>0.606</td>
</tr>
<tr>
<td>Oasis Crescent Equity Fund</td>
<td>2.969</td>
<td>1.884</td>
<td>1.084</td>
<td>32.864</td>
<td>12.314</td>
<td>20.550</td>
<td>27.314</td>
<td>17.261</td>
<td>10.053</td>
</tr>
<tr>
<td>OMAM IDEAS Fund</td>
<td>1.992</td>
<td>2.528</td>
<td>-0.536</td>
<td>3.801</td>
<td>6.456</td>
<td>-2.655</td>
<td>3.045</td>
<td>3.679</td>
<td>-0.634</td>
</tr>
<tr>
<td>Sanlam Empowerment Equity Fund</td>
<td>0.246</td>
<td>1.870</td>
<td>-1.624</td>
<td>-3.530</td>
<td>13.103</td>
<td>-16.633</td>
<td>8.065</td>
<td>18.387</td>
<td>-10.322</td>
</tr>
<tr>
<td>STANLIB Corporate Wealth Development Fund</td>
<td>1.792</td>
<td>2.001</td>
<td>-0.209</td>
<td>5.083</td>
<td>3.160</td>
<td>1.923</td>
<td>6.306</td>
<td>2.543</td>
<td>3.763</td>
</tr>
</tbody>
</table>
TABLE 8.9: SRI funds vis-à-vis benchmark indices in sub-period two (1 September 1998 – 31 March 2002) (cont.)

<table>
<thead>
<tr>
<th>SRI fund name</th>
<th>Sharpe SRI FUND</th>
<th>Sharpe BENCHMARK</th>
<th>Difference Sharpe</th>
<th>Sortino SRI FUND</th>
<th>Sortino BENCHMARK</th>
<th>Difference Sortino</th>
<th>UPR SRI FUND</th>
<th>UPR BENCHMARK</th>
<th>Difference UPR</th>
</tr>
</thead>
<tbody>
<tr>
<td>TopGEAR Fund</td>
<td>0.884</td>
<td>1.007</td>
<td>-0.123</td>
<td>-0.816</td>
<td>-3.894</td>
<td>3.078</td>
<td>5.187</td>
<td>7.105</td>
<td>-1.918</td>
</tr>
<tr>
<td>Shapiro Wilk W-test</td>
<td>0.961</td>
<td>0.901</td>
<td>0.060</td>
<td>0.098</td>
<td>0.861</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>p-value Shapiro Wilk W-test</td>
<td>0.717</td>
<td>0.098</td>
<td>0.025</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reference mean</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean of difference scores ((\bar{D}))</td>
<td>-0.183</td>
<td>-0.099</td>
<td>0.858</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Standard deviation of difference scores ((S_D))</td>
<td>0.640</td>
<td>7.989</td>
<td>6.939</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single-sample t-test</td>
<td>-1.109</td>
<td>-0.048</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>p-value Single-sample t-test</td>
<td>0.286</td>
<td>0.962</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wilcoxon matched pairs test (Z-value)</td>
<td>-</td>
<td>-</td>
<td>0.681</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>p-value Wilcoxon matched pairs test</td>
<td>-</td>
<td>-</td>
<td>0.095</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
According to the Sharpe and Sortino ratios SRI funds marginally underperformed their benchmark indices during sub-period two ($\bar{D}$ equal to -0.183 and -0.099 respectively). In contrast, the Upside-potential ratio indicates that SRI funds marginally outperformed their benchmark indices during the same period ($\bar{D}$ equal to 0.858). As none of the differences were however statistically significant (p-values equal to 0.286, 0.962 and 0.095 respectively), $H_{2,0}$ could not be rejected. This implies that there is no difference between the risk-adjusted performance of South African SRI funds and their respective benchmark indices over the period 1 September 1998 – 31 March 2002 (the decline period of SRI in South Africa).
TABLE 8.10: SRI funds vis-à-vis benchmark indices in sub-period three (1 April 2002 – 31 March 2006)

<table>
<thead>
<tr>
<th>SRI fund name</th>
<th>Sharpe SRI FUND</th>
<th>Sharpe BENCHMARK</th>
<th>Difference Sharpe</th>
<th>Sharpe SRI FUND</th>
<th>Sharpe BENCHMARK</th>
<th>Sortino SRI FUND</th>
<th>Sortino BENCHMARK</th>
<th>Sortino Difference</th>
<th>Sortino SRI FUND</th>
<th>Sortino BENCHMARK</th>
<th>UPR SRI FUND</th>
<th>UPR BENCHMARK</th>
<th>UPR Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>African Harvest Infrastructure Bond Fund</td>
<td>1.785</td>
<td>1.753</td>
<td>0.032</td>
<td>17.419</td>
<td>17.140</td>
<td>0.280</td>
<td>0.090</td>
<td>0.092</td>
<td>-0.002</td>
<td>-296</td>
<td>-0.007</td>
<td>-0.007</td>
<td>-0.000</td>
</tr>
<tr>
<td>Community Growth Gilt Fund</td>
<td>1.760</td>
<td>1.764</td>
<td>-0.005</td>
<td>16.020</td>
<td>17.010</td>
<td>-0.990</td>
<td>0.087</td>
<td>0.094</td>
<td>-0.007</td>
<td>0.012</td>
<td>0.012</td>
<td>0.012</td>
<td>-0.007</td>
</tr>
<tr>
<td>Community Growth Equity Fund</td>
<td>1.610</td>
<td>1.050</td>
<td>0.560</td>
<td>13.292</td>
<td>8.195</td>
<td>5.097</td>
<td>0.112</td>
<td>0.100</td>
<td>0.012</td>
<td>0.137</td>
<td>0.137</td>
<td>0.137</td>
<td>0.000</td>
</tr>
<tr>
<td>Fraters Earth Equity Fund</td>
<td>2.137</td>
<td>1.307</td>
<td>0.830</td>
<td>31.153</td>
<td>9.116</td>
<td>22.036</td>
<td>0.228</td>
<td>0.092</td>
<td>0.137</td>
<td>0.064</td>
<td>0.064</td>
<td>0.064</td>
<td>0.000</td>
</tr>
<tr>
<td>Fraters Flexible Fund</td>
<td>2.013</td>
<td>1.510</td>
<td>0.502</td>
<td>24.465</td>
<td>12.488</td>
<td>11.977</td>
<td>0.165</td>
<td>0.103</td>
<td>0.062</td>
<td>0.078</td>
<td>0.078</td>
<td>0.078</td>
<td>0.000</td>
</tr>
<tr>
<td>Fraters Real Income Fund</td>
<td>2.407</td>
<td>2.094</td>
<td>0.313</td>
<td>69.782</td>
<td>35.060</td>
<td>34.723</td>
<td>0.278</td>
<td>0.069</td>
<td>0.210</td>
<td>0.089</td>
<td>0.089</td>
<td>0.089</td>
<td>0.000</td>
</tr>
<tr>
<td>Futuregrowth Albaraka Equity Fund</td>
<td>1.858</td>
<td>1.050</td>
<td>0.808</td>
<td>23.240</td>
<td>8.195</td>
<td>15.045</td>
<td>0.189</td>
<td>0.100</td>
<td>0.089</td>
<td>0.082</td>
<td>0.082</td>
<td>0.082</td>
<td>0.000</td>
</tr>
<tr>
<td>Futuregrowth Anchor Fund</td>
<td>1.002</td>
<td>0.570</td>
<td>0.432</td>
<td>8.136</td>
<td>4.121</td>
<td>4.015</td>
<td>0.062</td>
<td>0.050</td>
<td>0.012</td>
<td>0.078</td>
<td>0.078</td>
<td>0.078</td>
<td>0.000</td>
</tr>
<tr>
<td>Futuregrowth Community Property Fund</td>
<td>1.818</td>
<td>1.490</td>
<td>0.328</td>
<td>18.120</td>
<td>14.115</td>
<td>4.005</td>
<td>0.084</td>
<td>0.051</td>
<td>0.034</td>
<td>0.092</td>
<td>0.092</td>
<td>0.092</td>
<td>0.000</td>
</tr>
<tr>
<td>Futuregrowth Infrastructure Bond Fund</td>
<td>1.829</td>
<td>1.764</td>
<td>0.064</td>
<td>17.914</td>
<td>17.010</td>
<td>0.904</td>
<td>0.093</td>
<td>0.094</td>
<td>-0.001</td>
<td>-0.033</td>
<td>-0.033</td>
<td>-0.033</td>
<td>-0.000</td>
</tr>
<tr>
<td>Futuregrowth SRI Balanced Fund</td>
<td>2.812</td>
<td>2.560</td>
<td>0.252</td>
<td>31.433</td>
<td>39.435</td>
<td>-8.002</td>
<td>0.139</td>
<td>0.181</td>
<td>-0.043</td>
<td>-0.093</td>
<td>-0.093</td>
<td>-0.093</td>
<td>-0.000</td>
</tr>
<tr>
<td>Futuregrowth SRI Equity Fund</td>
<td>2.478</td>
<td>2.388</td>
<td>0.091</td>
<td>36.022</td>
<td>27.997</td>
<td>8.025</td>
<td>0.178</td>
<td>0.143</td>
<td>0.035</td>
<td>0.073</td>
<td>0.073</td>
<td>0.073</td>
<td>0.000</td>
</tr>
<tr>
<td>Investment Solutions Sakhisizwe Fund</td>
<td>2.389</td>
<td>2.637</td>
<td>-0.248</td>
<td>26.286</td>
<td>17.372</td>
<td>8.914</td>
<td>0.104</td>
<td>0.066</td>
<td>0.038</td>
<td>0.074</td>
<td>0.074</td>
<td>0.074</td>
<td>0.000</td>
</tr>
<tr>
<td>Metropolitan Futurebuilder Fund</td>
<td>1.779</td>
<td>-0.497</td>
<td>2.277</td>
<td>19.495</td>
<td>-2.321</td>
<td>21.817</td>
<td>0.135</td>
<td>0.046</td>
<td>0.089</td>
<td>0.092</td>
<td>0.092</td>
<td>0.092</td>
<td>0.000</td>
</tr>
<tr>
<td>Momentum Supernation Fund</td>
<td>2.668</td>
<td>2.160</td>
<td>0.508</td>
<td>45.040</td>
<td>29.296</td>
<td>15.744</td>
<td>0.229</td>
<td>0.161</td>
<td>0.068</td>
<td>0.086</td>
<td>0.086</td>
<td>0.086</td>
<td>0.000</td>
</tr>
</tbody>
</table>
TABLE 8.10: SRI funds vis-à-vis benchmark indices in sub-period three (1 April 2002 – 31 March 2006) (cont.)

<table>
<thead>
<tr>
<th>SRI fund name</th>
<th>Sharpe SRI FUND</th>
<th>Sharpe BENCHMARK</th>
<th>Difference Sharpe</th>
<th>Sortino SRI FUND</th>
<th>Sortino BENCHMARK</th>
<th>Difference Sortino</th>
<th>UPR SRI FUND</th>
<th>UPR BENCHMARK</th>
<th>Difference UPR</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1)</td>
<td>(2)</td>
<td>(3)</td>
<td>(4) = (2) – (3)</td>
<td>(5)</td>
<td>(6)</td>
<td>(7) = (5) – (6)</td>
<td>(8)</td>
<td>(9)</td>
<td>(10) = (8) – (9)</td>
</tr>
<tr>
<td><strong>Nedbank Sustainability Investing Index Fund</strong></td>
<td>1.135</td>
<td>1.076</td>
<td>0.059</td>
<td>13.937</td>
<td>17.659</td>
<td>-3.723</td>
<td>0.069</td>
<td>0.104</td>
<td>-0.035</td>
</tr>
<tr>
<td><strong>Oasis Crescent Equity Fund</strong></td>
<td>1.729</td>
<td>1.050</td>
<td>0.678</td>
<td>21.987</td>
<td>8.195</td>
<td>13.792</td>
<td>0.176</td>
<td>0.100</td>
<td>0.075</td>
</tr>
<tr>
<td><strong>Oasis Crescent International FoF</strong></td>
<td>0.455</td>
<td>0.075</td>
<td>0.380</td>
<td>3.234</td>
<td>0.440</td>
<td>2.794</td>
<td>0.086</td>
<td>0.065</td>
<td>0.021</td>
</tr>
<tr>
<td><strong>OMAM IDEAS Fund</strong></td>
<td>1.630</td>
<td>1.680</td>
<td>-0.050</td>
<td>13.296</td>
<td>17.403</td>
<td>-4.107</td>
<td>0.086</td>
<td>0.060</td>
<td>0.026</td>
</tr>
<tr>
<td><strong>Sanlam Empowerment Equity Fund</strong></td>
<td>-1.438</td>
<td>-3.261</td>
<td>1.824</td>
<td>-9.112</td>
<td>-14.186</td>
<td>5.074</td>
<td>0.057</td>
<td>0.015</td>
<td>0.042</td>
</tr>
<tr>
<td><strong>STANLIB Corporate Wealth Development Fund</strong></td>
<td>1.613</td>
<td>1.187</td>
<td>0.426</td>
<td>24.756</td>
<td>11.847</td>
<td>12.909</td>
<td>0.199</td>
<td>0.038</td>
<td>0.162</td>
</tr>
<tr>
<td><strong>Shapiro Wilk W-test</strong></td>
<td>0.804</td>
<td></td>
<td></td>
<td>0.956</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.930</td>
</tr>
<tr>
<td><strong>p-value Shapiro Wilk W-test</strong></td>
<td>0.000</td>
<td></td>
<td></td>
<td>0.451</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.142</td>
</tr>
<tr>
<td><strong>Reference mean</strong></td>
<td>0.000</td>
<td></td>
<td></td>
<td>0.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.000</td>
</tr>
<tr>
<td><strong>Mean of difference scores (D̄)</strong></td>
<td>0.479</td>
<td></td>
<td></td>
<td>8.110</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.049</td>
</tr>
<tr>
<td><strong>Standard deviation of difference scores (SD̄)</strong></td>
<td>0.599</td>
<td></td>
<td></td>
<td>10.228</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.063</td>
</tr>
<tr>
<td><strong>Single-sample t-test</strong></td>
<td>-</td>
<td></td>
<td></td>
<td>3.633</td>
<td></td>
<td></td>
<td>3.555</td>
<td></td>
<td>3.555</td>
</tr>
<tr>
<td><strong>p-value Single-sample t-test</strong></td>
<td>-</td>
<td></td>
<td></td>
<td>0.001</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.001</td>
</tr>
<tr>
<td><strong>Wilcoxon matched pairs test (Z-value)</strong></td>
<td>3.632</td>
<td></td>
<td></td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-</td>
</tr>
<tr>
<td><strong>p-value Wilcoxon matched pairs test</strong></td>
<td>0.000</td>
<td></td>
<td></td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-</td>
</tr>
</tbody>
</table>
All three measures of risk-adjusted portfolio performance indicate that SRI funds significantly outperformed their benchmark indices in sub-period three ($\bar{D}$ equal to 0.479, 8.110 and 0.049; p-values equal to 0.000, 0.001 and 0.001 respectively). As such, $H_{3.0}$ could be rejected. This implies that there is indeed a difference between the risk-adjusted performance of South African SRI funds and their respective benchmark indices over the period 1 April 2002 – 31 March 2006 (the resurgence period of SRI in South Africa).

With regard to the first benchmark category it can thus be said that there was no difference between the risk-adjusted performance of SRI funds and their respective benchmark indices during sub-periods one and two. Thereafter SRI funds, however, significantly outperformed their benchmark indices. This finding implies that the SRI sector in South Africa has undergone a learning effect i.e. that SRI fund managers needed time to familiarise themselves with the various dimensions of SRI within the South African context. Similar learning effects were noted in SRI markets in Australia (Cummings 2000:79; Bauer et al. 2005:1755), the UK (Mill 2006:131) as well as in the USA and in Germany (Bauer et al. 2006:33).

8.5.3 Testing the hypotheses associated with the second benchmark category

Using fund classification, size and date of incepting as matching criteria, two conventional (non-SRI) funds were selected for each SRI fund during the research period. As indicated in section 7.4.1(c) of Chapter Seven, primary data could only be sourced on SRI and conventional unit trusts given difficulties in accessing data on other pooled (non-unit trusts) and segregated funds. As such, performance could only be evaluated during sub-periods two and three. The corresponding pairs of null and alternative hypotheses read as follows:

- $H_{4.0}$: There is no difference between the risk-adjusted performance of South African SRI funds and a matched sample conventional (non-SRI) funds over
- 299 -

the period 1 September 1998 – 31 March 2002 (the decline period of SRI in South Africa).

- $H_{4,A}$: There is a difference between the risk-adjusted performance of South African SRI funds and a matched sample conventional (non-SRI) funds over the period 1 September 1998 – 31 March 2002 (the decline period of SRI in South Africa).

- $H_{5,0}$: There is no difference between the risk-adjusted performance of South African SRI funds and a matched sample conventional (non-SRI) funds over the period 1 April 2002 – 31 March 2006 (the resurgence period of SRI in South Africa).

- $H_{5,A}$: There is a difference between the risk-adjusted performance of South African SRI funds and a matched sample conventional (non-SRI) funds over the period 1 April 2002 – 31 March 2006 (the resurgence period of SRI in South Africa).

Tables 8.11 and 8.12, which deal with the two abovementioned hypotheses, are structured in the same manner. In column (1) the names of the SRI funds are listed in alphabetical order. In column (2) the calculated Sharpe ratios of the SRI funds are shown as well as the Sharpe ratios of the matched sample of conventional (non-SRI) funds in column (3). The names of the matched conventional (non-SRI) unit trusts were provided in Table 7.5 of Chapter Seven. The Sharpe ratios of the matched sample of conventional (non-SRI) funds were determined by calculating the average of the two matched (non-SRI) funds for each corresponding SRI fund.

Column (4) was calculated by taking the difference between the Sharpe ratios of the SRI funds and the Sharpe ratios of the matched sample of conventional (non-SRI) funds. In columns (5) and (6) the calculated Sortino ratios of the SRI funds and the matched sample of conventional (non-SRI) funds are reflected. Column (7) was calculated by taking the difference between the Sortino ratios of the SRI funds and the Sortino ratios of the matched sample of conventional (non-SRI) funds.
funds. The Upside-potential ratios (UPR) of the SRI funds are shown in column (8), that of the matched sample of conventional (non-SRI) funds in column (9) and the differences in column (10). Tables 8.11 and 8.12 also indicate the results of the Shapiro Wilk W-tests and the relevant significance tests.

