

RESPONSIBLE INVESTING IN SOUTH AFRICA – A RETAIL PERSPECTIVE

Suzette Viviers*

University of Stellenbosch

sviviers@sun.ac.za

Colin Firer+

University of Stellenbosch

March 2012

Abstract

This research addresses a gap in the literature on responsible investing (RI) in South Africa by studying the risk-adjusted performance of RI unit trusts available to retail investors. The Sharpe, Sortino and Upside-potential ratios for 16 RI unit trusts, their benchmarks and a matched sample of conventional unit trusts were calculated for the period 1 June 1992 – 31 August 2011. Most of the RI unit trusts in South Africa use exclusionary screens based on Shari'ah (Islamic) law with the remaining funds focusing on social issues, such as labour relations and social development. The total expense ratios of RI unit trusts are slightly higher than those of conventional funds, but no different from that of their benchmarks or a matched sample of conventional unit trusts. It is suggested that local assets managers expand the range of retail RI unit trusts available in the country.

Keywords

Ethical screening; Responsible investing; Retail investors; Risk-adjusted return; South Africa

***Prof Suzette Viviers** is a professor at the Department of Business Management, University of Stellenbosch, Stellenbosch, South Africa.

+**Prof Colin Firer** was emeritus professor at the Graduate School of Business, University of Cape Town, South Africa.

1. INTRODUCTION

Although no universally accepted definition of responsible investing (RI) exists, it essentially refers to the integration of ethical as well as environmental, social and corporate governance (ESG) considerations into investment analysis and ownership practices (Herringer, Firer & Viviers, 2009). Investors engage in RI for different reasons. Some investors wish to invest in line with their personal values and they usually take a stand on what they *do not want to own*. The use of exclusionary screens to avoid ‘sin stocks’ is the oldest form of RI (often called ethical investing) and is mostly favoured by private investors, churches, community groups and human rights organisations (Sparkes & Cowton, 2004).

Other investors may engage in RI in order to transform corporate policies and practices on a range of ESG issues. They are more likely to use positive screening, best-in-sector screening and/or shareholder activist strategies. However, in order for these strategies to be effective, investors need to have a significant stake in investee companies. Thus these approaches require the support of large institutional investors such as pension funds, insurance companies and commercial banks (O’Rourke, 2003). A third motive behind RI relates to investors’ desire to improve the standard of living in local communities, for example, by investing directly in social infrastructure development (Viviers, Hand & Ractliffe, 2011). These investments, often called community, targeted or impact investments, likewise require the support of investors with deep pockets to be effective (De Cleene & Sonnenberg, 2004).

According to the Association for Savings and Investments SA (2011a), there were 943 collective investment schemes registered on 30 June 2011. Of these 52 had RI mandates (22 active unit trusts and 30 non-unitised funds), translating to 5.15% of all collective investment schemes.

Institutional investors in South Africa have long justified their lack of interest in RI by arguing that such a strategy involves a financial sacrifice (Eccles, Nicholls & De Jongh, 2007:2). This claim is not entirely without merit. Many of the early RI funds financed black economic empowerment deals through special purpose vehicles (SPVs). The SPV structure, however, proved unsustainable in the aftermath of the emerging market crisis in 1998 and led to the demise of several RI funds (Bridge, 1999; Hirsch, 2005). As a result of these losses, many institutional investors become reluctant to adopt RI strategies (Bacher, 2004; Visser, 2005). A study by Viviers, Bosch, Smit and Buijs (2008) on the risk-adjusted performance of RI funds in South Africa, however, revealed that the performance of these funds over the period 1 June 1992 to 30 March 2006 was not significantly different from that of a matched sample of conventional funds. Based on their findings, Viviers et al. (2008) recommended that South African investors could consider RI funds as part of a well-diversified investment strategy without harming their investment performance.

Growth in the South African RI market has nonetheless continued to lag behind international counterparts. A study by Sinclair and Yao (2011) showed that RI represents only a fraction of the total assets under management (AUM) in South Africa (TABLE 1).

TABLE 1: Estimates of professional sustainable investment assets under management in South Africa on 31 December 2010 (\$ billion)^(a)

	<i>Total AUM</i>	<i>ESG-integrated strategy^(b)</i>	<i>% ESG-integrated / total AUM</i>	<i>ESG-branded strategy^(c)</i>	<i>% ESG-branded / total AUM</i>
General asset management	556.2	111.2	20.0%	4.2	0.8%
Private equity	14.2	6.3	44.0%	1.1	8.0%

(a) The authors of this report preferred the term sustainable investment over RI and defined it as investments that integrate ESG factors into analysis, stock selection and active ownership practices in the belief that these factors can improve long-term risk management.
(b) Defined as approaches that include ESG factors, but which may or may not brand themselves as 'sustainable', 'responsible', 'impact' or 'green'.
(c) Defined as approaches that are explicitly ESG inclusive and marketed as such.

Source: Sinclair and Yao (2011)

Institutional investors in South Africa have also argued that RI was stifled by the lack of enabling legislation (Eccles et al. 2007, Herringer et al. 2009). This argument no longer holds water, as amendments were made to Regulation 28 of the Pension Funds Act (No 24 of 1956) in March 2011. The Act now explicitly states that prudent investing should take into account all factors that could materially affect an investment including factors of an ESG character.

Since very limited research has been conducted on the retail RI market in South Africa, this study set out to highlight a number of critical issues confronting responsible retail investors in South Africa. In the sections to follow, particular attention is given to the number of RI unit trusts available to retail investors in South Africa, the characteristics of these unit trusts and their risk-adjusted performance relative to their respective benchmarks and to a matched sample of conventional unit trusts. Retail funds refer to funds in which individual investors/unit holders can invest directly or indirectly and where the investment is held in the name of the individual investor (Association for Savings and Investment SA, 2011b).

2. LITERATURE REVIEW

Since the focus of this study is retail RI, the literature review will focus primarily on screening as the means through which private investors can invest ethically and responsibly. Pertinent findings on the risk-adjusted performance of RI funds and demand from the retail sector will also be highlighted.

2.1 Screening as RI strategy

Members of religious groups, such as the Quakers and Methodists, were the first investors to refrain from investing in the securities of companies producing 'undesirable' products or services, as well as those operating in 'undesirable' industries and countries (Schwartz, 2003). According to this approach, responsible investors typically avoid investments in businesses which are associated with alcohol, tobacco, weapons, gambling, pornography and nuclear energy (Sparkes & Cowton, 2004). Most exclusionary screens are faith-based. For example,

Roman Catholics who are opposed to abortion and birth control have been known to exclude hospitals that offer abortion services as well as the manufacturers of abortifacients and birth control medication and devices (Whitten, 2004). Detailed investment guidelines and criteria regarding ‘morally acceptable investments’ are outlined on websites tailored to the needs of members of several denominations within the Christian faith (Christian Brothers Investment Services, 2012; Christian Financial Association, 2012; Crosswalk, 2012).

Similar websites exist for Jewish investors who wish to invest according to the tenets of their faith (