According to the Sharpe ratio, SRI funds underperformed the sample of matched conventional (non-SRI) funds in sub-period two (\( \bar{D} \) equal to -0.182), whereas the Sortino and Upside-potential ratios suggest otherwise (\( \bar{D} \) equal to 1.124 and 0.577 respectively). However, as none of the differences were statistically significant, \( H_{4,0} \) could not be rejected. This implies that there is no difference between the risk-adjusted performance of South African SRI funds and a sample of matched conventional (non-SRI) funds over the period 1 September 1998 – 31 March 2002 (the decline period of SRI in South Africa).
### TABLE 8.11: SRI funds *vis-à-vis* matched conventional (non-SRI) funds in sub-period two (1 September 1998 – 31 March 2002)

<table>
<thead>
<tr>
<th>Name of SRI unit trust</th>
<th>Sharpe SRI FUND</th>
<th>Sharpe MATCHED SAMPLE</th>
<th>Difference Sharpe</th>
<th>Sortino SRI FUND</th>
<th>Sortino MATCHED SAMPLE</th>
<th>Difference Sortino</th>
<th>UPR SRI FUND</th>
<th>UPR MATCHED SAMPLE</th>
<th>Difference UPR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Community Growth Equity Fund</td>
<td>1.694</td>
<td>1.874</td>
<td>-0.181</td>
<td>15.727</td>
<td>20.920</td>
<td>-5.193</td>
<td>14.261</td>
<td>16.572</td>
<td>-2.311</td>
</tr>
<tr>
<td>Fraters Earth Equity Fund</td>
<td>-2.378</td>
<td>-0.135</td>
<td>-2.244</td>
<td>-20.303</td>
<td>-19.201</td>
<td>2.601</td>
<td>4.590</td>
<td>-1.989</td>
<td></td>
</tr>
<tr>
<td>Fraters Flexible Fund</td>
<td>-1.289</td>
<td>-0.463</td>
<td>-0.826</td>
<td>-9.545</td>
<td>-4.328</td>
<td>-5.217</td>
<td>2.710</td>
<td>3.007</td>
<td>-0.297</td>
</tr>
<tr>
<td>Futuregrowth Albaraka Equity Fund</td>
<td>2.039</td>
<td>1.553</td>
<td>0.486</td>
<td>18.606</td>
<td>13.401</td>
<td>5.205</td>
<td>13.112</td>
<td>12.451</td>
<td>0.660</td>
</tr>
<tr>
<td>Oasis Crescent Equity Fund</td>
<td>2.969</td>
<td>1.391</td>
<td>1.577</td>
<td>48.567</td>
<td>15.482</td>
<td>33.085</td>
<td>27.314</td>
<td>14.337</td>
<td>12.976</td>
</tr>
<tr>
<td>Oasis Crescent International FoF</td>
<td>1.781</td>
<td>0.716</td>
<td>1.064</td>
<td>19.106</td>
<td>5.053</td>
<td>14.053</td>
<td>8.971</td>
<td>7.303</td>
<td>1.669</td>
</tr>
<tr>
<td>Sanlam Empowerment Equity Fund</td>
<td>0.246</td>
<td>1.389</td>
<td>-1.143</td>
<td>1.962</td>
<td>13.141</td>
<td>-11.179</td>
<td>8.065</td>
<td>13.023</td>
<td>-4.958</td>
</tr>
<tr>
<td>Shapiro Wilk W-test</td>
<td>0.982</td>
<td>0.928</td>
<td>0.054</td>
<td></td>
<td></td>
<td></td>
<td>0.780</td>
<td></td>
<td></td>
</tr>
<tr>
<td>p-value Shapiro Wilk W-test</td>
<td>0.976</td>
<td>0.500</td>
<td>0.476</td>
<td></td>
<td></td>
<td></td>
<td>0.017</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reference mean</td>
<td>0.000</td>
<td>0.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean of difference scores ($\bar{D}$)</td>
<td>-0.182</td>
<td>1.124</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.577</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Standard deviation of difference scores ($S_D$)</td>
<td>1.235</td>
<td>16.315</td>
<td>5.400</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single-sample t-test</td>
<td>-0.417</td>
<td>0.195</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>p-value single-sample t-test</td>
<td>0.688</td>
<td>0.850</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wilcoxon matched pairs test (Z-value)</td>
<td>-</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.560</td>
<td></td>
<td></td>
</tr>
<tr>
<td>p-value Wilcoxon test</td>
<td>-</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.575</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Name of SRI unit trust</td>
<td>Sharpe SRI FUND</td>
<td>Sharpe MATCHED SAMPLE</td>
<td>Difference Sharpe</td>
<td>Sortino SRI FUND</td>
<td>Sortino MATCHED SAMPLE</td>
<td>Difference Sortino</td>
<td>UPR SRI FUND</td>
<td>UPR MATCHED SAMPLE</td>
<td>Difference UPR</td>
</tr>
<tr>
<td>--------------------------------------------------</td>
<td>-----------------</td>
<td>-----------------------</td>
<td>------------------</td>
<td>-----------------</td>
<td>------------------------</td>
<td>-------------------</td>
<td>--------------</td>
<td>-------------------</td>
<td>----------------</td>
</tr>
<tr>
<td>Community Growth Equity Fund</td>
<td>1.610</td>
<td>1.583</td>
<td>0.027</td>
<td>13.292</td>
<td>12.461</td>
<td>0.831</td>
<td>11.170</td>
<td>11.019</td>
<td>0.151</td>
</tr>
<tr>
<td>Futuregrowth Albaraka Equity Fund</td>
<td>1.858</td>
<td>1.320</td>
<td>0.538</td>
<td>23.240</td>
<td>10.638</td>
<td>12.601</td>
<td>18.897</td>
<td>10.562</td>
<td>8.335</td>
</tr>
<tr>
<td>Oasis Crescent International FoF</td>
<td>0.455</td>
<td>0.181</td>
<td>0.274</td>
<td>3.234</td>
<td>1.165</td>
<td>2.070</td>
<td>8.566</td>
<td>7.366</td>
<td>1.200</td>
</tr>
<tr>
<td>Fraters Real Income Fund</td>
<td>2.407</td>
<td>1.465</td>
<td>0.941</td>
<td>69.782</td>
<td>14.711</td>
<td>55.071</td>
<td>27.823</td>
<td>5.211</td>
<td>22.612</td>
</tr>
<tr>
<td>Community Growth Gilt Fund</td>
<td>1.760</td>
<td>1.762</td>
<td>-0.003</td>
<td>16.020</td>
<td>17.908</td>
<td>-1.888</td>
<td>8.720</td>
<td>9.403</td>
<td>-0.683</td>
</tr>
<tr>
<td>Shapiro Wilk W-test</td>
<td>0.359</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.664</td>
<td></td>
<td></td>
<td>0.831</td>
</tr>
<tr>
<td>p-value Shapiro Wilk W-test</td>
<td>0.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.000</td>
<td></td>
<td></td>
<td>0.034</td>
</tr>
<tr>
<td>Reference mean</td>
<td>0.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.000</td>
<td></td>
<td></td>
<td>0.000</td>
</tr>
<tr>
<td>Mean of difference scores (D)</td>
<td>0.365</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>9.332</td>
<td></td>
<td></td>
<td>4.942</td>
</tr>
<tr>
<td>Standard deviation of difference scores (SD)</td>
<td>0.566</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>16.919</td>
<td></td>
<td></td>
<td>7.136</td>
</tr>
<tr>
<td>Wilcoxon matched pairs test (Z-value)</td>
<td>1.682</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.663</td>
<td></td>
<td></td>
<td>1.885</td>
</tr>
<tr>
<td>p-value Wilcoxon test</td>
<td>0.093</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.508</td>
<td></td>
<td></td>
<td>0.059</td>
</tr>
</tbody>
</table>
All three ratios indicated that SRI funds outperformed the matched sample of conventional (non-SRI) funds in sub-period three ($\bar{D}$ equal to 0.365, 9.332 and 4.942 respectively). However, as none of the differences were statistically significant (p-values equal to 0.093, 0.508 and 0.059), $H_{5,0}$ could not be rejected. This implies that there is no difference between the risk-adjusted performance of South African SRI funds and a sample of matched conventional (non-SRI) funds over the period 1 April 2002 – 31 March 2006 (the resurgence period of SRI in South Africa).

In summary it can thus be argued that the performance of SRI funds in South Africa is no different from that of conventional (non-SRI) funds. This finding is similar to that reported in international studies on SRI fund performance (Guerard 1997a:11, 1997b:31; Goldreyer & Diltz 1999:23; Statman 2000:30; Bauer et al. 2005:1755). It is further noted that SRI fund improved from sub-period two to three, providing evidence of a learning effect.

### 8.5.4 Testing the hypotheses associated with the third benchmark category

As indicated in Figure 8.1, the third benchmark category deals with the evaluation of SRI fund performance vis-à-vis the general equity market in South Africa. The FTSE/JSE All Share Index was used as proxy for the performance of the general equity market in South Africa. Three pairs of null and alternative hypotheses were formulated to correspond with the three sub-periods identified in SRI history in South Africa. More formally these hypotheses can be stated as:

- $H_{6,0}$: There is no difference between the risk-adjusted performance of South African SRI funds and the FTSE/JSE All Share Index over the period 1 June 1992 – 31 August 1998 (the establishment period of SRI in South Africa).
- $H_{6,A}$: There is a difference between the risk-adjusted performance of South African SRI funds and the FTSE/JSE All Share Index over the period 1 June 1992 – 31 August 1998 (the establishment period of SRI in South Africa).
- \( H_{7,0} \): There is no difference between the risk-adjusted performance of South African SRI funds and the FTSE/JSE All Share Index over the period 1 September 1998 – 31 March 2002 (the decline period of SRI in South Africa).
- \( H_{7,A} \): There is a difference between the risk-adjusted performance of South African SRI funds and the FTSE/JSE All Share Index over the period 1 September 1998 – 31 March 2002 (the decline period of SRI in South Africa).

- \( H_{8,0} \): There is no difference between the risk-adjusted performance of South African SRI funds and the FTSE/JSE All Share Index over the period 1 April 2002 – 31 March 2006 (the resurgence period of SRI in South Africa).
- \( H_{8,A} \): There is a difference between the risk-adjusted performance of South African SRI funds and the FTSE/JSE All Share Index over the period 1 April 2002 – 31 March 2006 (the resurgence period of SRI in South Africa).

Tables 8.13, 8.14 and 8.15, which deal with the three abovementioned hypotheses, are structured in the same sequence. In column (1) the names of the SRI funds are listed in alphabetical order. In column (2) the calculated Sharpe ratios of the SRI funds are shown as well as the Sharpe ratios of the FTSE/JSE All Share Index in column (3). Column (4) was calculated by taking the difference between the Sharpe ratios of the SRI funds and the Sharpe ratios of FTSE/JSE All Share Index. In columns (5) and (6) the calculated Sortino ratios of the SRI funds and the FTSE/JSE All Share Index are reflected. Column (7) was calculated by taking the difference between the Sortino ratios of the SRI funds and the Sortino ratios of FTSE/JSE All Share Index. The Upside-potential ratios (UPR) of the SRI funds are shown in column (8), that of the FTSE/JSE All Share Index in column (9) and the differences in column (10). Also contained in Tables 8.13, 8.14 and 8.15 are the results of the Shapiro Wilk W-tests and the relevant significance tests.

Based on the Sharpe and Sortino ratios SRI funds significantly outperformed the general equity market in South Africa during sub-period one (\( \overline{D} \) equal to 0.492 and 1.859 respectively and p-values equal to 0.001 and 0.002 respectively) and
marginally underperformed according to the Upside-potential ratio (\( \bar{D} \) equal to -0.221 and p-value = 0.310 > 0.050). However, as the Upside-potential ratio’s Wilcoxon matched pairs test was not statistically significant (p-value = > 0.050), H\(_{6,0}\) could not be rejected. This implies that there is no difference between the risk-adjusted performance of South African SRI funds and the FTSE/JSE All Share Index over the period 1 June 1992 – 31 August 1998 (the establishment period of SRI in South Africa).
### TABLE 8.13: SRI funds vis-à-vis the FTSE/JSE All Share Index in sub-period one (1 June 1992 – 31 August 1998)

<table>
<thead>
<tr>
<th>SRI Fund Name</th>
<th>Sharpe SRI FUND</th>
<th>Sharpe FTSE/JSE ALL SHARE INDEX</th>
<th>Difference Sharpe</th>
<th>Sortino SRI FUND</th>
<th>Sortino FTSE/JSE ALL SHARE INDEX</th>
<th>Difference Sortino</th>
<th>UPR SRI FUND</th>
<th>UPR FTSE/JSE ALL SHARE INDEX</th>
<th>Difference UPR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Community Growth Equity Fund</td>
<td>0.343</td>
<td>0.011</td>
<td>0.333</td>
<td>1.081</td>
<td>0.038</td>
<td>1.043</td>
<td>3.418</td>
<td>4.142</td>
<td>-0.724</td>
</tr>
<tr>
<td>Futuregrowth Albaraka Equity Fund</td>
<td>0.241</td>
<td>0.011</td>
<td>0.230</td>
<td>0.874</td>
<td>0.038</td>
<td>0.836</td>
<td>4.653</td>
<td>4.142</td>
<td>0.511</td>
</tr>
<tr>
<td>Futuregrowth Anchor Fund</td>
<td>-0.254</td>
<td>-1.041</td>
<td>0.786</td>
<td>-1.013</td>
<td>-4.272</td>
<td>3.259</td>
<td>2.061</td>
<td>1.294</td>
<td>0.767</td>
</tr>
<tr>
<td>Futuregrowth Community Property Fund</td>
<td>0.178</td>
<td>-0.615</td>
<td>0.794</td>
<td>0.499</td>
<td>-2.316</td>
<td>2.815</td>
<td>0.983</td>
<td>1.756</td>
<td>-0.773</td>
</tr>
<tr>
<td>Futuregrowth Infrastructure Bond Fund</td>
<td>-0.102</td>
<td>-0.494</td>
<td>0.392</td>
<td>-0.330</td>
<td>-1.730</td>
<td>1.400</td>
<td>2.203</td>
<td>2.415</td>
<td>-0.211</td>
</tr>
<tr>
<td>Metropolitan Futurebuilder Fund</td>
<td>-0.145</td>
<td>-0.698</td>
<td>0.552</td>
<td>-0.458</td>
<td>-2.670</td>
<td>2.211</td>
<td>1.112</td>
<td>1.671</td>
<td>-0.559</td>
</tr>
<tr>
<td>STANLIB Corporate Wealth Development Fund</td>
<td>-0.209</td>
<td>-0.569</td>
<td>0.360</td>
<td>-0.687</td>
<td>-2.138</td>
<td>1.451</td>
<td>0.982</td>
<td>1.539</td>
<td>-0.557</td>
</tr>
<tr>
<td>Shapiro Wilk W-test</td>
<td>0.879</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.432</td>
</tr>
<tr>
<td>p-value Shapiro Wilk W-test</td>
<td>0.221</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.000</td>
</tr>
<tr>
<td>Reference mean</td>
<td>0.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.000</td>
</tr>
<tr>
<td>Mean of difference scores ($\overline{D}$)</td>
<td>0.492</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-0.221</td>
</tr>
<tr>
<td>Standard deviation of difference scores ($S_D$)</td>
<td>0.225</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.619</td>
</tr>
<tr>
<td>Single-sample t-test</td>
<td>5.802</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-</td>
</tr>
<tr>
<td>p-value single-sample t-test</td>
<td>0.001</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-</td>
</tr>
<tr>
<td>Wilcoxon matched pairs test (Z-value)</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1.014</td>
<td></td>
</tr>
<tr>
<td>p-value Wilcoxon matched pairs test</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.310</td>
<td></td>
</tr>
</tbody>
</table>
TABLE 8.14: SRI funds vis-à-vis the FTSE/JSE All Share Index in sub-period two (1 September 1998 – 31 March 2002)

<table>
<thead>
<tr>
<th>SRI fund name</th>
<th>Sharpe SRI FUND</th>
<th>Sharpe FTSE/JSE ALL SHARE INDEX</th>
<th>Difference Sharpe</th>
<th>Sortino SRI FUND</th>
<th>Sortino FTSE/JSE ALL SHARE INDEX</th>
<th>Difference Sortino</th>
<th>UPR SRI FUND</th>
<th>UPR FTSE/JSE ALL SHARE INDEX</th>
<th>Difference UPR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Community Growth Equity Fund</td>
<td>1.694</td>
<td>1.884</td>
<td>-0.191</td>
<td>15.727</td>
<td>20.375</td>
<td>-4.648</td>
<td>14.261</td>
<td>17.261</td>
<td>-3.000</td>
</tr>
<tr>
<td>Futuregrowth Albaraka Equity Fund</td>
<td>2.039</td>
<td>1.884</td>
<td>0.154</td>
<td>18.606</td>
<td>20.375</td>
<td>-1.769</td>
<td>13.112</td>
<td>17.261</td>
<td>-4.149</td>
</tr>
<tr>
<td>Oasis Crescent Equity Fund</td>
<td>2.969</td>
<td>1.884</td>
<td>1.084</td>
<td>48.567</td>
<td>20.375</td>
<td>28.193</td>
<td>27.314</td>
<td>17.261</td>
<td>10.053</td>
</tr>
<tr>
<td>Sanlam Empowerment Equity Fund</td>
<td>0.246</td>
<td>1.884</td>
<td>-1.638</td>
<td>1.962</td>
<td>20.375</td>
<td>-18.413</td>
<td>8.065</td>
<td>17.261</td>
<td>-9.196</td>
</tr>
<tr>
<td>Futuregrowth Anchor Fund</td>
<td>0.830</td>
<td>1.884</td>
<td>-1.054</td>
<td>7.322</td>
<td>20.375</td>
<td>-13.053</td>
<td>10.999</td>
<td>17.261</td>
<td>-6.262</td>
</tr>
<tr>
<td>Investec Mafisa Fund</td>
<td>1.303</td>
<td>1.884</td>
<td>-0.581</td>
<td>15.799</td>
<td>20.375</td>
<td>-4.576</td>
<td>19.231</td>
<td>17.261</td>
<td>1.970</td>
</tr>
<tr>
<td>TopGEAR Fund</td>
<td>0.884</td>
<td>1.884</td>
<td>-1.001</td>
<td>6.725</td>
<td>20.375</td>
<td>-13.650</td>
<td>5.187</td>
<td>17.261</td>
<td>-12.074</td>
</tr>
<tr>
<td>Futuregrowth Infrastructure Bond Fund</td>
<td>2.367</td>
<td>1.884</td>
<td>0.483</td>
<td>11.514</td>
<td>20.375</td>
<td>-8.860</td>
<td>5.874</td>
<td>17.261</td>
<td>-11.387</td>
</tr>
<tr>
<td>Futuregrowth Community Property Fund</td>
<td>1.799</td>
<td>1.884</td>
<td>-0.086</td>
<td>9.737</td>
<td>20.375</td>
<td>-10.638</td>
<td>2.903</td>
<td>17.261</td>
<td>-14.358</td>
</tr>
<tr>
<td>OMAM IDEAS Fund</td>
<td>1.992</td>
<td>1.838</td>
<td>0.154</td>
<td>7.902</td>
<td>18.813</td>
<td>-10.910</td>
<td>3.045</td>
<td>15.845</td>
<td>-12.799</td>
</tr>
<tr>
<td>Investec Sechaba Fund</td>
<td>0.509</td>
<td>1.072</td>
<td>-0.564</td>
<td>2.071</td>
<td>8.897</td>
<td>-6.826</td>
<td>2.321</td>
<td>10.100</td>
<td>-7.779</td>
</tr>
<tr>
<td>African Harvest Infrastructure Bond Fund</td>
<td>0.179</td>
<td>0.919</td>
<td>-0.740</td>
<td>1.023</td>
<td>8.230</td>
<td>-7.206</td>
<td>1.952</td>
<td>8.622</td>
<td>-6.671</td>
</tr>
</tbody>
</table>
TABLE 8.14: SRI funds vis-à-vis the FTSE/JSE All Share Index in sub-period two (1 September 1998 – 31 March 2002) (cont.)

<table>
<thead>
<tr>
<th>SRI fund name</th>
<th>Sharpe SRI FUND</th>
<th>Sharpe FTSE/JSE ALL SHARE INDEX</th>
<th>Difference Sharpe</th>
<th>Sortino SRI FUND</th>
<th>Sortino FTSE/JSE ALL SHARE INDEX</th>
<th>Difference Sortino</th>
<th>UPR SRI FUND</th>
<th>UPR FTSE/JSE ALL SHARE INDEX</th>
<th>Difference UPR</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(1)</td>
<td>(2)</td>
<td>(3)</td>
<td>(4) = (2) – (3)</td>
<td>(5)</td>
<td>(6) = (5) – (6)</td>
<td>(7)</td>
<td>(8)</td>
<td>(10) = (8) – (9)</td>
</tr>
<tr>
<td>Shapiro Wilk W-test</td>
<td>0.990</td>
<td>0.671</td>
<td>0.320</td>
<td>0.999</td>
<td>0.671</td>
<td>0.320</td>
<td>0.999</td>
<td>0.000</td>
<td>0.999</td>
</tr>
<tr>
<td>p-value Shapiro Wilk W-test</td>
<td>0.999</td>
<td>0.000</td>
<td>0.999</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
</tr>
<tr>
<td>Reference mean</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
</tr>
<tr>
<td>Mean of difference scores ($\bar{D}$)</td>
<td>-0.273</td>
<td>-6.667</td>
<td>-7.251</td>
<td>-0.273</td>
<td>-6.667</td>
<td>-7.251</td>
<td>-0.273</td>
<td>-6.667</td>
<td>-7.251</td>
</tr>
<tr>
<td>Standard deviation of difference scores ($S_D$)</td>
<td>0.685</td>
<td>10.484</td>
<td>6.468</td>
<td>0.685</td>
<td>10.484</td>
<td>6.468</td>
<td>0.685</td>
<td>10.484</td>
<td>6.468</td>
</tr>
<tr>
<td>Single-sample t-test</td>
<td>-1.541</td>
<td>-</td>
<td>-</td>
<td>-1.541</td>
<td>-</td>
<td>-</td>
<td>-1.541</td>
<td>-</td>
<td>-1.541</td>
</tr>
<tr>
<td>p-value single-sample t-test</td>
<td>0.146</td>
<td>-</td>
<td>-</td>
<td>0.146</td>
<td>-</td>
<td>-</td>
<td>0.146</td>
<td>-</td>
<td>0.146</td>
</tr>
<tr>
<td>Wilcoxon matched pairs test (Z-value)</td>
<td>-</td>
<td>2.556</td>
<td>2.840</td>
<td>-</td>
<td>2.556</td>
<td>2.840</td>
<td>-</td>
<td>2.556</td>
<td>2.840</td>
</tr>
<tr>
<td>p-value Wilcoxon matched pairs test</td>
<td>-</td>
<td>0.011</td>
<td>0.005</td>
<td>-</td>
<td>0.011</td>
<td>0.005</td>
<td>-</td>
<td>0.011</td>
<td>0.005</td>
</tr>
</tbody>
</table>
According to all three performance measures local SRI funds underperformed the FTSE/JSE All Share Index during sub-period two (\( \bar{D} \) equal to -0.273, -6.667 and -7.251 respectively). This finding lends support to the name given to sub-period two as the ‘decline period of SRI in South Africa’. As the Upside-potential ratio’s Wilcoxon matched pairs test was statistically significant (p-value = 0.005 < 0.050), \( H_{7.0} \) could be rejected. This implies that there is indeed a difference between the risk-adjusted performance of South African SRI funds and the FTSE/JSE All Share Index over the period 1 September 1998 – 31 March 2002 (the decline period of SRI in South Africa).
TABLE 8.15: SRI funds vis-à-vis the FTSE/JSE All Share Index in sub-period three (1 April 2002 – 31 March 2006)

<table>
<thead>
<tr>
<th>SRI fund name</th>
<th>Sharpe SRI FUND</th>
<th>Sharpe FTSE/JSE ALL SHARE INDEX</th>
<th>Difference Sharpe</th>
<th>Sortino SRI FUND</th>
<th>Sortino FTSE/JSE ALL SHARE INDEX</th>
<th>Difference Sortino</th>
<th>UPR SRI FUND</th>
<th>UPR FTSE/JSE ALL SHARE INDEX</th>
<th>Difference UPR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Community Growth Equity Fund</td>
<td>1.610</td>
<td>1.050</td>
<td>0.560</td>
<td>13.292</td>
<td>8.195</td>
<td>5.097</td>
<td>11.170</td>
<td>10.006</td>
<td>1.165</td>
</tr>
<tr>
<td>Futuregrowth Albaraka Equity Fund</td>
<td>1.858</td>
<td>1.050</td>
<td>0.808</td>
<td>23.240</td>
<td>8.195</td>
<td>15.045</td>
<td>18.897</td>
<td>10.006</td>
<td>8.891</td>
</tr>
<tr>
<td>Oasis Crescent Equity Fund</td>
<td>1.729</td>
<td>1.050</td>
<td>0.678</td>
<td>21.987</td>
<td>8.195</td>
<td>13.792</td>
<td>17.552</td>
<td>10.006</td>
<td>7.546</td>
</tr>
<tr>
<td>Oasis Crescent International FoF</td>
<td>0.455</td>
<td>1.050</td>
<td>-0.595</td>
<td>3.234</td>
<td>8.195</td>
<td>-4.960</td>
<td>8.566</td>
<td>10.006</td>
<td>-1.440</td>
</tr>
<tr>
<td>Community Growth Gilt Fund</td>
<td>1.760</td>
<td>1.050</td>
<td>0.710</td>
<td>16.020</td>
<td>8.195</td>
<td>7.826</td>
<td>8.720</td>
<td>10.006</td>
<td>-1.286</td>
</tr>
<tr>
<td>African Harvest Infrastructure Bond Fund</td>
<td>1.785</td>
<td>1.050</td>
<td>0.735</td>
<td>17.419</td>
<td>8.195</td>
<td>9.225</td>
<td>8.980</td>
<td>10.006</td>
<td>-1.025</td>
</tr>
<tr>
<td>Futuregrowth Infrastructure Bond Fund</td>
<td>1.829</td>
<td>1.050</td>
<td>0.779</td>
<td>17.914</td>
<td>8.195</td>
<td>9.719</td>
<td>9.318</td>
<td>10.006</td>
<td>-0.688</td>
</tr>
<tr>
<td>OMAM IDEAS Fund</td>
<td>1.630</td>
<td>1.050</td>
<td>0.580</td>
<td>13.296</td>
<td>8.195</td>
<td>5.101</td>
<td>8.624</td>
<td>10.006</td>
<td>-1.382</td>
</tr>
<tr>
<td>Futuregrowth Community Property Fund</td>
<td>1.818</td>
<td>1.050</td>
<td>0.768</td>
<td>18.120</td>
<td>8.195</td>
<td>9.926</td>
<td>8.416</td>
<td>10.006</td>
<td>-1.589</td>
</tr>
<tr>
<td>Fraters Real Income Fund</td>
<td>2.407</td>
<td>1.803</td>
<td>0.604</td>
<td>69.782</td>
<td>22.768</td>
<td>47.014</td>
<td>27.823</td>
<td>17.279</td>
<td>10.544</td>
</tr>
</tbody>
</table>
## TABLE 8.15: SRI funds vis-à-vis the FTSE/JSE All Share Index in sub-period three (1 April 2002 – 31 March 2006) (cont.)

<table>
<thead>
<tr>
<th>SRI fund name</th>
<th>Sharpe FTSE/JSE ALL SHARE INDEX</th>
<th>Sharpe SRI FUND</th>
<th>Difference Sharpe</th>
<th>Sortino FTSE/JSE ALL SHARE INDEX</th>
<th>Sortino SRI FUND</th>
<th>Difference Sortino</th>
<th>UPR FTSE/JSE ALL SHARE INDEX</th>
<th>UPR SRI FUND</th>
<th>Difference UPR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Futuregrowth Anchor Fund</td>
<td>1.002</td>
<td>0.376</td>
<td>0.626</td>
<td>8.136</td>
<td>2.983</td>
<td>5.153</td>
<td>6.236</td>
<td>5.758</td>
<td>0.478</td>
</tr>
<tr>
<td>Futuregrowth SRI Equity Fund</td>
<td>2.478</td>
<td>2.491</td>
<td>-0.012</td>
<td>36.022</td>
<td>40.476</td>
<td>-4.453</td>
<td>17.811</td>
<td>19.970</td>
<td>-2.159</td>
</tr>
<tr>
<td>Futuregrowth SRI Balanced Fund</td>
<td>2.812</td>
<td>2.392</td>
<td>0.419</td>
<td>31.433</td>
<td>31.099</td>
<td>0.334</td>
<td>13.869</td>
<td>15.899</td>
<td>-2.030</td>
</tr>
<tr>
<td>Investment Solutions Sakhisizwe Fund</td>
<td>2.389</td>
<td>2.392</td>
<td>-0.003</td>
<td>26.286</td>
<td>31.099</td>
<td>-4.813</td>
<td>10.446</td>
<td>15.899</td>
<td>-5.453</td>
</tr>
<tr>
<td>Nedbank Sustainability Investing Index Fund</td>
<td>1.135</td>
<td>1.086</td>
<td>0.048</td>
<td>13.937</td>
<td>16.625</td>
<td>-2.688</td>
<td>6.867</td>
<td>9.279</td>
<td>-2.412</td>
</tr>
<tr>
<td>Shapiro Wilk W-test</td>
<td></td>
<td>0.239</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>p-value Shapiro Wilk W-test</td>
<td></td>
<td>0.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reference mean</td>
<td></td>
<td>0.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean of difference scores ($\bar{D}$)</td>
<td></td>
<td>0.615</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Standard deviation of difference scores ($S_D$)</td>
<td>0.489</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wilcoxon matched pairs test (Z-value)</td>
<td></td>
<td>3.632</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>p-value Wilcoxon matched pairs test</td>
<td></td>
<td>0.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- 311 -
All three measures of risk-adjusted performance indicated that local SRI funds outperformed the FTSE/JSE All Share Index during sub-period three ($\bar{D}$ equal to 0.615, 9.959 and 2.508 respectively). However, based on the insignificance of the Upside-potential ratio’s Wilcoxon matched pairs test (p-value = 0.159 > 0.050), $H_{8.0}$ could not be rejected. This implies that there is no difference between the risk-adjusted performance of South African SRI funds and their respective benchmark indices over the period 1 April 2002 – 31 March 2006 (the resurgence period of SRI in South Africa).

The findings pertaining to the third benchmark category can thus be summarised by saying that:
- there was no significant difference in the risk-adjusted performance of local SRI funds vis-à-vis the general equity market in sub-periods one and three; and
- SRI funds significant underperformed the general equity market in South Africa in sub-period two.

These findings support the EMH notion which holds that active managers cannot beat the market (Hirt et al. 2006:91). Researchers such as Luther and Matatko (1994:77), Mallin et al. (1995:483), Statman (2000:30) and Bauer et al. (2005:1755) also found that SRI funds in the UK and USA underperformed relative to broad market indices.

A closer inspection of the findings in Tables 8.13, 8.14 and 8.15 also point to evidence of a learning effect in the local SRI sector.

Having tested all eight pairs of null and alternative hypotheses, a summary of the findings will be presented next.
8.6 SUMMARY AND CONCLUSIONS

Based on unadjusted (raw) returns, SRI fund performance was the best during the resurgence period of SRI in South Africa i.e. sub-period three. Similar findings were found when evaluating the average Sharpe, Sortino and Upside-potential ratios of the local SRI funds over the three sub-periods. This was however not the case when considering the average single-factor CAPM Jensen's alphas or the average two-factor Van Rensburg and Slaney APT Jensen’s alphas. Both of these models show that SRI fund performance declined in sub-period two. According to the CAPM, performance improved in sub-period three, although not to the same level that it was prior to the emerging market crisis in 1998. According to the two-factor Van Rensburg and Slaney APT model, SRI performance continued to decline in sub-period three.

With regard to the first benchmark category it can be said that there was no difference between the risk-adjusted performance of SRI funds and their respective benchmark indices during sub-periods one and two. Thereafter SRI funds significantly outperformed their benchmark indices. This finding implies that the SRI sector in South Africa has undergone a learning effect. Similar learning effects were noted in SRI markets in Australia (Cummings 2000:79; Bauer et al. 2005:1755), the UK (Mill 2006:131) as well as in the USA and in Germany (Bauer et al. 2006:33).

This finding might also be attributed to the nature of the SRI strategies employed by local SRI funds (with many investing heavily in equities, either by means of a screening or shareholder activism strategy), strong economic growth during sub-period three as well as high commodity and property prices.

With regard to the second benchmark category it was shown that the risk-adjusted performance of SRI funds in South Africa is no different from that of conventional (non-SRI) funds in the country. As pointed out earlier, these findings

With reference to the third benchmark category it was found that local SRI funds significantly underperformed the general equity market in South Africa during sub-period two, but yielded returns that weren’t significantly different from that of the market in sub-periods one and three. These findings correspond with international research findings which show that SRI funds generally underperform relative to market indices (Luther & Matatko 1994:77; Mallin et al. 1995:483; Statman 2000:30; Bauer et al. 2005:1755).

To summarise the empirical findings, the hypothetical model (Figure 8.1) will now be restated in terms of an empirical model of SRI fund performance in South Africa (Figure 8.2).

As indicated in Figure 8.2, only two null hypotheses could be rejected. Null hypothesis $H_{3,0}$ was rejected implying that local SRI funds significantly outperformed their benchmark indices during sub-period three (the resurgence period of SRI in South Africa). Null hypothesis $H_{7,0}$ was also rejected indicating that local SRI funds significantly underperformed the general equity market in South Africa during sub-period two (the decline period of SRI in South Africa).

From the evidence presented it seems as if local SRI funds underperformed the constituents of the three benchmark categories in the early phases of the research period (sub-periods one and two), but improved towards the end of the research period.

The strategic implications of these findings will be explored in the next chapter.
FIGURE 8.2: Empirical model of SRI fund performance in South Africa

SRI fund’s respective benchmark indices
- $H_{1,0}$ vs $H_{1,1}$
  - Sub-period 1
    - Failed to reject $H_{1,0}$ i.e. no difference

- $H_{2,0}$ vs $H_{2,1}$
  - Sub-period 2
    - Failed to reject $H_{2,0}$ i.e. no difference

- $H_{3,0}$ vs $H_{3,1}$
  - Sub-period 3
    - Rejected $H_{3,0}$ i.e. there is a difference

Conventional (non-SRI) funds
- $H_{4,0}$ vs $H_{4,1}$
  - Sub-period 2
    - Failed to reject $H_{4,0}$ i.e. no difference

- $H_{5,0}$ vs $H_{5,1}$
  - Sub-period 3
    - Failed to reject $H_{5,0}$ i.e. no difference

- $H_{6,0}$ vs $H_{6,1}$
  - Sub-period 1
    - Failed to reject $H_{6,0}$ i.e. no difference

- $H_{7,0}$ vs $H_{7,1}$
  - Sub-period 2
    - Rejected $H_{7,0}$ i.e. there is a difference

South African equity market
- $H_{8,0}$ vs $H_{8,1}$
  - Sub-period 3
    - Failed to reject $H_{8,0}$ i.e. no difference
CHAPTER NINE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

9.1 INTRODUCTION

In this chapter effect will be given to the final research objective of this study (as stated in section 1.5.2 of Chapter One), namely to provide a holistic overview of the pertinent research findings, focusing on the strategic implications thereof.

This chapter consists of seven main sections. Firstly, a brief overview will be provided of the purpose of the research, the research objectives as well as the research design and methodology of the study. Secondly, the pertinent findings and conclusions of the study will be highlighted, followed by the strategic implications and recommendations emanating from the research. Thereafter, the contributions of the research will be set out along with a number of limitations. Suggestions for future research will be presented, followed by some final concluding remarks.

9.2 OVERVIEW OF THE RESEARCH

In this section, a brief overview will be provided of the purpose of the research, the research objectives as well as the research design and methodology of the study.

9.2.1 Purpose of the research

The purpose of this research was described in a threefold manner in section 1.4 of Chapter One, namely:

- To develop, via phenomenological research methodologies, substantive (context bound) theories pertaining to SRI in South Africa.
- To gauge, by means of positivistic research methodologies, the risk-adjusted performance of South African SRI funds as compared with three benchmark categories, namely the benchmark indices of the SRI funds, a matched sample of conventional (non-SRI) funds and the general equity market in South Africa.
- To outline the strategic implications of the findings for investors and other key stakeholders in the South African SRI sector.

The purpose of the research was supported by a number of research objectives.

### 9.2.2 Research objectives

As set out in section 1.5.1 of Chapter One, the primary objective of this research was to obtain a deeper understanding of SRI in its broadest context in South Africa. However, besides investigating this relatively uncharted investment domain in South Africa, the focus of this research was also on the assessment of the risk-adjusted performance of local SRI funds as compared with three benchmark categories, namely the benchmark indices of the SRI funds, a matched sample of conventional (non-SRI) funds and the general equity market in South Africa.

To give effect to the primary objective of the study and to focus on the purpose of the research, the following secondary research objectives were derived in section 1.5.2 of Chapter One, namely:

To give effect to the primary objective of the research and to focus on the purpose of the research, the following secondary research objectives were formulated:

(viii) To determine which research paradigms, research methodologies, data collection and data analysis methods are the most appropriate to research the problem in question.
(ix) To conduct an extensive review of the literature (supplemented, where applicable, with semi-structured, face-to-face interviews with local SRI fund managers and industry experts) on the following topics:

a. the historical development of SRI globally and in South Africa;
b. the strategies employed by socially responsible investors in South Africa and abroad;
c. the ethical premises underpinning SRI;
d. the current size, driving forces in and the obstacles to SRI internationally and locally;
e. the measures used to evaluate the risk-adjusted performance of investment portfolios; and
f. the financial performance of SRI funds.

(x) To construct the first complete database of SRI funds in South Africa.

(xi) To source relevant quantitative primary data.

(xii) To test the research hypotheses as depicted in the hypothetical model (Figure 1.4 of Chapter One) using the appropriate investment analytical and statistical procedures.

(xiii) To report on the findings of the empirical analysis.

(xiv) To provide a holistic overview of the pertinent research findings, focusing on the strategic implications thereof.

Research objectives (i) to (vi) were addressed in Chapters Two to Eight, whereas objective (vii) is addressed in this chapter.

9.2.3 Research design and methodology

Chapter Two focused on the important issue of selecting an appropriate research design and methodology for this study. The adopted research design and methodology were selected on the basis of secondary sources dealing with business research in general and business ethics research in particular. The research design and methodology were also contextualised in terms of the purpose and nature of the research in question. It was motivated in this study:
- exhibits features of both qualitative and quantitative research;
- can be labelled as exploratory, descriptive and predictive research;
- uses both inductive and deductive reasoning; and
- can be classified as applied research.

Data and methodological triangulation strategies were adopted to investigate the stated research problem, research questions and research hypotheses. The criteria for a well-designed research project were also described and implemented in this research.

The phenomenological component of the research consisted of an extensive literature review as well as semi-structured, face-to-face interviews conducted with local SRI fund managers and industry experts. Convenience sampling was used to identify twelve knowledgeable SRI fund managers and industry experts. Qualitative data were analysed using appropriate phenomenological approaches such as content analysis.

The positivistic dimension of this research centred on the testing of the hypotheses set out in the hypothetical model (Figure 1.4 of Chapter One). More specifically, Chapter Seven was devoted to the identification of the population, sampling frame and sample of 24 local SRI funds as well as the sourcing of quantitative primary data. In Chapter Eight the quantitative data were analysed and the eight pairs of null and alternative hypotheses tested using suitable investment analytical and statistical procedures.

The integration of phenomenological and positivistic research methodologies addressed the need for such an approach in the field of business ethics research (Rossouw 2004b:10) as well as the call by Kliemt (1990:9) for greater interdisciplinary research between the subject domains of economics and philosophy.
9.3 PERTINENT FINDINGS AND CONCLUSIONS

The pertinent findings of the research are set out below and collectively address the research questions as set out in section 1.6.1 of Chapter One.

9.3.1 Definition of SRI

Although several definitions of SRI exist in the literature, Mansley’s (2000:5) definition was adopted and modified for the research in question. SRI was thus defined in this study as “…a set of approaches which include moral and ESG considerations along with conventional financial criteria in decisions regarding the selection, retention and realisation of particular investments”.

From this definition it is clear that SRI is an intricate process which, in the absence of legislation, depends to a large extent on the individual investor's ethical disposition.

The lack of a proper definition of SRI was identified by SRI fund managers and industry experts as one of the main impediments to understanding SRI in South Africa, particularly in terms of how it relates to the promotion of broad-based BEE.

The view expressed in this research is that a comprehensive definition of SRI in South Africa be adopted to allow for the integration of broad-based BEE considerations in screening, shareholder activism and cause-based investment strategies. The adopted definition of a ‘socially responsible investor’ in South Africa should therefore include investors who:

- screen investment opportunities in terms of their moral and/or religious convictions;
- screen investment opportunities based on a range of ESG and broad-based BEE considerations;
- engage with management boards on a range of ESG broad-based BEE considerations; and
- finance specific social, environmental, empowerment or infrastructural developments causes by investing in them.

9.3.2 Status of the SRI sector internationally

It was found that SRI in the USA is growing rapidly and moving from a fringe investment strategy to a mainstream one. Similar growth trends were observed in the UK and Europe. The increasing emphasis placed on SRI in global markets is also expected to manifest itself in South Africa given that South Africa is an inseparable part of the integrated ‘global financial village’.

The most prominent variables which have been found to stimulate the demand for SRIs internationally include growing consumerism among investors, amendments to pension fund legislation and increased stakeholder advocacy.

The three most important obstacles to the growth and development of the SRI sector internationally include the use of short-term performance benchmarks, increased scrutiny of trustees' fiduciary duties and a lack of skills among investment analysts and fund managers.

9.3.3 Status of the SRI sector in South Africa

It was found that, although the South African government is doing a great deal to address the dire need for socio-economic development in the country, more private sector involvement is required to make a significant difference in the lives of ordinary citizens. In this regard SRI represents a powerful means whereby more private sector capital can be channelled into areas of national priority.

During the research period (1 June 1992 to 31 March 2006) 43 SRI funds were launched in South Africa of which only 35 were still active on the 31st of March 2006. Although it is difficult to establish the size of the SRI sector in South Africa the best estimate is that SRIs represent approximately 0.7 percent of the total
investment capacity in South Africa (AFAC TDI Manager Watch survey 30 September 2006). The majority of SRI funds in South Africa can be classified as asset allocation and equity funds.

Empirical evidence shows that many of the local SRI funds which have employed a pure cause-based investment strategy in the 1990s (and particularly those that focused on the promotion of broad-based BEE) were discontinued before the end of the research period (31 March 2006). Most of the SRI funds still in existence on 31 March 2006 combined a cause-based investment strategy with a positive or best-of-sector screening approach. Local SRI fund managers and industry experts only expect moderate growth in the area of cause-based investing given the lack of viable opportunities in South Africa, the illiquid nature of such investments, the lack of regular market valuations and a lack of skills in the sector.

The combination of a cause-based investment strategy with a positive or best-of-sector screening approach makes perfect sense given the degree of overlap that exists in terms of the ESG issues considered by both approaches. These considerations mainly deal with the promotion of broad-based BEE and the development of social infrastructure in South Africa.

An evaluation of the types of ESG screens employed by South African SRI fund managers reveals that they differ from those which are extensively used in the international SRI arena. It is by no means suggested that the ESG screens in South Africa should mirror those in the international market, but more attention should be given to ESG considerations which are deemed to be important in global markets. Greater consideration should, for example, be given to environmental management issues. This suggestion is particularly important if local asset managers are to attract more capital from foreign investors.

It was further pointed out that very few active SRI funds in South Africa employ a shareholder activism strategy. Given the emphasis placed on shareholder
activism in the Financial Sector Charter and the UN Principles for Responsible Investment, it is foreseen that more institutional investors will become actively engaged with management boards of JSE-listed companies. This development, along with that of increased stakeholder advocacy, is strongly encouraged.

Based on an extensive literature review and semi-structured, face-to-face interviews with local SRI fund managers and industry experts, the following drivers of SRI in South Africa were identified, namely:
- the launch of the FTSE/JSE SRI Index;
- the introduction of the Financial Sector Charter;
- improved triple bottom line reporting by local companies;
- sustained stakeholder advocacy by local NGOs and trade unions;
- increased incidents of corporate fraud;
- changes in the profile of the investment community in South Africa; and
- changing views on the role of business in the South African society.

It is foreseen that these developments will continue to support the growth and development of SRI in South Africa in future.

The most serious impediments to SRI in South Africa were identified as:
- trustees' concerns regarding the financial performance of local SRI funds;
- a lack of skills among local investments analysts and fund managers;
- the short-sighted evaluation of SRI fund performance against short-term benchmarks; and
- a shortage of new SRI opportunities, asset classes and funds.

Several recommendations are made in section 9.4 of this chapter to address the abovementioned challenges in growing the demand for SRIs in South Africa.

Another development that may gain prominence as a driver of SRI in South Africa is that of amendments to Regulation 28 of the Pension Funds Act (Act No 24 of 1956 as amended). Although prescribed asset allocation could channel
significant amounts of capital into areas of national priority, it should be seen as a last resort. Should legislation become inevitable, however, it is suggested that it be similar in nature to regulations in the UK, Europe and Australia which call for greater disclosure of pension funds’ SRI policies (or the lack thereof).

9.3.4 Ethical foundation of SRI

A clear distinction was made between three types of investing, namely moral investing, amoral (or ethically indifferent) investing and immoral investing. It was argued that SRI constitutes moral investing as socially responsible investors consider their own needs along with those of an array of ‘others’, such as customers, suppliers, employees, animals and society at large. It was also argued that socially responsible investors exhibit high levels of moral development based on the fact that they generally express a concern for universal principles which exceed the prescriptions of the law.

It can be argued that South Africa’s socio-political history had a pronounced effect on the ethical approaches used by socially responsible investors in South Africa to evaluate investment opportunities. From the evidence presented it seems as if preference is given to the principles underlying deontological ethics and the ethics of care. SRI strategies based on deontological ethics tend to focus on the protection of human rights as well as the promotion of distributive and compensatory justice. In contrast, SRI strategies based on the ethics of care seem to focus on local companies’ stakeholder relations in particular those that relate to their employees and local communities.

The researcher not only provided a description of the ethicality of SRI in South Africa, but also sought to uncover, develop and justify basic moral principles which are intended to guide socially responsible investors in their decision making and ownership practices. By adopting a normative approach the researcher took a definite stand on what she considered to be right or wrong in terms of SRI in South Africa and provided a theoretical justification for her
position. An example in this regard refers to the argument that government bonds are *bona fide* SRIs, despite claims by business ethicists, such as Arthur (1999:41), that gilts cannot be seen as ethical investments (see Section 5.3.3(b) of Chapter Five for more detail in this regard).

### 9.3.5 SRI fund performance

Although SRI is about more than money, financial performance remains one of the most, if not the most, important variable influencing the demand for SRIs. This view was strongly underscored by local SRI fund managers and industry experts. Although international research findings on the topic have varied over the years, it seems as if SRI funds tend to underperform versus broad market indices, but perform at least as well as conventional (non-SRI) funds.

To gauge the risk-adjusted performance of SRI funds in South Africa, a hypothetical model (Figure 1.4 of Chapter One) was developed. As indicated in this model, local SRI fund performance was compared with three benchmark categories, namely the benchmark indices of the SRI funds, a matched sample of conventional (non-SRI) funds and the general equity market in South Africa.

SRI fund performance *vis-à-vis* the three benchmark categories was evaluated during three sub-periods, namely 1 June 1992 to 31 August 1998, 1 September 1998 to 31 March 2002 and 1 April 2002 to 31 March 2006. These sub-periods represent three distinct periods in SRI history in South Africa, namely the establishment period, the decline period and the resurgence period.

The empirical evidence reveals that:

- local SRI funds underperformed relative to their respective benchmark indices during the first two sub-periods but significantly outperformed them during sub-period three. This finding points to the presence of a learning effect in the local SRI sector;
local SRI fund performance is not significantly different from that of a matched sample of conventional (non-SRI) funds; and
- local SRI funds significantly underperformed relative to the general equity market in South Africa during sub-period two (the decline period of SRI in South Africa) but performed on a par with the FTSE/JSE All Share Index during sub-periods one and two.

The abovementioned findings correspond with international research findings on the risk-adjusted performance of SRI funds and the EMH notion that active managers cannot beat the market. It thus seems as if socially responsible investors in South Africa are no worse off (financially speaking) as compared with conventional investors. The outcome of the quantitative data analysis is more favourable than initially anticipated. A review of the SRI literature in South Africa as well as semi-structured, face-to-face interviews with local SRI fund managers and industry experts suggested that the historic performance of SRI funds in South Africa was less than desirable. This is clearly not the case.

As indicated in the empirical model (Figure 8.2), only two of the eight null hypotheses could be rejected. For ease of reading, Figure 8.2 is reproduced here as Figure 9.1. Null hypothesis \( H_{3,0} \) was rejected showing that local SRI funds significantly out-performed their benchmark indices during sub-period three (the resurgence period of SRI in South Africa). This finding is indicated in green in Figure 9.1. Null hypothesis \( H_{7,0} \) (shown in red in Figure 9.1) was also rejected indicating that local SRI funds significantly underperformed versus the general equity market in South Africa during sub-period two (the decline period of SRI in South Africa).
FIGURE 9.1: Empirical model of SRI fund performance in South Africa

- Failed to reject $H_{1,0}$ i.e. no difference
- Failed to reject $H_{2,0}$ i.e. no difference
- Rejected $H_{3,0}$ i.e. there is a difference
- Failed to reject $H_{4,0}$ i.e. no difference
- Failed to reject $H_{5,0}$ i.e. no difference
- Failed to reject $H_{6,0}$ i.e. no difference
- Rejected $H_{7,0}$ i.e. there is a difference
- Failed to reject $H_{8,0}$ i.e. no difference
In the following section the strategic implications of the findings are explored and recommendations are offered.

### 9.4 STRATEGIC IMPLICATIONS AND RECOMMENDATIONS EMANATING FROM THE RESEARCH

The findings of this research have a bearing on investors and other key stakeholders in the SRI sector, such as asset managers, financial planners, asset consultants, investment analysts, academics and the government, as well as local trade unions, NGOs and lobby groups.

#### 9.4.1. Strategic implications and recommendations for investors

As indicated earlier, empirical evidence seem to suggest that there is no marked difference between the risk-adjusted returns of local SRI funds and their respective benchmark indices, a matched sample of conventional (non-SRI) funds and the general equity market in South Africa. This implies that investors could consider investing in local SRI funds as part of a well-diversified investment strategy. Cause-based investments in particular can offer good diversification benefits as they typically display low levels of correlation with listed securities.

It is however recommended that investors give careful consideration to the type of SRI strategy (or combination of strategies) that would best suit their return requirements, level of risk tolerance and other investment criteria and constraints such as liquidity, investment horizon and regulation.

The fact that local SRI fund performance improves over the longer term implies that investors ought to adopt a long-term orientation. It is thus recommended that investors, (i) give due consideration to the level of SRI experience and skills possessed by a particular SRI fund manager before investing, and (ii) evaluate performance against long-term benchmarks.
9.4.2 Strategic implications and recommendations for local asset managers in South Africa

Anticipated growth in the local SRI sector implies that SRI should become a strategic objective for local asset managers who have not yet given it much thought. According to contemporary strategic management literature, the formulation and implementation of strategic objectives lead to a bigger market share, a broader product line and an enhanced reputation (Needle 2004:300; Hitt, Ireland & Hoskisson 2005:114).

Existing SRI asset managers (such as Fraters Asset Management, Futuregrowth Specialist Asset Management and the Community Growth Company) should continue the good work that they are currently doing. It is however recommended that more varied SRI products be developed and that the current range of SRI screens used be broadened to bring SRI in South Africa in line with international best practice. In particular, more attention should be given to environmental considerations.

As indicated in Figure 9.2, asset managers in South Africa can adopt one of five business-level strategies with regard to SRI.

**FIGURE 9.2: Five business-level strategies**

Source: Hitt et al. (2005:114)
In essence, a **differentiation strategy** relates to and integrated set of actions to be taken to produce goods and services (at an acceptable cost) that customers perceive as being different in ways that are important to them (Lussier 2006:170). In contrast, a **cost leadership strategy** focuses on the with features which are acceptable to customers at the lowest cost, relative to that of competitors (Hitt et al. 2005:114). Businesses pursuing a cost leadership strategy should however still be able to compete in terms of product functionality and quality. A **focused strategy**, which could be based on cost leadership or product differentiation, serves the needs of a particular competitive segment.

It can be argued that the adoption of a focused differentiation strategy is the most suitable strategy for asset managers in or entering the SRI sector in South Africa. This argument can be justified by firstly considering the needs of socially responsible investors. Often socially responsible investors, such as pension funds and faith-based investors, have very specific needs which call for innovative, unique products. Knowledge of a specific market segment in the SRI sector can thus lead to competitive gains and the development of appropriate new products.

A second argument which favours the adoption of a focused differentiation strategy relates to that fact that it allows a company to make the most efficient use of its resources, such as the specialised skills of SRI analysts (Needle 2004:314).

A third consideration in favour of a focused differentiation strategy is that of customer loyalty. Thompson and Strickland (1999:78) claim that customers who value a product’s uniqueness tend to become loyal to both the product and the company providing it. This claim has been shown to be true in the SRI sector in the UK, where it was found that socially responsible investors held on to poor performing SRI funds for much longer than conventional investors did (Webley, Lewis & Mackenzie 2001:27).
Finally, SRI funds generally have higher expense ratios as compared with conventional (non-SRI) funds implying that the pursuit of a cost leadership strategy is a less attractive business-level strategy. As indicated in section 3.3.2(b) of Chapter Three, the higher cost of SRI funds can be ascribed to the complexities associated with the measurement of non-financial screens, the valuation of private equity ventures and the time required to engage with management boards.

A focused differentiation strategy is not without risk. Competitors can, for example, find effective ways to match the focused asset manager’s efforts in serving the narrowly defined target market and investors’ preferences (Thompson & Strickland 1999:134). A focused strategy however becomes increasingly attractive if:

- the segment is big enough to be profitable;
- the segment has good growth potential;
- the segment is not crucial to the success of major competitors;
- the focuser has the skills and resources to serve the segment efficiently; and
- the focuser can defend itself against challengers based on consumer goodwill.

Although the local SRI sector is still in its infancy, it is expected to grow in future for a variety of reasons pointed out earlier. Although not empirically proven in South Africa, it is also foreseen that local socially responsible investors will also exhibit higher levels of customer loyalty as compared with conventional investors, hence providing support for a focused differentiation strategy.

By developing innovative SRI products which are in line with global SRI trends, local asset managers can also tap into the growing market of foreign investors interested in SRI.
9.3.4 Sundry recommendations

Based on the findings of this research, it is strongly recommended that all stakeholders educate themselves with regard to the phenomenon of SRI in its entirety. It is suggested that a Social Investment Forum, similar to forums in the UK and Europe, be established to address the educational needs of investors and other stakeholders in the SRI industry.

More specifically a local Social Investment Forum should serve as a voice for the local SRI sector and aim to:

- inform, educate and provide a forum for discussion and debate for its members about issues and developments in the SRI field;
- inform, educate and raise awareness of SRI amongst target groups in the general population through their website, the general media and alliances with NGOs, campaigning groups, SRI product companies;
- promote an understanding of SRI and encourage the development of appropriate SRI practices and investment vehicles;
- identify, encourage and help develop working models that demonstrate the effectiveness of SRI in protecting the environment, alleviating social hardship and stimulating sustainable economic development;
- support and encourage a greater sense of social accountability amongst investors, both corporate and individual, and from financial institutions;
- encourage and expect high ethical standards of professional conduct from its members and the public at large;
- initiate and publish research for required changes in legislation as well as company policies and practices in order to enable SRI to develop rapidly and effectively both in South Africa and other emerging countries; and
- promote cooperation with international SRI organisations through the exchange of information and ideas.

The abovementioned aims are similar to those of the UK Social Investment Forum, which has been highly successful in promoting and encouraging the
development and positive impact of SRI amongst UK-based investors (UK Social Investment Forum 2006).

Given the reality that SRI is a deliberate strategy adopted by socially responsible investors, it is recommended that government interference in the process should be kept to a minimum.

It is clear that, if properly implemented, SRI in South Africa could serve as a valuable case study for other developing countries. From the evidence presented it is however apparent that much still remains to be done for this to become a reality. SRI in South Africa is indeed “…a big boat we’re still trying to row with little oars…and we’ve got a long way to go before we reach the harbour gates and high seas” (Finlay 2004).

**9.5 CONTRIBUTIONS OF THE RESEARCH**

In terms of the purpose of this research, a number of contributions are evident. Firstly, a comprehensive research design framework was developed to effectively execute the research. A unique design was adopted by integrating phenomenological and positivistic research methodologies.

Secondly, substantive theories pertaining to SRI in South Africa were developed. Examples include: defining SRI in the South African context; outlining the size and composition of the local SRI sector; describing the SRI strategies employed by local SRI fund managers; identifying the prominent ethical approaches followed by socially responsible investors in South Africa and describing the variables impacting on the demand for SRIs in South Africa. With regard to the latter, a comprehensive conceptual model (Figure 1.3 of Chapter One) was developed.

Thirdly, the first complete database of SRI funds in South Africa was constructed. This survivorship-free database was used to evaluate the risk-adjusted
performance of local SRI funds since the inception of the SRI sector in South Africa in June 1992.

The research further contributes to the body of knowledge by presenting empirical findings on the risk-adjusted performance of local SRI funds which were not previously available. Finally, clear strategic objectives were identified based on the findings of this study.

9.6 LIMITATIONS OF THE STUDY

Although precautions were taken to ensure the reliability and validity of the study it is (with the benefit of hindsight) possible to identify some limitations to this research.

The main limitation deals with the small sample of local SRI funds which was available for statistical analysis. This situation could however not be prevented given that:

- the SRI sector in South Africa has only been in existence for 14 years by the end of the research period (31 March 2006);
- some SRI funds' track records did not exceed twelve months by the end of the research period (31 March 2006);
- monthly valuations were not available for a number of SRI funds;
- certain SRI fund managers were not at liberty to disseminate performance data due to confidentiality clauses; and
- some SRI funds were not classified as separate legal investment vehicles and could thus not be included in the study.

Given the nature of the sample, potential biases might have manifested themselves, such as a success bias (as only SRI fund managers with reasonable performance might have been willing to disseminate performance data), a survivorship bias (as only those local SRI funds that survived longer than a year
were included in the sample) and a size bias (as only larger funds might have had monthly valuations). Given these issues, suitable statistical procedures were adopted to ensure that the reliability and validity of the findings would not be jeopardised.

Cognisance is also taken of the critique levelled at studies evaluating ex post fund performance. Although ex post measures “…provide a rear view and ignore oncoming traffic”, their value should not be underestimated. For the research in question, and in the absence of prior research, ex post measures were used to answer a specific question on the historical performance of SRI funds in South Africa.

9.7 FUTURE RESEARCH

Seven topics in the field of SRI in South Africa were identified as warranting further research. It is firstly suggested that a research instrument be developed to empirically test the variables depicted in the comprehensive conceptual model (Figure 1.3 of Chapter One). Such a study will shed more light on the variables that impact on the demand for SRIs.

Secondly, pioneering research needs to be undertaken on the impact of SRIs. Its impact should be quantified, measured and reported to stakeholders. Thirdly, more research is required to determine the educational needs of stakeholders in the local SRI sector and how these could be addressed best. A comprehensive gap analysis should be performed to identify deficiencies in existing training and educational programmes.

In the fourth instance, more research is needed on the functions that a local Social Investment Forum ought to fulfil and how such a forum could best be structured. It is further suggested that a follow-up study be undertaken in five years time to determine whether SRI funds do in fact yield better risk-adjusted returns in the long term. It is expected that more data will then be available,
allowing for the application of a multi-factor APT model, such as the one suggested by Bauer et al. 2005:1751 (Equation 6.24 of Chapter Six), and correlation analyses to gain further insight into the drivers of SRI fund performance in South Africa. It is suggested that hypotheses be formulated and tested to evaluate the impact of fund size and investment style on SRI fund performance.

In five years from today sufficient observations will also be available on the FTSE/JSE SRI Index to allow for a meaningful comparison between its performance and that of the FTSE/JSE All Share Index.

Lastly it is suggested that qualitative research be undertaken, either by means of case studies or interviews, to determine the composition of SRI funds. The case studies or interviews could answer questions such as: “To what extent are local SRI funds different from traditional collective investment schemes?” and “How strictly do local SRI managers apply SRI criteria when making investment decisions, particularly when faced with adverse economic conductions?”.

9.8 FINAL CONCLUDING REMARKS

This research has exposed the researcher to a wide range of learning experiences and challenges which required high levels of resilience. Throughout the research cognisance was taken of the warning uttered by the 11th century Hebrew philosopher Maimonides, namely that:

“*He who has studied insufficiently, and teaches and acts according to his defective knowledge, is to be considered as if he sinned knowingly*”

Not wanting to be labelled as an intentional sinner, all efforts were taken in this research to critically evaluate all of the dimensions of SRI in South Africa.
REFERENCES


Clarke, P. 2002. Putting pension plans to work - Retirement billions can be harnessed to green the economy. The environmental magazine, 13(6): 44-45.


Han, Y. 2006. Impact of brand identity on perceived brand image of the Nelson Mandela Metropolitan University. Unpublished Masters dissertation, Nelson Mandela Metropolitan University, Port Elizabeth.


Investorswords. 2006a. The Sortino ratio. 
http://www.investorwords.com/5793/Sortino_ratio.html

Investorword. 2006b. Dollar-weighted rate or return. 


Islamic banking 'could double'. 2003. Fin24.com, 22 September, 


Mutualfunds. 2006a. History of mutual funds. mutualfunds.about.com/cs/history/a/fund_history.htm

Mutualfunds. 2006b. Mutual fund definition. mutualfunds.about.com/cs/glossaries/g/mutual_fund.htm


Personal communication: Hutchinson, P. 2006. Marketing manager. BOE, Cape Town.


Personal communication: Naudè, P. 2006. Professor of Philosophy and Director of the Unit of Professional Ethics. Nelson Mandela Metropolitan University. Port Elizabeth.


Personal communication: Palframan, J. 2006. Lecturer, Nelson Mandela Metropolitan University, Port Elizabeth.


Personal communication: Sonnenberg, D. 2006. Director. Sustainability Research and Intelligence (SR&I), Johannesburg.


RisCura RisCView SRI Vehicles Surveys (from August 2003 – March 2006) available on: http://www.riscura.co.za/riscview.htm


The triple bottom line – the JSE’s SRI index one year on... 2005. *Finance week*, 27 July: 49.


Tranchimand, H. 2006. SRI in Europe: one size does not fit all. Presentation held at the 5th annual conference of the Australian Ethical Investment Association, Sydney, 21-22 September.


ANNEXURE A: DETAILS ON THE INTERVIEWS CONDUCTED WITH LOCAL SRI FUND MANAGERS AND INDUSTRY EXPERTS

This annexure contains details on the names and affiliations of the local SRI fund managers and industry experts who participated in the in-depth, face-to-face interviews. The questions posed during the interviews are also set out in this annexure. In the first section, details are provided on the interviews conducted in Cape Town in July 2003. In the second section, details are presented on the interviews conducted in Johannesburg in March 2006.

SECTION 1: CAPE TOWN INTERVIEWS – JULY 2003

Names of respondents:

<table>
<thead>
<tr>
<th>Name</th>
<th>Affiliated institution</th>
<th>Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mr C Forster</td>
<td>Sanlam Investment Management</td>
<td>Senior financial officer: Private equity group</td>
</tr>
<tr>
<td>Mr T Plaistowe</td>
<td>Old Mutual Asset Managers</td>
<td>Portfolio manager: development assets</td>
</tr>
<tr>
<td>Mr J Mafolo</td>
<td>Metropolitan Asset Managers</td>
<td>Portfolio manager</td>
</tr>
<tr>
<td>Ms A Dinan</td>
<td>Fraters Asset Management</td>
<td>SRI analyst</td>
</tr>
<tr>
<td>Ms H Jackson</td>
<td>African Harvest Fund Managers</td>
<td>Chief investment officer</td>
</tr>
<tr>
<td>Ms L Christodoulou</td>
<td>Futuregrowth Specialist Asset Management</td>
<td>Social impact analyst</td>
</tr>
<tr>
<td>Mr A Canter</td>
<td>Futuregrowth Specialist Asset Management</td>
<td>Chairman: Investment committee</td>
</tr>
</tbody>
</table>

Interview questions:

- How do you define SRI in the South African context?
- Why do you define SRI in the way that you do?
- Why should investors in South Africa consider SRI?
- What are your main concerns regarding the SRI sector in South Africa?
- Do you foresee growth in the local sector? Please motivate your answer.
- What are your views on the risk-adjusted performance of SRI funds in South Africa?
- In your opinion, how important is the risk-adjusted performance of local SRI funds in promoting SRI in South Africa?
- Which factors do you see as having the biggest impact on SRI fund performance in South Africa?
- What are your views on legislating SRI in South Africa?
- What are the biggest challenges facing the SRI sector in South Africa at the moment (July 2003)?
- What are your needs in terms of SRI research?
SECTION 2: JOHANNESBURG INTERVIEWS – MARCH 2006

Names of respondents:

<table>
<thead>
<tr>
<th>Name of interviewee</th>
<th>Affiliated institution</th>
<th>Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mr D Sonnenberg</td>
<td>Sustainability Research and Intelligence</td>
<td>Director</td>
</tr>
<tr>
<td>Mr M Davids</td>
<td>Alexander Forbes Financial Services</td>
<td>Asset consultant</td>
</tr>
<tr>
<td>Mr M Adsetts</td>
<td>Alexander Forbes Financial Services</td>
<td>Asset consultant</td>
</tr>
<tr>
<td>Ms J Johnston</td>
<td>JSE</td>
<td>Strategists</td>
</tr>
<tr>
<td>Ms C Le Roux</td>
<td>JSE</td>
<td>Legal counsellor</td>
</tr>
</tbody>
</table>

Interview questions:

- How do you define SRI in the South African context?
- Why do you define SRI in the way that you do?
- Has your definition of SRI changed in the light of the definitions of targeted investment and shareholder activism provided in the Financial Sector Charter?
- Which factors do you perceive as having a positive impact on SRI in South Africa?
- How important do you view each of the following factors in stimulating greater demand for SRIs in South Africa?
  - The launch of the FTSE/JSE SRI Index
  - The introduction of the Financial Sector Charter
  - Demand from customers
  - Improved triple bottom line reporting by local companies
  - The performance of local SRI funds
  - Increased NGO activism
  - Corporate scandals
- Which factors do you perceive as having a negative impact on SRI?
- How important do you view each of the following impediments to SRI in South Africa?
  - A lack of skills in the industry
  - Reluctance from trustees to engage in SRI
  - Negative investor sentiment
  - The lack of viable investment opportunities
  - A lack of information in the industry
- What do you consider as the main challenges to growing SRI in South Africa?
- What are your views on legislating SRI?
ANNEXURE B: DETAILS ON THE SAMPLE OF LOCAL SRI FUNDS

This annexure contains details on all the SRI funds which have been launched in South Africa during the period 1 June 1992 to 31 March 2006. In the first section details will be provided of all the active and discontinued SRI unit trusts followed by details on the other pooled (non-unit trust) and segregated SRI funds.

In both sections funds are listed in alphabetical order according to their second-tier classification. Details are provided of each fund’s status (active or discontinued), asset manager, classification, date of inception, size of assets on 31 March 2006 (if still active), date of discontinuance (if applicable), reason for discontinuance (if applicable), name of fund manager(s), benchmark and fund objectives. Comments regarding the fund and sources utilised in compiling and/or verifying fund particulars are also provided.

SECTION 1: SRI UNIT TRUSTS

Details on all the active and discontinued SRI unit trusts launched in South Africa during the period 1 June 1992 to 31 March 2006 are presented below. They are listed in the same order as in Table 7.3 i.e. equity, asset allocation (balanced) and fixed interest unit trusts.

Equity funds

<table>
<thead>
<tr>
<th>Community Growth Equity Fund</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Status</strong></td>
</tr>
<tr>
<td>Asset manager</td>
</tr>
<tr>
<td>Classification</td>
</tr>
<tr>
<td>Date of inception</td>
</tr>
<tr>
<td>Fund size as on 31 March 2006</td>
</tr>
<tr>
<td>Fund benchmark</td>
</tr>
<tr>
<td>Fund manager</td>
</tr>
<tr>
<td>Fund objectives</td>
</tr>
<tr>
<td>Comments regarding the launch of this fund ushered in the SRI movement in South Africa and has become an influential enforcer of social responsibility in firms. It now attends</td>
</tr>
<tr>
<td>Fund</td>
</tr>
<tr>
<td>------</td>
</tr>
<tr>
<td>SRI strategy employed</td>
</tr>
<tr>
<td>Reference(s)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Fraters Earth Equity Fund</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Status</strong></td>
</tr>
<tr>
<td><strong>Asset manager</strong></td>
</tr>
<tr>
<td><strong>Classification</strong></td>
</tr>
<tr>
<td><strong>Date of inception</strong></td>
</tr>
<tr>
<td><strong>Fund size on 31 March 2006</strong></td>
</tr>
<tr>
<td><strong>Fund benchmark</strong></td>
</tr>
<tr>
<td><strong>Fund manager</strong></td>
</tr>
<tr>
<td><strong>Fund objectives</strong></td>
</tr>
<tr>
<td><strong>Comments regarding the fund</strong></td>
</tr>
<tr>
<td><strong>SRI strategy employed</strong></td>
</tr>
<tr>
<td><strong>Reference(s)</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Fraters Islamic Equity Fund</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Status</strong></td>
</tr>
<tr>
<td><strong>Asset manager</strong></td>
</tr>
<tr>
<td><strong>Classification</strong></td>
</tr>
<tr>
<td><strong>Date of inception</strong></td>
</tr>
<tr>
<td><strong>Fund size on 31 March 2006</strong></td>
</tr>
<tr>
<td><strong>Fund benchmark</strong></td>
</tr>
<tr>
<td><strong>Fund manager</strong></td>
</tr>
<tr>
<td><strong>Fund objectives</strong></td>
</tr>
</tbody>
</table>
responsibility and performance measurements, including environmental management, social responsibility, economic empowerment and corporate governance. This is achieved through constructive engagement with the management of the companies in which the fund is invested.

<table>
<thead>
<tr>
<th>SRI strategy employed</th>
<th>A strategy combining shareholder activism and negative screening</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reference(s)</td>
<td>FundsData (2006); Fraters corporate website (2006); Frater launches first Islamic Unit Trust Fund (2006); Personal communication: Mr Terence Craig – Fraters (14 July 2006)</td>
</tr>
</tbody>
</table>

**Futuregrowth Albaraka Equity Fund (previously called the Futuregrowth Pure Equity Fund)**

<table>
<thead>
<tr>
<th>Status</th>
<th>Active</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asset manager</td>
<td>Frater Unit Trust Management Company</td>
</tr>
<tr>
<td>Classification</td>
<td>Unit trust: Domestic-Equity-General</td>
</tr>
<tr>
<td>Date of inception</td>
<td>1 June 1992</td>
</tr>
<tr>
<td>Fund size on 31 March 2006</td>
<td>R545 709 044</td>
</tr>
<tr>
<td>Fund benchmark</td>
<td>FTSE/JSE All Share Index</td>
</tr>
<tr>
<td>Fund manager(s)</td>
<td>Mr Ashraf Mohamed</td>
</tr>
</tbody>
</table>

**Fund objectives**

The fund provides investors with cost-effective access to a broad spectrum of JSE-listed investments. It is a well-balanced equity portfolio designed to provide medium- to long-term capital growth at a high level of risk. The fund is strictly managed in accordance with Shari'ah Law and therefore does not invest in shares that have an association with alcohol, gambling, non-halaal foodstuffs or interest-bearing instruments. The Shari'ah Supervisory Board assists in ethical issues and ensures that investments meet the stringent considerations of the mandate. The fund is exposed to the movements and sensitivities of the equity market. The fund also assumes mandate risk as its mandate precludes investments in non Shari'ah compliant shares including financial shares and interest-bearing instruments.

**Comments regarding the fund**

Although the fund was launched in 1992 as a SRI fund it only became a Shari'ah compliant fund in May 2003.

<table>
<thead>
<tr>
<th>SRI strategy employed</th>
<th>Negative screening</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reference(s)</td>
<td>FundsData (2006); AFAC TDI Manager Watch Survey (March 2006); Futuregrowth website (2006); Personal communication: Ms Angelique Kalam - Futuregrowth (24 July 2006)</td>
</tr>
</tbody>
</table>

**Nedbank Sustainable Investment Index Fund**

<table>
<thead>
<tr>
<th>Status</th>
<th>Discontinued</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asset manager</td>
<td>Use to be Nedbank Unit Trusts</td>
</tr>
<tr>
<td>Classification</td>
<td>Use to be Unit trust: Domestic-Equity-General</td>
</tr>
<tr>
<td>Date of inception</td>
<td>6 August 2002</td>
</tr>
<tr>
<td>Date of discontinuance</td>
<td>31 October 2003</td>
</tr>
</tbody>
</table>

**Reason for discontinuance**

The fund merged with the FTNIB Quants Core Equity Fund as it had too few assets under management and too few investors.

**Fund benchmark**

Edward Nathan & Friedland Sustainability Index

**Fund manager(s)**

Could not be established.
**Fund objectives**
The fund aimed at providing investors with long-term capital growth over 3-5 years (with medium to high risk) by tracking the performance of the Edward Nathan & Friedland Sustainability Index. This index weighted companies based on (1) their weighting in the FTSE/JSE Top 40 index and (2) their sustainability score reflecting their compliance with international best practices on sustainable development. The index and associated fund considered the social, environmental and economic consequences of investments thus taking cognisance of the triple-bottom-line approach to corporate measurement.

**Comments regarding the fund**
The fund was developed to coincide with the World Summit on Sustainable Development which took place in Johannesburg in August 2002. It was created with the aim of complementing other Nedbank products such as the Affinities range that contributes to sustainable development in the fields of community-based conservation, environmental education, sustainable use and species or habitat conservation. Nedbank believed that having a sustainability index and fund in the public domain would place a certain amount of public pressure on companies to follow sustainable business practices.

**SRI strategy employed**
Positive screening

**Reference(s)**
First index-based sustainable development unit trust is launched by Nedbank (2002); Personal communication: Mr Paul Hutchinson –BOE (17 July 2006) & Ms Tisha Powell – Nedbank (18 July 2006)

### Oasis Crescent Equity Fund

<table>
<thead>
<tr>
<th>Status</th>
<th>Active</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asset manager</td>
<td>Oasis Crescent Management Company</td>
</tr>
<tr>
<td>Classification</td>
<td>Unit trust: Domestic-Equity-General</td>
</tr>
<tr>
<td>Date of inception</td>
<td>31 July 1998</td>
</tr>
<tr>
<td>Fund size on 31 March 2006</td>
<td>R1 657 300 000</td>
</tr>
<tr>
<td>Fund benchmark</td>
<td>FTSE/JSE All Share Index</td>
</tr>
<tr>
<td>Fund managers</td>
<td>Mr Adam Ebrahim &amp; Mr Michael Swingler</td>
</tr>
</tbody>
</table>

**Fund objectives**
The primary objective of the fund is to protect capital and is a medium to high-risk investment vehicle. The secondary objective of the fund is to grow capital based on selective selection criteria. The fund provides investors with the opportunity to invest in listed equities on both local and international stock exchanges within the ethical parameters of Shari'ah-governed investment. The fund is an actively managed, Shari'ah compliant collective investment scheme that adheres to the ethical investment guidelines that are prescribed by the company’s Shari'ah Advisory Board. The mandate of this portfolio is to invest on both local (85%) and international (15%) share exchanges and is managed according to an investment philosophy of low volatility.

**SRI strategy employed**
Negative screening

**Reference(s)**
FundsData (2006); AFAC TDI Manager Watch Survey (March 2006)

### Oasis Crescent International Feeder Fund

<table>
<thead>
<tr>
<th>Status</th>
<th>Active</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asset manager</td>
<td>Oasis Crescent Management Company</td>
</tr>
<tr>
<td>Classification</td>
<td>Unit trust: Foreign-Equity-General</td>
</tr>
<tr>
<td>Date of inception</td>
<td>28 September 2001</td>
</tr>
<tr>
<td>Fund size on 31</td>
<td>R300 200 000</td>
</tr>
</tbody>
</table>

**Fund objectives**

**SRI strategy employed**

**Reference(s)**

### Dow Jones Islamic Market Index Fund

<table>
<thead>
<tr>
<th>March 2006</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Fund benchmark</td>
<td>Dow Jones Islamic Market Index</td>
</tr>
<tr>
<td>Fund managers</td>
<td>Mr Adam Ebrahim &amp; Mr Michael Swingler</td>
</tr>
<tr>
<td>Fund objectives</td>
<td>The objective of the fund is to achieve medium to long-term growth in US dollars. This is to be realised by investing in a selection of top performing funds that conform with the same rigorous criteria that is applied to provide superior returns at a low investment risk. The aim is to provide geographical offshore and fund diversification, a hedge against Rand depreciation and steady capital growth over time. The fund will only invest in selected securities that comply with ethical and moral considerations. In addition to Shari’ah prescriptions, the fund also avoids investments that are associated with high levels of gearing.</td>
</tr>
<tr>
<td>Comments regarding the fund</td>
<td>The fund invests in offshore dollar-based equities via the Crescent Global Equity Fund (a top-performing Shari’ah compliant global mutual fund that forms part of the Oasis Group’s global product range). The underlying fund, which is domiciled in Ireland and listed on the Irish Stock Exchange, invests in listed equity markets across the world. The feeder fund invests directly into the Oasis Crescent Equity Fund, but allows investors to invest in Rand, rather than US dollar</td>
</tr>
<tr>
<td>SRI strategy employed</td>
<td>Negative screening</td>
</tr>
<tr>
<td>Reference(s)</td>
<td>Du Preez 2005:1; FundsData (2006); AFAC TDI Manager Watch Survey (March 2006)</td>
</tr>
</tbody>
</table>

### Sanlam Empowerment Equity Fund

| Status | Discontinued |
| Asset Manager | Use to be Sanlam Unit Trusts |
| Classification | Use to be Unit trust: Domestic – Equity – Varied Specialist |
| Date of inception | 15 September 1997 |
| Date of discontinuance | 30 April 2003 |
| Reason for discontinuance | The Sanlam Empowerment Equity Fund and the Sanlam Value Fund has been combined under the name and mandate of the latter. The mandate of the Empowerment Equity Fund was to invest in shares of companies directly or indirectly involved in economic empowerment. “In our opinion it was not possible to comply satisfactorily with the fund’s mandate in the present investment environment as was the case with similar funds in the industry” |
| Fund manager | Use to be Mduduzi Ndlovo |
| Benchmark | Barings ING Empowerment Index |
| Fund objectives | The fund sought long-term capital appreciation by investing in shares that were directly or indirectly involved in the process of economic empowerment |
| Comments regarding the fund | The fund was geared towards individuals, groups and pension / provident funds wishing to utilise the potential growth of black empowered companies (black chips) and/or wishing to participate in BEE. |
| SRI strategy employed | Positive screening |
| Reference(s) | Sanlam Unit Trusts Quarterly Bulletin – 31 December 2002; Changes to Sanlam Unit Trusts’ offerings (2003) |

### Sasfin Socially Responsible Fund

<p>| Status | Active |
| Asset manager | Sasfin Frankel Pollak Securities |
| Classification | Unit trust: Domestic-Equity-Varied Specialist |
| Date of inception | 14 October 2005 |</p>
<table>
<thead>
<tr>
<th>Sasfin TwentyTen Fund</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Status</strong></td>
</tr>
<tr>
<td><strong>Asset manager</strong></td>
</tr>
<tr>
<td><strong>Classification</strong></td>
</tr>
<tr>
<td><strong>Date of inception</strong></td>
</tr>
<tr>
<td><strong>Fund size on 31 March 2006</strong></td>
</tr>
<tr>
<td><strong>Fund benchmark</strong></td>
</tr>
<tr>
<td><strong>Fund manager</strong></td>
</tr>
<tr>
<td><strong>Fund objectives</strong></td>
</tr>
<tr>
<td><strong>SRI strategy employed</strong></td>
</tr>
<tr>
<td><strong>Source</strong></td>
</tr>
</tbody>
</table>

**Asset allocation (balanced) funds**

<table>
<thead>
<tr>
<th>Fraters Flexible Fund</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Status</strong></td>
</tr>
<tr>
<td><strong>Asset manager</strong></td>
</tr>
<tr>
<td><strong>Classification</strong></td>
</tr>
</tbody>
</table>
**Frater's Real Income Fund**

<table>
<thead>
<tr>
<th>Date of inception</th>
<th>15 October 2001</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fund size on 31 March 2006</td>
<td>R782 188 779</td>
</tr>
<tr>
<td>Fund benchmark</td>
<td>Composite benchmark: SA Equities (45% FTSE/JSE All Share Index &amp; 25% FTSE/JSE Financials and Industrials Index), SA Bonds (15% BEASSA All Bond Index), Property (5% Property Unit Trust Index) &amp; Cash (10% Stefi Index)</td>
</tr>
<tr>
<td>Fund manager</td>
<td>Mr Terence Craig</td>
</tr>
<tr>
<td>Fund objectives</td>
<td>The fund is actively managed and is able to invest in equities, fixed interest, listed property and cash. The fund aims to maximise total returns and align the investment objectives of the investor, the fund manager and the asset management company. The fund also uses its presence to promote awareness of corporate responsibility and performance measurements, including environmental management, social responsibility, economic empowerment and corporate governance. This is achieved through constructive engagement with the management of the companies in which the fund is invested.</td>
</tr>
<tr>
<td>Comments regarding the fund</td>
<td>The fund is Frater’s ‘best view’ on domestic asset allocation combined with individual instrument selection based on bottom-up research conducted by our in-house research team. The fund houses the investments of Frater’s management. The fund has a medium risk profile and is suitable for individuals and small retirement funds that have relatively low income demands from their capital bases. The fund should be seen as a core holding around which other strategies are planned.</td>
</tr>
<tr>
<td>SRI strategy employed</td>
<td>Shareholder activism</td>
</tr>
<tr>
<td>Reference(s)</td>
<td>FundsData (2006); Fraters corporate website (2006); Personal communication: Mr Terence Craig – Fraters (14 July 2006)</td>
</tr>
</tbody>
</table>

**Fraters Real Income Fund**

<table>
<thead>
<tr>
<th>Status</th>
<th>Active</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asset manager</td>
<td>Frater Unit Trust Management Company</td>
</tr>
<tr>
<td>Classification</td>
<td>Unit trust: Domestic-Asset Allocation-Targeted and Absolute Real Return</td>
</tr>
<tr>
<td>Date of inception</td>
<td>9 October 2002</td>
</tr>
<tr>
<td>Fund size on 31 March 2006</td>
<td>R731 781 343</td>
</tr>
<tr>
<td>Fund benchmark</td>
<td>CPIX + 3%</td>
</tr>
<tr>
<td>Fund managers</td>
<td>Mr Terence Craig &amp; Mr Matthew Kreeve</td>
</tr>
<tr>
<td>Fund objectives</td>
<td>The fund aims to achieve the highest sustainable income payout that is possible without eroding the fund’s inflation adjusted capital base. The fund aims to grow this income and the underlying capital of the fund in line with inflation (CPIX). The fund is actively managed and is able to invest in high yielding equities, bonds, fixed deposits, money market instruments, listed debentures, property unit trusts, listed property equities and other high yielding securities. The fund also uses its presence to promote awareness of corporate responsibility and performance measurements, including environmental management, social responsibility, economic empowerment and corporate governance. This is achieved through constructive engagement with the management of the companies in which the fund is invested.</td>
</tr>
<tr>
<td>Comments regarding the fund</td>
<td>The fund has a low risk profile and is suitable for individuals and small retirement funds that have relatively high income demands from their capital bases.</td>
</tr>
<tr>
<td>SRI strategy</td>
<td>Shareholder activism</td>
</tr>
</tbody>
</table>
Fixed interest funds

**Community Growth Gilt Fund**

<table>
<thead>
<tr>
<th>Status</th>
<th>Active</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asset manager</td>
<td>Old Mutual Asset Managers</td>
</tr>
<tr>
<td>Classification</td>
<td>Unit trust: Domestic-Fixed Interest-Bond</td>
</tr>
<tr>
<td>Date of inception</td>
<td>14 July 1998</td>
</tr>
<tr>
<td>Fund size on 31 March 2006</td>
<td>R947 884 644</td>
</tr>
<tr>
<td>Fund benchmark</td>
<td>BEASSA All Bond Index</td>
</tr>
<tr>
<td>Fund manager</td>
<td>Ms Jennifer Sheehy</td>
</tr>
<tr>
<td>Fund objectives</td>
<td>The fund aims to maximise total returns through a balance of capital growth and income generation. The fund invests in bonds with a particular emphasis on reconstruction, development and the empowerment of the South African labour force. The emphasis is on institutions and projects that contribute to the development of South Africa through programmes that have a meaningful social impact, and are committed to development, community participation and support.</td>
</tr>
<tr>
<td>Comments regarding the fund</td>
<td>The fund typically invests a minimum of 25% of its assets in non-government and non-banking bonds such as those of Eskom, Transnet, Umgeni Water, SA Housing Trust, Development Bank and the Landbank.</td>
</tr>
<tr>
<td>SRI strategy employed</td>
<td>Positive screening</td>
</tr>
<tr>
<td>Reference(s)</td>
<td>Du Preez (2005:37); FundsData (2006); AFAC TDI Manager Watch Survey (March 2006); OMAM corporate website (2006)</td>
</tr>
</tbody>
</table>

**SECTION 2: OTHER POOLED (NON-UNIT TRUST) AND SEGREGATED SRI FUNDS**

Details on all the active and discontinued pooled (non-unit trust) and segregated SRI funds launched in South Africa during the period 1 June 1992 to 31 March 2006 are presented below. They are listed in the same order as in Table 7.3 i.e. equity, asset allocation (balanced), fixed interest, alternative (private equity) and property funds.

**Equity funds**

**AMB Empowerment Equity Fund**

<table>
<thead>
<tr>
<th>Status</th>
<th>Assumed discontinued (as no trace of the fund could be found)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asset manager</td>
<td>Use to be AMB Capital Management (no longer exists)</td>
</tr>
<tr>
<td>Classification</td>
<td>Could not be established whether the fund was pooled or segregated Domestic-Equity</td>
</tr>
<tr>
<td>Date of inception</td>
<td>1 April 1997</td>
</tr>
<tr>
<td>Date of discontinuance</td>
<td>31 December 2002</td>
</tr>
<tr>
<td>Reason for discontinuance</td>
<td>The fund was withdrawn from the AFAC TDI Manager Watch Survey towards the end of 2002 upon request of the management company. Efforts to verify</td>
</tr>
</tbody>
</table>
Fund data has been unsuccessful as neither fund managers at AMB Private Equity nor at Foord (which had close ties with AMB in the past) have been able to provide any information on the fund or ex-fund manager (Personal communication Mr Andrew Hall & Ms Donnetta McKinley). As such the fund had to be excluded from the survey. Another reason for its exclusion flows from the fact that only quarterly performance data is available in the AFAC TDI manager watch database.

<table>
<thead>
<tr>
<th>Fund manager</th>
<th>Use to be Mr Hilton Davies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benchmark</td>
<td>Could not be established.</td>
</tr>
<tr>
<td>Fund objectives</td>
<td>The objective of the fund was to finance BEE groups by investing predominantly in unlisted, but also listed, companies. The funding of BEE transactions where the relevant BEE groups have no significant capital will typically be through Special Purpose Vehicles (SPV’s) or similar structures, as well as providing equity capital directly to BEE investment holding companies. In addition, investment opportunities exist in the purchase and/or refinancing of existing BEE SPV’s. Strategic guidance will be provided throughout the term of the investment, to ensure long term capital appreciation.</td>
</tr>
<tr>
<td>SRI strategy employed</td>
<td>Cause-based investing</td>
</tr>
<tr>
<td>Reference(s)</td>
<td>AFAC TDI Manager Watch Survey (September 2002; March 2003); Kobokoane (1999); South African Venture Capital Association (2006); Personal communication: Ms Donetta McKinley – Foord (18 July 2006) &amp; Mr Andrew Hall – AMB Private Equity Partners (26 July 2006)</td>
</tr>
</tbody>
</table>

**Futuregrowth Anchor Fund**

<table>
<thead>
<tr>
<th>Status</th>
<th>Discontinued</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asset manager</td>
<td>Futuregrowth Specialist Asset Management</td>
</tr>
<tr>
<td>Classification</td>
<td>Pooled: Domestic-Equity</td>
</tr>
<tr>
<td>Date of inception</td>
<td>1 July 1997</td>
</tr>
<tr>
<td>Date of discontinuance</td>
<td>31 May 2004</td>
</tr>
<tr>
<td>Reason for discontinuance</td>
<td>The fund’s investment mandate changed.</td>
</tr>
<tr>
<td>Fund manager</td>
<td>Use to be Mr Chris Freund</td>
</tr>
<tr>
<td>Benchmark</td>
<td>Composite benchmark: 80% FTSE/JSE Financials and Industrials Index &amp; 20% FTSE/JSE SA Resources Index</td>
</tr>
<tr>
<td>Fund objectives</td>
<td>To invest in socially responsible companies listed in the financial, resources and industrial sectors of the JSE.</td>
</tr>
<tr>
<td>SRI strategy employed</td>
<td>Although the exact SRI strategy of this fund could not be established with certainty, two options seem likely: 1. the fund could have had a cause-based investing strategy. This can be justified by looking at all the other SRI funds in the Futuregrowth stable. All the SRI funds launched before the establishment of the FTSE/JSE SRI Index in 2004 employed a cause-based investment strategy. Only after the launch of the FTSE/JSE SRI Index, did the company establish two new SRI funds, both employing a positive screening strategy. When Futuregrowth launched the Anchor fund in 1998, they had (and still have) a distinct advantage in the area of alternative or cause-based investments and might have wanted to capitalise on this strength. 2. the fund could have had a <strong>positive screening strategy</strong>. This can be justified by looking at the fund’s classification (general equity) and its benchmark (80% FTSE/JSE Financial &amp; Industrial 30 Index &amp; 20% FTSE/JSE Resources Index). The company might have focused on listed equities with a strong empowerment focus as many other SRI funds which were launched late in the 1990s. On balance, the second option seems the most likely and will thus be assigned to this fund for the purpose of this study. It could be definitively assigned to this fund for the purpose of this study.</td>
</tr>
</tbody>
</table>
argued that the fund did not employ a negative screening strategy. All five local SRI funds with a negative (exclusionary) screening approach are based on Shari’ah law and reflect this fact in their names e.g. Frater’s Islamic Fund or the Investment Solutions’ Shari’ah fund etc. If this fund employed a negative screening strategy, it would probably have been named accordingly. Futuregrowth did exactly this when they renamed the Pure Equity Fund to the Albaraka Equity fund when the fund became an Islamic compliant fund.

Reference(s)  Personal communication: Ms Angelique Kalam – Futuregrowth (25 July 2006); AFAC TDI manager watch database as on 31 March 2006

### Futuregrowth SRI Equity Fund

<table>
<thead>
<tr>
<th>Status</th>
<th>Active</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asset manager</td>
<td>Futuregrowth Specialist Asset Management</td>
</tr>
<tr>
<td>Classification</td>
<td>Pooled: Domestic-Equity</td>
</tr>
<tr>
<td>Date of inception</td>
<td>1 July 2004</td>
</tr>
<tr>
<td>Size of fund on 31 March 2006</td>
<td>R33 200 000</td>
</tr>
<tr>
<td>Fund manager</td>
<td>Mr Ashraf Mohamed</td>
</tr>
<tr>
<td>Benchmark</td>
<td>FTSE/JSE SRI Index + 3%</td>
</tr>
</tbody>
</table>

**Fund objectives**
- Investment objective: adding maximum alpha targets within stipulated risk parameters.
- Excess return objective: a minimum excess return of 3% p.a. in excess of the prescribed benchmark.
- Tracking error objective: a maximum allowable forecast tracking error of 5% p.a.

**Comments regarding the fund**
Futuregrowth launched this fund in response to the flurry of interest from pension funds seeking an avenue through which to bolster their SRI investments. The fund tracks 27 of the best performing companies contained in the FTSE/JSE SRI Index (launched in May 2004). This index ranks JSE listed companies on a number of social, ethical, environmental and governance criteria.

**SRI strategy employed**
Positive screening

**Reference(s)**
Rose (2004:15); Futuregrowth corporate website (2006); Ms Angelique Kalam - Futuregrowth (18 July 2006)

### Asset allocation (balanced) SRI funds

#### Community Growth Equity Fund of Funds

<table>
<thead>
<tr>
<th>Status</th>
<th>Active</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asset managers</td>
<td>Old Mutual Asset Managers</td>
</tr>
<tr>
<td>Classification</td>
<td>Pooled: Domestic-Asset Allocation</td>
</tr>
<tr>
<td>Date of inception</td>
<td>1 April 2005</td>
</tr>
<tr>
<td>Size of fund on 31 March 2006</td>
<td>R25 000 000</td>
</tr>
<tr>
<td>Fund manager</td>
<td>Mr Douglas Davids</td>
</tr>
<tr>
<td>Benchmark</td>
<td>Composite benchmark (no weights indicated): Cash (Stefi Index) + SA Bonds (BEASSA All Bond Index) + SA Equity (FTSE/JSE All Share Index) + Alternative (CPI + 7%)</td>
</tr>
</tbody>
</table>
**Fund objectives**

This fund of funds provides institutional investors with a well-diversified profile of local assets that aim to provide long-term capital growth while promoting sustainable and responsible investing. The performance objective of the fund is to produce above-average, real returns, with relatively low risk of capital loss over rolling five-year periods. It has a medium risk profile.

**Comments regarding the fund**

The fund contains a mix of money market, fixed income, equities and alternative assets. Using a fund of funds approach, the fund invests in the Community Growth Equity Fund (equities), Community Growth Gilt Fund (fixed income), Community Growth Money Market Fund (money market) and the IDEAS Fund (alternative assets).

**SRI strategy employed**

Positive screening

**Reference(s)**

OMAM corporate website (2006); Personal communication: Mr Douglas Davids – OMAM (17 July 2006)

---

### Futuregrowth Diversified Development Fund

<table>
<thead>
<tr>
<th>Status</th>
<th>Discontinued</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asset manager</td>
<td>Use to be Futuregrowth Specialist Asset Management</td>
</tr>
<tr>
<td>Classification</td>
<td>Pooled: Domestic-Asset Allocation</td>
</tr>
</tbody>
</table>

**Date of inception**

The date could not be established after an extensive review of the literature, internet searches and personal communication with a company representative. Clearly the fund could not have been established before its individual funds - the Futuregrowth Infrastructure Bond Fund came into existence on 1 January 1994, the Futuregrowth Structured Empowerment Fund on 1 October 1995, the Futuregrowth Community Property Fund on 1 July 1996 and the Futuregrowth Anchor Fund came on 1 January 1997. As the company might have taken a wait and see approach with regard to the Anchor Fund, it could be assumed that this fund only came into existence approximately six months later i.e. on 1 June 1997

**Date of discontinuance**

31 July 2001 (based on the fact that it was excluded from the AFAC TDI Manager Watch Survey September 2001 survey because “the fund was being broken down into the individual units”)

**Reason for discontinuance**

This was a composite portfolio, which held the other Futuregrowth funds namely the Infrastructure Bond Fund, Structured Empowerment Fund, Community Property Fund and Anchor Fund.

**Fund manager(s)**

Could not be established

**Benchmark**

CPI + 4%

**Fund objectives**

Infrastructure development, BEE financing, community regeneration and social upliftment.

**SRI strategy employed**

Cause-based investing

**Reference(s)**

Personal communication: Ms Angelique Kalam – Futuregrowth (25 July 2006); AFAC TDI Manager Watch Survey (September 2001).

---

### Futuregrowth SRI Balanced Fund

<table>
<thead>
<tr>
<th>Status</th>
<th>Active</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asset manager</td>
<td>Futuregrowth Specialist Asset Management</td>
</tr>
<tr>
<td>Classification</td>
<td>Pooled: Domestic-Asset Allocation</td>
</tr>
</tbody>
</table>

**Date of inception**

30 September 2004

**Size of fund on 31 March 2006**

R3 200 000

**Fund manager(s)**

Mr Henry Hawinkel (Asset Allocation), Ashraf Mohammed (SRI Equity), Kelebogile Moloko (Infrastructure Bond Fund), Anabel Chesters
| Benchmark | Composite weighting of the underlying funds’ benchmarks: namely the Futuregrowth SRI Equity Fund, Futuregrowth Infrastructure Bond Fund, Futuregrowth Community Property Fund & Cash |
| Fund objectives | The fund, which is effectively a fund of funds, addresses the complex nature of socially responsible investing in South Africa. The Futuregrowth Infrastructure Bond Fund and the Futuregrowth Community Property Fund provide investors with social impact from a targeted and development perspective whilst the Futuregrowth SRI Equity Fund gives investors exposure to listed equities that have met the FTSE/JSE’s SRI Index criteria with regards to environmental, economic and social performance. |
| SRI strategy employed | A strategy combining cause-based investing and positive screening |
| Reference(s) | Futuregrowth corporate website (2006); Personal communication: Ms Angelique Kalam - Futuregrowth Asset Management (24 July 2006) |

**Investec Mafisa Fund**

| Status | Discontinued |
| Asset manager | Use to be Investec Asset Management |
| Classification | It could not be established whether the fund was pooled or segregated |
| Date of inception | 1 October 1997 |
| Date of discontinuance | According to Mr Adams of Investec the discontinuance date can not be pinpointed as the investment mandate progressively changed from a SRI focus to a general private equity focus. The fund was however excluded from the AFAC TDI Manager Watch Survey as from 31 August 2002. As a result this date will be used as the discontinuance date. |
| Reason for discontinuance | The fund changed its investment mandate. The fund now invests in a wide variety of private equity assets i.e. not only those with a social focus. |
| Fund manager | Use to be Ms Busi Mabuza at one time and Ms Heater Jackson at another |
| Benchmark | Could not be established |
| Fund objectives | The fund gave investors an opportunity to earn market related returns from investments specifically targeted at areas of social need. These include health care, education, building and construction, utilities, water and sanitation, technology and infrastructure development. |
| Comments regarding the fund | The fund took an all embracing approach to the definition of ‘social need’ and did not limit its investments to black empowerment companies. Monthly returns for the fund are only available (on the AFAC TDI manager watch database) from 1 May 1998 until 31 August 2002 |
| SRI strategy employed | Cause-based investing |
| Reference(s) | Social investment performs well (1998); Personal communication Mr Adam Alexander – Investec (24 July 2006); AFAC TDI Manager Watch Survey (September 2001); AFAC TDI manager watch database as on 31 March 2006 |

**Investec Sechaba Fund**

| Status | Discontinued |
| Asset manager | Use to be Investec Asset Management |
| Classification | It could not be established whether the fund was pooled or segregated |
| Date of inception | 1 August 2000 |
| Date of discontinuance | According to Mr Adams of Investec the discontinuance date can not be pinpointed as the investment mandate progressively changed from a SRI focus to a general private equity focus. The fund was however excluded from the AFAC TDI Manager Watch Survey as from 31 August 2002. As a result... |
this date will be used as the discontinuance date.

<table>
<thead>
<tr>
<th>Reason for discontinuance</th>
<th>The fund changed its investment mandate. The fund now invests in a wide variety of private equity assets i.e. not only those with a social focus.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fund manager</td>
<td>Use to be Ms Heather Jackson</td>
</tr>
<tr>
<td>Benchmark</td>
<td>Could not be established</td>
</tr>
<tr>
<td>Fund objectives</td>
<td>The fund focussed exclusively on private equity investments with a social investment focus.</td>
</tr>
<tr>
<td>SRI strategy employed</td>
<td>Cause-based investing</td>
</tr>
<tr>
<td>Reference(s)</td>
<td>Personal communication Mr Adam Alexander – Investec (24 July 2006); AFAC TDI Manager Watch Survey (September 2001)</td>
</tr>
</tbody>
</table>

### Metropolitan Futurebuilder Fund

<table>
<thead>
<tr>
<th>Status</th>
<th>Active</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asset manager</td>
<td>Metropolitan Asset Managers</td>
</tr>
<tr>
<td>Classification</td>
<td>Pooled: Domestic-Asset Allocation</td>
</tr>
<tr>
<td>Date of inception</td>
<td>1 October 1996</td>
</tr>
<tr>
<td>Size of fund as at 31 March 2006</td>
<td>R888 000 000</td>
</tr>
<tr>
<td>Fund manager</td>
<td>Mr Godfrey Albertyn</td>
</tr>
<tr>
<td>Benchmark</td>
<td>CPIX + 4%</td>
</tr>
<tr>
<td>Fund objectives</td>
<td>The fund has a temperate risk profile and strives to contribute to local economic development and employment creation by investing in those projects and companies that concentrate on the provision and enrichment of infrastructure as well as BEE. The fund is designed to achieve long-term inflation beating returns for investors.</td>
</tr>
<tr>
<td>Comments regarding the fund</td>
<td>The fund invests in listed and unlisted bonds, but they are largely unlisted securities that focus on the provision of infrastructure. The equity investments include listed companies and private equity initiatives. In the past, the fund has invested in the telecommunications, energy, water, housing and infrastructure sectors, with a view to improving the quality of life of ordinary people, transferring skills and creating a more equitable wealth distribution in the country.</td>
</tr>
<tr>
<td>SRI strategy employed</td>
<td>A strategy combining cause-based investing and positive screening</td>
</tr>
<tr>
<td>Reference(s)</td>
<td>AFAC TDI Manager Watch Survey (September 2002); Du Preez (2005:37); AFAC TDI Manager Watch Survey (March 2006); Metropolitan Asset Managers corporate website (2006); Personal communication: Mr Godfrey Albertyn – Metropolitan Asset Managers (24 July 2006)</td>
</tr>
</tbody>
</table>

### Metropolitan Socially Responsible Investment Fund

<table>
<thead>
<tr>
<th>Status</th>
<th>Active</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asset manager</td>
<td>Metropolitan Asset Managers</td>
</tr>
<tr>
<td>Classification</td>
<td>Pooled: Domestic-Asset Allocation</td>
</tr>
<tr>
<td>Date of inception</td>
<td>1 December 2005</td>
</tr>
<tr>
<td>Size of fund as at 31 March 2006</td>
<td>R112 000 000</td>
</tr>
<tr>
<td>Fund manager</td>
<td>Mr Godfrey Albertyn</td>
</tr>
<tr>
<td>Benchmark</td>
<td>Composite benchmark: SA Equities (60% FTSE/JSE SRI Index); SA Bonds (30% BEASSA All Bond Index); Property (5% CPI + 6%) &amp; Cash (5% Alexander Forbes Money Market Index)</td>
</tr>
</tbody>
</table>
Fund objectives | The fund strives to provide investors with above average investment returns while at the same time contributing to society by investing in businesses that are economically, socially and environmentally sustainable organisations.

Comments regarding the fund | The creation of the new fund was necessitated by the investor’s need to have an SRI fund that complies with Regulation 28 of the Pension Funds Act. Unlike Metropolitan’s existing SRI fund called the Futurebuilder fund, this fund is designed to satisfy the needs of clients who want to invest in the SRI space without having to worry about compliance with Regulation 28 of the Pension Funds Act. Equities are selected primarily from the FTSE/JSE SRI Index whereas the bond portfolio is strongly biased towards infrastructure. The property portfolio is mainly invested in properties located in underdeveloped areas.

SRI strategy employed | A strategy combining cause-based investing and positive screening

Reference(s) | Investment with a conscience (2006:5); Personal communication: Mr Godfrey Albertyn – Metropolitan Asset Managers (18 July 2006)

---

**Momentum Supernation Fund**

**Status** | Active

**Asset manager** | Futuregrowth Specialist Asset Management

**Classification** | Pooled: Domestic-Asset Allocation

**Date of inception** | 1 October 2002

**Size of fund as at 31 March 2006** | R78 900 000

**Fund manager** | Mr Ashraf Mohamed

**Benchmark** | Composite benchmark: SA Equities (60% FTSE/JSE All Share Index); SA Bonds (25% BEASSA All Bond Index); Property (10% CPI + 4%) & Cash (5% Stefi Index)

**Fund objectives** | The fund, which is effectively a fund of funds, aims to achieve an optimal balance between investments in bonds, equities, property and cash in order to lower the volatility of returns while at the same time provide for capital growth and assist in the provision of capital for social upliftment. The portfolio is a balanced fund with a medium risk profile and is ideal for long-term retirement funding. The fund seeks to play a part in the social development of South Africa by addressing infrastructure development, social upliftment, rural development and job creation in order to achieve this objective. The fund is also known for its active engagement SRI strategy with the aim of enhancing corporate governance within listed equity investments. The fund is aimed at the risk-averse investor and is suitable for institutional investors who require competitive real returns over the long-term combined with a social bias, without wishing to take on high risk.

**Comments regarding the fund** | The equity component of the fund, which can be up to 75% of the value of the fund, is invested in the Fraters Earth Equity Fund, which invests solely in listed shares. The bond component of fund is invested in the Futuregrowth Infrastructure Bond Fund while the property component of the fund is invested in Futuregrowth’s Community Property Fund with the remaining balance held in cash. Decisions regarding the Fund’s asset allocation have also been outsourced to Futuregrowth Specialist Asset Management company. The fund complies with Regulation 28 of the Pension Funds Act.

**SRI strategy employed** | A strategy combining shareholder activism and positive screening

**Reference(s)** | Du Preez (2005:38); AFAC TDI Manager Watch Survey (March 2006); Personal communication: Ms Angelique Kalam - Futuregrowth (24 July 2006)
### Rocklands Social Responsible Balanced Fund

<table>
<thead>
<tr>
<th>Status</th>
<th>Active</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asset manager</td>
<td>Rockland Investment Management</td>
</tr>
<tr>
<td>Classification</td>
<td>It could not be established whether the fund is a pooled or segregated fund</td>
</tr>
<tr>
<td>Domestic-Asset Allocation</td>
<td></td>
</tr>
<tr>
<td>Date of inception</td>
<td>Sometime in 2004</td>
</tr>
<tr>
<td>Size of fund as at 31 March 2006</td>
<td>Confidential</td>
</tr>
<tr>
<td>Fund manager</td>
<td>Could not be established</td>
</tr>
<tr>
<td>Benchmark</td>
<td>Could not be established</td>
</tr>
<tr>
<td>Fund objectives</td>
<td>Could not be established</td>
</tr>
<tr>
<td>Comments regarding the fund</td>
<td>This fund was identified from the AFAC TDI manager watch database as on 31 March 2006 where it was merely listed as a SRI fund. As performance data is confidential, the fund had to be excluded from the sample.</td>
</tr>
<tr>
<td>SRI strategy employed</td>
<td>Although this could not be established with certainty, the fund’s classification lends itself to a cause-based investing strategy. As the Rocklands Growth and Development fund uses a combination of positive and negative screens along with a cause-based strategy, it is assumed that this fund employs a similar strategy.</td>
</tr>
<tr>
<td>Reference(s)</td>
<td>AFAC TDI manager watch database as on 31 March 2006</td>
</tr>
</tbody>
</table>

### Sanlam Community Builder Fund

<table>
<thead>
<tr>
<th>Status</th>
<th>Active (NB: On 31 March 2006 the fund was closed and in the process of unwinding)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asset manager</td>
<td>Sanlam Investment Managers</td>
</tr>
<tr>
<td>Classification</td>
<td>Pooled: Domestic-Asset Allocation</td>
</tr>
<tr>
<td>Date of inception</td>
<td>1 January 1996</td>
</tr>
<tr>
<td>Fund manager(s)</td>
<td>Could not be established</td>
</tr>
<tr>
<td>Benchmark</td>
<td>No benchmark</td>
</tr>
<tr>
<td>Fund objectives</td>
<td>The fund is geared to provide a focused opportunity through which investors in general can contribute to the growth of South Africa through investing in infrastructure, job creation, service provision and economic enablement. The fund typically invests in listed and unlisted equities, bonds, cash and property.</td>
</tr>
<tr>
<td>Comments regarding the fund</td>
<td>Although the fund is still active (according to Mr Danie Scholtz of SIM), monthly returns are only available (in the AFAC TDI manager watch database) from January 1996 until 31 December 2003. As such the fund is excluded from the sample</td>
</tr>
<tr>
<td>SRI strategy employed</td>
<td>A strategy combining cause-based investing and positive screening</td>
</tr>
<tr>
<td>Reference(s)</td>
<td>Heese (2002b); Personal communication: Mr Danie Scholtz &amp; Mr Cobus Foster - SIM (25 July 2006); AFAC TDI manager watch database as on 31 March 2006</td>
</tr>
</tbody>
</table>

### STANLIB Corporate Wealth Development Fund

<table>
<thead>
<tr>
<th>Status</th>
<th>Active</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asset manager</td>
<td>STANLIB</td>
</tr>
<tr>
<td>Classification</td>
<td>Pooled: Domestic-Asset Allocation</td>
</tr>
<tr>
<td>Date of inception</td>
<td>1 January 1997</td>
</tr>
<tr>
<td>Size of fund on 31 March 2006</td>
<td>R504 000 000</td>
</tr>
<tr>
<td>Fund manager</td>
<td>Mr Patrick Mamathuba</td>
</tr>
<tr>
<td>Benchmark</td>
<td>CPI</td>
</tr>
<tr>
<td>Fund objectives</td>
<td>Firstly to generate stable income and capital growth, secondly to provide a</td>
</tr>
</tbody>
</table>
reasonable level of current income and thirdly to ensure maximum stability of
capital invested. Even though the fund is comprised of listed and unlisted
securities, unlisted equities and special purpose bonds are generally
preferred by management. Projects financed by this fund include
electrification, sanitation and infrastructure projects in under-serviced areas
and has facilitated the purchase of equity in companies owned or managed by
previously disadvantaged people.

SRI strategy employed
A strategy combining cause-based investing and positive screening

Reference(s)
Du Preez (2005:37); AFAC TDI Manager Watch Survey (March 2006);
Personal communication Ms Hettie Bosch – STANLIB (28 July 2006)

TopGEAR Fund

<table>
<thead>
<tr>
<th>Status</th>
<th>Discontinued</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asset manager</td>
<td>Use to be Infinity Asset Management (no longer in existence)</td>
</tr>
<tr>
<td>Classification</td>
<td>Pooled: Domestic-Asset Allocation</td>
</tr>
<tr>
<td>Date of inception</td>
<td>1 February 1998</td>
</tr>
</tbody>
</table>
| Date of discontinuance  | 30 September 2002 (date when the fund was excluded from the AFAC TDI
manager watch survey) |
| Reason for discontinuance| Could not be established although it is assumed that the fund was
 discontinued when the management company ceased to exist. |
| Fund manager            | Use to be Mr Graham Parker |
| Benchmark               | 7% real growth over rolling three-year periods |
| Fund objectives         | TopGEAR, which was developed to give impetus to the government's macro-
                           economic GEAR (growth, employment and redistribution) strategy aimed at:
                           - providing a vehicle through which savings can be mobilised to assist in
                             the reconstruction and development of our country and its people.
                           - providing investors with a reasonable return on their investment over time.
                           - helping improve the growth rate of our economy, reduce the level of
                             unemployment and improve the standard of living for all South Africans.
                           - supporting small to medium size businesses.
                           - lending support to black economic empowerment.
                           - providing a credible vehicle through which "Corporate South Africa" can
                             meet its social responsibility commitment in addressing legacy. |
| Comments regarding the fund| The fund was a unique investment vehicle which allowed the private sector,
labour, financial institutions and the retirement fund industry to pool their
available resources to address the backlog in development created by the
legacy of apartheid, and give real support to South Africa's economic
development and its people. The fund had a material proportion of its assets
invested in development-related investments that were focused on improving
the quality of life in South Africa reducing the levels of unemployment and
uplifting the previously disadvantaged people of our country. TopGEAR's
assets were invested among a wide variety of asset classes, from listed and
unlisted securities, to bonds, gilts, offshore investments and state enterprises.
All investments contribute in some way to the development and upliftment of
South Africa. The fund followed the lead set by the government and invested
in those industries whose development has been recognised as crucial to the
country's development: tourism, building & construction, agriculture,
exporting, financial services, and education & training. In addition, listed black
empowerment companies or those that are in the process of listing, were
supported because of their redistributive nature. Up to 40% of the fund's
assets were allocated to development aspects within acceptable risk/return
criteria, with the balance being allocated to growth assets. The investment
approach was dynamic asset allocation between equities and other asset
classes and was decided upon on an ongoing basis, depending on economic
conditions, both locally and abroad. However, a higher proportion of assets
were allocated towards listed and unlisted equities than towards gilts, property
and the money markets.

<table>
<thead>
<tr>
<th>SRI strategy employed</th>
<th>A strategy combining cause-based investing and positive screening</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reference(s)</td>
<td>Extract from Infinity Asset Management’s corporate website (found via Yahoo!). The website no longer exists. AFAC TDI manager watch database as on 31 March 2006; Personal communication: Ms Heather Jackson – African Harvest &amp; Mr Godfrey Albertyn Metropolitan Asset Managers 26 July 2006</td>
</tr>
</tbody>
</table>

**Fixed interest SRI funds**

<table>
<thead>
<tr>
<th>African Harvest Infrastructure Bond Fund</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Status</strong></td>
</tr>
<tr>
<td><strong>Asset manager</strong></td>
</tr>
<tr>
<td><strong>Classification</strong></td>
</tr>
<tr>
<td><strong>Date of inception</strong></td>
</tr>
<tr>
<td><strong>Size of fund on 31 March 2006</strong></td>
</tr>
<tr>
<td><strong>Fund manager</strong></td>
</tr>
<tr>
<td><strong>Benchmark</strong></td>
</tr>
<tr>
<td><strong>Fund objectives</strong></td>
</tr>
<tr>
<td><strong>Comments regarding the fund</strong></td>
</tr>
<tr>
<td><strong>SRI strategy employed</strong></td>
</tr>
<tr>
<td><strong>Reference(s)</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Futuregrowth Infrastructure Bond Fund</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Status</strong></td>
</tr>
<tr>
<td><strong>Asset manager</strong></td>
</tr>
<tr>
<td><strong>Classification</strong></td>
</tr>
<tr>
<td><strong>Date of inception</strong></td>
</tr>
<tr>
<td><strong>Size of fund on 31 March 2006</strong></td>
</tr>
<tr>
<td><strong>Fund managers</strong></td>
</tr>
<tr>
<td><strong>Benchmark</strong></td>
</tr>
<tr>
<td><strong>Fund objectives</strong></td>
</tr>
</tbody>
</table>
The fund invests about 40% of its assets in traditional listed bonds. The rest of the fund’s assets are invested in unlisted businesses through the provision of finance for projects and structured deals for the development of infrastructure and services in previously disadvantaged communities. The fund uses credit risk specialists to source and analyse appropriate deals. The investment returns of the fund are further enhanced by the active management of interest rate, credit and liquidity risk. The fund’s social impact is measured using the government’s estimates and requirements within infrastructure sectors such as energy, water and sanitation, transport, communications, housing, health, education and security. The fund’s social impact on 30 November 2005 was described in terms of:
- facilitating the development and construction of over 200,000 houses;
- developing and maintaining 9,200 km of road network;
- facilitating the creation of over 10,000 jobs in various development sectors;
- providing access to health services for 13 million South Africans; and
- investing R440 million in water and sanitation infrastructure in South Africa.

Alternative (private equity) funds

### AllF African Infrastructure Investment Fund

<table>
<thead>
<tr>
<th>Status</th>
<th>Active</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asset manager</td>
<td>African Infrastructure Investment Managers (AllF is a joint venture between Old Mutual Asset Managers and Macquarie - Africa)</td>
</tr>
<tr>
<td>Classification</td>
<td>Pooled: Domestic-Alternative</td>
</tr>
<tr>
<td>Date of inception</td>
<td>Sometime in 2003</td>
</tr>
<tr>
<td>Size of fund on 31 March 2006</td>
<td>R 80 600 000</td>
</tr>
<tr>
<td>Fund manager</td>
<td>Mr Andrew Johnstone</td>
</tr>
<tr>
<td>Benchmark</td>
<td>7% real growth over rolling 3-year periods</td>
</tr>
<tr>
<td>Fund objectives</td>
<td>The fund invests (by means of equity) in long term infrastructure projects in Africa.</td>
</tr>
<tr>
<td>Comments regarding the fund</td>
<td>The fund is excluded from the sample on the basis that the company would not have been able to furnish asset or performance data (due to confidentiality clauses).</td>
</tr>
<tr>
<td>SRI strategy employed</td>
<td>Cause-based investing</td>
</tr>
<tr>
<td>Reference(s)</td>
<td>Personal communication: Mr Andrew Johnstone - African Infrastructure Investment Managers (18 July 2006)</td>
</tr>
</tbody>
</table>

### AllF South African Infrastructure Fund

<table>
<thead>
<tr>
<th>Status</th>
<th>Active (fully invested)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asset managers</td>
<td>African Infrastructure Investment Managers</td>
</tr>
<tr>
<td>Classification</td>
<td>Pooled: Domestic-Alternative</td>
</tr>
<tr>
<td>Date of inception</td>
<td>Sometime in 1996</td>
</tr>
<tr>
<td>Size of fund on</td>
<td>R 1 320 000 000</td>
</tr>
</tbody>
</table>
### Fund manager: Mr Andrew Johnstone

**Benchmark:** 7% real growth over rolling 3-year periods

**Fund objectives:** The fund invests (by means of equity) in long term infrastructure projects in SADC.

**Comments regarding the fund:** The fund has invested significant amounts in privately funded toll roads in South Africa. Investors in the fund are, amongst others, Standard Bank, African Development Bank, the IDEAS Fund via Old Mutual, Futuregrowth, Liberty, Metropolitan Life, Public Investment Commissioners and the Transnet Pension Fund. The fund is excluded from the sample on the basis that the company would not have been able to furnish asset or performance data (due to confidentiality clauses).

**SRI strategy employed:** Cause-based investing

**Reference(s):** Personal communication: Mr Andrew Johnstone - African Infrastructure Investment Managers (18 July 2006)

### Futuregrowth Structured Empowerment Fund

<table>
<thead>
<tr>
<th>Status</th>
<th>Active (but closed and in the process of unwinding as at 31 March 2006)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asset manager</td>
<td>Futuregrowth Specialist Asset Management</td>
</tr>
<tr>
<td>Classification</td>
<td>Pooled: Domestic-Alternative</td>
</tr>
<tr>
<td>Date of inception</td>
<td>1 October 1995</td>
</tr>
<tr>
<td>Size of fund on 31 March 2006</td>
<td>Could not be established</td>
</tr>
<tr>
<td>Fund manager(s)</td>
<td>Mr James Howard</td>
</tr>
<tr>
<td>Benchmark</td>
<td>Inflation +8% (assume it is CPI as that is what other Futuregrowth funds use)</td>
</tr>
<tr>
<td>Fund objectives</td>
<td>An actively managed, specialist portfolio which funded empowerment companies to take equity stakes in established businesses. Investments were made in preference shares in special purpose vehicles that in turn held primarily listed shares and direct holdings in empowerment companies. The fund was involved in phase one of public and large scale empowerment vehicles, mostly special purpose vehicles. The fund was in the process of unwinding on 31 March 2006.</td>
</tr>
<tr>
<td>SRI strategy employed</td>
<td>Cause-based investing</td>
</tr>
<tr>
<td>Reference(s)</td>
<td>Seeds of new asset management (2002:14); Personal communication: Ms Angelique Kalam – Futuregrowth (24 July 2006); AFAC TDI manager watch database as on 31 March 2006</td>
</tr>
</tbody>
</table>

### Investment Solutions Sakhisizwe Fund

<table>
<thead>
<tr>
<th>Status</th>
<th>Active</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asset manager</td>
<td>Investment Solutions</td>
</tr>
<tr>
<td>Classification</td>
<td>Pooled: Domestic-Alternative</td>
</tr>
<tr>
<td>Date of inception</td>
<td>1 November 2004</td>
</tr>
<tr>
<td>Size of fund on 31 March 2006</td>
<td>R 103 927 780</td>
</tr>
<tr>
<td>Fund manager(s)</td>
<td>Mr Andrew Steyn &amp; Mr Ms Suniti Naran</td>
</tr>
<tr>
<td>Benchmark</td>
<td>Composite benchmark: 70% BEASSA All Bond Index; 20% FTSE/JSE All Share Index &amp; 10% Stefi Index</td>
</tr>
<tr>
<td>Fund objectives</td>
<td>The fund targets investors with a long-term investment horizon (more than seven years) and those who do not require liquidity in the short term and who want to responsibly contribute to the economic and social development of the new South Africa, without compromising returns. Investment Solutions expects</td>
</tr>
</tbody>
</table>
a low probability of capital loss over the long term and volatility of returns over the short term, but returns above inflation in the long term.

Comments regarding the fund

"Sakhisiswe" means “building a nation”. Investment Solutions launched this multi-manager fund with the aim of identifying the best SRI managers in South Africa. The selected fund managers should not only conduct rigorous financial analyses, but should also consider the positive and negative consequences of their investments. The portfolio is designed to deliver sustainable value to society at large, as well as to investors by investing in more than 300 different SRI projects. The fund primarily focuses on funds that make targeted investments, but shareholder activism is seen as an important criterion. Socially responsible investments include securities in:
- companies committed to job creation, skills development, BEE and sound environmental practices;
- state enterprises that facilitate infrastructural development and economic growth; and
- commercial properties (such as shopping centres) that serve the needs of disadvantaged communities nationwide.

The Fund is invested in the OMAM IDEAS Fund, the Futuregrowth Community Property Fund, the Futuregrowth Infrastructure Bond Fund and an equity portfolio managed by Fraters along the lines of the Fraters Earth Equity Fund. Due to the investment limitations set out in Regulation 28, retirement funds can invest up to 6% in this fund.

SRI strategy employed

A strategy that combines cause-based investing with positive screening and a shareholder activism approach

Reference(s)

Du Preez (2005:3); Investment Solutions Quarterly Bulletin (March 2006); Personal communication Mr Mark Davids – Alexander Forbes; Mr Andrew Steyn, Ms Suniti Naran & Ms Nicky Wildt – Investment Solutions (24 July 2006)

Investment Solutions Shari’ah Fund

Status Active
Asset manager Investment Solutions
Classification Pooled: Domestic-Alternative
Date of inception 1 April 2005
Size of fund on 31 March 2006 R8 184 304
Fund manager(s) Mr Andrew Steyn & Mr Ms Suniti Naran
Benchmark High equity unit trust category average

Fund objectives

The underlying investments of this fund are managed in accordance with the principles of the Shari’ah or Islamic law. In compliance with Shari’ah, the underlying investments managers screen all investments according to industry type and by means of financial ratios. Investing in enterprises with core business activities or sources of revenue associated with alcohol, tobacco, pork-related products, financial services, defence/weapons, gambling and pornography is prohibited. Also excluded are enterprises with levels of debt or interest income that are unacceptable according to the Shari’ah. Any interest income received from companies that pass above screening processes is distributed by the underlying managers to charity organisations on behalf of the investors.

Comments regarding the fund

The fund has a high equity component and investors are offered the opportunity to invest in local and global assets. The investment managers are given specific mandates aimed at growth in capital value. Risk meter: aggressive – volatile returns over a five-year period. The portfolio complies with the investment limitations set out in Regulation 28 of the Pension Funds Act.
<table>
<thead>
<tr>
<th>SRI strategy employed</th>
<th>Negative screening</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reference(s)</td>
<td>Investment Solutions Quarterly Bulletin (March 2006); Personal communication Mr. Mark Davids – Alexander Forbes; Mr Andrew Steyn, Ms Suniti Naran &amp; Ms Nicky Wildt – Investment Solutions (24 July 2006)</td>
</tr>
</tbody>
</table>

**Investec SRI Life Fund**

<table>
<thead>
<tr>
<th>Status</th>
<th>Active</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asset manager</td>
<td>Investec Asset Management</td>
</tr>
<tr>
<td>Classification</td>
<td>Segregated: Domestic-Alternative</td>
</tr>
<tr>
<td>Date of inception</td>
<td>17 October 2005</td>
</tr>
<tr>
<td>Size of fund on 31 March 2006</td>
<td>R567 898 129</td>
</tr>
<tr>
<td>Fund manager</td>
<td>Mr Malcolm Gray</td>
</tr>
<tr>
<td>Benchmark</td>
<td>Could not be established.</td>
</tr>
<tr>
<td>Fund objective</td>
<td>Could not be verified, assume that this fund, like the other two Investec fund, invest in socially responsible (cause-based) projects in South Africa.</td>
</tr>
<tr>
<td>Comments regarding the fund</td>
<td>As an alternative to the Investec Mafisa and Sechaba portfolios, Investec has been running this dedicated SRI Fund since October 2005.</td>
</tr>
<tr>
<td>SRI strategy employed</td>
<td>Cause-based investing</td>
</tr>
<tr>
<td>Reference(s)</td>
<td>Personal communication: Mr Adam Alexander - Investec (25 July 2006)</td>
</tr>
</tbody>
</table>

**OMAM IDEAS (Infrastructural, Development & Environmental Asset Infrastructure) Fund**

<table>
<thead>
<tr>
<th>Status</th>
<th>Active</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asset managers</td>
<td>Old Mutual Asset Managers &amp; Macquarie (Africa)</td>
</tr>
<tr>
<td>Classification</td>
<td>Pooled: Domestic-Alternative</td>
</tr>
<tr>
<td>Date of inception</td>
<td>1 January 1999</td>
</tr>
<tr>
<td>Size of fund on 31 March 2006</td>
<td>R1 208 900 000</td>
</tr>
<tr>
<td>Fund manager</td>
<td>Mr Jurie Swart</td>
</tr>
<tr>
<td>Benchmark</td>
<td>CPI + 7% over rolling 3-year periods</td>
</tr>
<tr>
<td>Fund objectives</td>
<td>The fund is an investment vehicle that focuses predominantly on infrastructural investments that make a significant contribution to growth and empowerment. At the same time the assets held are required to provide a commercially acceptable return. The fund’s assets consist predominantly of investments in commercially viable development projects that aim to achieve measurable transformation objectives in South Africa and may include equity, bonds and property assets. The fund has a low risk profile.</td>
</tr>
<tr>
<td>Comments regarding the fund</td>
<td>The fund invests mainly in unlisted assets, hence its classification as an alternative portfolio. The fund invests some of its funds in the South African Infrastructure Fund and the Africa Infrastructure Fund managed by Africa Infrastructure Investment Managers.</td>
</tr>
<tr>
<td>SRI strategy employed</td>
<td>Cause-based investing</td>
</tr>
<tr>
<td>Reference(s)</td>
<td>Du Preez (2005:37); OMAM corporate website (2006); Personal communication Mr Jurie Swart – OMAM (18 July 2006)</td>
</tr>
<tr>
<td><strong>Prodigy Transformation Fund</strong></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td><strong>Status</strong></td>
<td>Active (albeit dormant and in the process of unwinding on 31 March 2006)</td>
</tr>
<tr>
<td><strong>Asset manager</strong></td>
<td>Coris Capital</td>
</tr>
<tr>
<td><strong>Classification</strong></td>
<td>Pooled: Domestic-Alternative</td>
</tr>
<tr>
<td><strong>Date of inception</strong></td>
<td>Sometime in 1998</td>
</tr>
<tr>
<td><strong>Size of fund on 31 March 2006</strong></td>
<td>Could not be established</td>
</tr>
<tr>
<td><strong>Fund manager</strong></td>
<td>Mr Gerhard Engelbrecht</td>
</tr>
<tr>
<td><strong>Benchmark</strong></td>
<td>Could not be established</td>
</tr>
<tr>
<td><strong>Fund objectives</strong></td>
<td>Investments in infrastructure development and BEE financing</td>
</tr>
<tr>
<td><strong>Comments regarding the fund</strong></td>
<td>Prodigy Asset Management merged with Coris Capital in 2002 and positioned itself as a specialised empowerment asset manager. The fund manager, Mr Gerhard Engelbrecht, explained that the ‘original’ Prodigy Transformation Fund consisted of only four underlying private equity investments. Two of these investments were sold off at the time of the merger and another liquidated in 2004. The only existing investment is very small private equity investment valued at approximately R3 million. According to Mr Engelbrecht, the fund is no longer actively manager watch survey, no details on the fund are contained in the database managed and will be unwound in time to come. As virtually no valuations are available for the fund, it has to be excluded from the sample.</td>
</tr>
<tr>
<td><strong>SRI strategy employed</strong></td>
<td>Cause-based investing</td>
</tr>
<tr>
<td><strong>Reference(s)</strong></td>
<td>Personal communication: Mr Gerhard Engelbrecht – Coris Capital (14 July 2006); Cranston (2002)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Rocklands Growth and Development Fund</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Status</strong></td>
<td>Active</td>
</tr>
<tr>
<td><strong>Asset manager</strong></td>
<td>Rockland Investment Management</td>
</tr>
<tr>
<td><strong>Classification</strong></td>
<td>It could not be established whether the fund is a pooled or segregated fund Domestic-Alternative</td>
</tr>
<tr>
<td><strong>Date of inception</strong></td>
<td>Sometime in 2004</td>
</tr>
<tr>
<td><strong>Size of fund on 31 March 2006</strong></td>
<td>Confidential</td>
</tr>
<tr>
<td><strong>Fund manager</strong></td>
<td>Mr Wentzel Oaker</td>
</tr>
<tr>
<td><strong>Benchmark</strong></td>
<td>CPI + 5%</td>
</tr>
<tr>
<td><strong>Fund objectives</strong></td>
<td>The objective of the fund is to finance BEE transactions, the construction of roads, bridges and dams, and local government projects bringing housing, sanitation and water to deprived areas as well as economic and social empowerment transactions. In addition, the fund will avoid investing in projects and companies that produce alcohol or tobacco, are involved in the production of weapons, gambling or nuclear energy, do not engage in effective management of the environment, do not promote diversity, equal employment opportunities or BEE. The fund will furthermore invest in businesses and projects that manufacture “good and useful” products, have a sound procurement policy, treat their employees fairly and are involved in their communities.</td>
</tr>
<tr>
<td><strong>Comments regarding the fund</strong></td>
<td>The fund operates as a fund of funds investing in seven underlying funds. To qualify for inclusion, the underlying funds must invest in infrastructure development projects, property and private equity.</td>
</tr>
<tr>
<td><strong>SRI strategy employed</strong></td>
<td>A strategy combining cause-based investing as well as positive and negative screening</td>
</tr>
<tr>
<td><strong>Reference(s)</strong></td>
<td>Glenrand MIB commits R300m to Rockland fund (2004); Du Preez (2005:40);</td>
</tr>
<tr>
<td>Rocklands Social Responsible Private Equity Fund</td>
<td></td>
</tr>
<tr>
<td>-----------------------------------------------</td>
<td>---</td>
</tr>
<tr>
<td><strong>Status</strong></td>
<td>Active</td>
</tr>
<tr>
<td><strong>Asset manager</strong></td>
<td>Rockland Investment Management</td>
</tr>
<tr>
<td><strong>Classification</strong></td>
<td>It could not be established whether the fund is a pooled or segregated fund Domestic-Alternative</td>
</tr>
<tr>
<td><strong>Date of inception</strong></td>
<td>Sometime in 2004</td>
</tr>
<tr>
<td><strong>Size of fund as at 31 March 2006</strong></td>
<td>Confidential</td>
</tr>
<tr>
<td><strong>Fund manager</strong></td>
<td>Could not be established</td>
</tr>
<tr>
<td><strong>Benchmark</strong></td>
<td>Could not be established</td>
</tr>
<tr>
<td><strong>Fund objectives</strong></td>
<td>Could not be established</td>
</tr>
<tr>
<td><strong>Comments regarding the fund</strong></td>
<td>This fund was identified from the AFAC TDI manager watch database as on 31 March 2006 where it was merely listed as a SRI fund. As performance data is confidential, the fund had to be excluded from the sample.</td>
</tr>
<tr>
<td><strong>SRI strategy employed</strong></td>
<td>Although this could not be established with certainty, the fund’s classification lends itself to a cause-based investing strategy. As the Rocklands Growth and Development fund uses a combination of positive and negative screens along with a cause-based strategy, it is assumed that this fund employs a similar strategy.</td>
</tr>
<tr>
<td><strong>Reference(s)</strong></td>
<td>AFAC TDI manager watch database as on 31 March 2006</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sanlam Development Fund</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Status</strong></td>
<td>Active</td>
</tr>
<tr>
<td><strong>Asset Manager</strong></td>
<td>Sanlam Investment Managers (SIM)</td>
</tr>
<tr>
<td><strong>Classification</strong></td>
<td>Pooled: Domestic-Alternative</td>
</tr>
<tr>
<td><strong>Date of inception</strong></td>
<td>1 November 1996</td>
</tr>
<tr>
<td><strong>Size of fund on 31 March 2006</strong></td>
<td>R2 700 000 000</td>
</tr>
<tr>
<td><strong>Fund manager(s)</strong></td>
<td>SIM team</td>
</tr>
<tr>
<td><strong>Benchmark</strong></td>
<td>No benchmark</td>
</tr>
<tr>
<td><strong>Fund objectives</strong></td>
<td>To uplift previously disadvantaged individuals through infrastructure development; to ensure better distribution of economic benefit through equity ownership and a process of skills transfer; to invest in BEE companies, financial instruments empowering previously disadvantaged individuals to acquire ownership of companies and intermediaries promoting small business entrepreneurs; to be involved in the pre-listing of black orientation companies. The fund not only provides capital but also strategic and investment advice to new black-led private equity and venture capital businesses.</td>
</tr>
<tr>
<td><strong>Comments regarding the fund</strong></td>
<td>Although the fund was still active on 31 March 2006, monthly returns are only available (in the AFAC TDI manager watch database as on 31 March 2006) from November 1996 until 30 June 2004. The fund was however not excluded from the sample for this reason. It was excluded as this fund is an internal Sanlam “fund” which invests in small loan financing companies, empowerment special purpose vehicles, BEE companies, infrastructure and private equity. As it is not a not a separate legal investment vehicle it is not fit for inclusion in this study.</td>
</tr>
<tr>
<td><strong>SRI strategy</strong></td>
<td>A strategy combining cause-based investing and positive screening</td>
</tr>
<tr>
<td>Sanlam Development Fund of Funds</td>
<td></td>
</tr>
<tr>
<td>--------------------------------</td>
<td></td>
</tr>
<tr>
<td><strong>Status</strong></td>
<td>Active</td>
</tr>
<tr>
<td><strong>Asset Manager</strong></td>
<td>Sanlam Investment Managers (SIM)</td>
</tr>
<tr>
<td><strong>Classification</strong></td>
<td>Pooled: Domestic-Alternative</td>
</tr>
<tr>
<td><strong>Date of inception</strong></td>
<td>1 July 2002</td>
</tr>
<tr>
<td><strong>Size of fund on 31 March 2006</strong></td>
<td>Could not be established</td>
</tr>
<tr>
<td><strong>Fund manager(s)</strong></td>
<td>SIM team</td>
</tr>
<tr>
<td><strong>Benchmark</strong></td>
<td>No benchmark</td>
</tr>
<tr>
<td><strong>Fund objectives</strong></td>
<td>This fund offers for institutional investors an acceptable route to participate in private equity. The fund allows investors to spread their investments over one or more of four private equity funds, each with a strong empowerment focus, with Sanlam providing an optional capital guarantee and a market competitive return. The capital guarantee enables retirement funds to classify the fund of funds investment as a debt instrument as opposed to an alternative investment which, in terms of pension funds legislation, limits institutional investors’ scope for investing in private equity. The fund of funds thus allows pension funds to increase their private equity weighting. The four underlying funds are MCI Value Partners Fund, New Africa Mining Fund, Southern Africa Intellectual Property Fund and Gallium Africa Fund. The fund is designed to deliver exceptional returns to investors and to finance empowerment transactions in South Africa, Namibia and other sub-Saharan African countries.</td>
</tr>
<tr>
<td><strong>Comments regarding the fund</strong></td>
<td>As in the case of the Sanlam Development Fund, this fund is an internal Sanlam “fund”. As it is not a not a separate legal investment vehicle it is not fit for inclusion in this study.</td>
</tr>
<tr>
<td><strong>SRI strategy employed</strong></td>
<td>A strategy combining cause-based investing and positive screening</td>
</tr>
<tr>
<td><strong>Reference(s)</strong></td>
<td>Door opens for institutional investors (2003); Personal communication Mr Danie Scholtz &amp; Mr Cobus Foster – Sanlam Investment Managers (27 July 2006); Cranston, Gqubule &amp; Mahabane (2004)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Futuregrowth Community Property Fund</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Status</strong></td>
</tr>
<tr>
<td><strong>Asset manager</strong></td>
</tr>
<tr>
<td><strong>Classification</strong></td>
</tr>
<tr>
<td><strong>Date of inception</strong></td>
</tr>
<tr>
<td><strong>Size of fund on 31 March 2006</strong></td>
</tr>
<tr>
<td><strong>Fund manager(s)</strong></td>
</tr>
<tr>
<td><strong>Benchmark</strong></td>
</tr>
<tr>
<td><strong>Fund objectives</strong></td>
</tr>
</tbody>
</table>
and maximising the economies of scale. Thirdly the fund strives for community upliftment through the provision of services and the creation of job opportunities for previously disadvantaged communities by: ensuring community support and involvement in projects; and facilitating community participation by encouraging local entrepreneurial initiatives with the provision of physical infrastructure.

<table>
<thead>
<tr>
<th>Comments regarding the fund</th>
</tr>
</thead>
</table>
| Since its inception in June 1996, the fund has focused on the provision of finance for the development of retail shopping centres catering to the needs of underserviced communities throughout South Africa. The fund has invested in the development of 16 shopping centres located in semi-rural and township areas countrywide. These centres are located in eight of the nine provinces, providing retail service and products to a primary target market of approximately 7 million people. The fund’s investments cater for the needs of low-income groups, whose disposable income is predicted to rise faster than any other income group in the country. Further growth is anticipated as office space will be increasingly required for banks, attorneys, doctors, insurers, municipal and government offices in these areas. The fund manager remarked that the construction of shopping centres in rural areas and townships is often perceived as financially risky but argues that if socio-economic development is to be encouraged in South Africa, the financial services sector needs to start using the investments of the working class to improve the lives of poor and unemployed people. On 28 September 2004, the Public Investment Commissioner (PIC), which invests funds on behalf of public sector entities (including the Government Employees Pension), committed R105 million to the fund. The PIC felt that investments made by the Government needed to be bolstered by private investments as “…the Government cannot be expected to be solely responsible for infrastructure development”.

<table>
<thead>
<tr>
<th>SRI strategy employed</th>
<th>Cause-based investing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reference(s)</td>
<td>Bonorchis (2004a); Newmarch (2004:15; Moledi (2004:17); Qoza (2004:17); AFAC TDI Manager Watch Survey (March 2006); Futuregrowth corporate website (2006); Personal communication: Ms Angelique Kalam – Futuregrowth (24 July 2006)</td>
</tr>
</tbody>
</table>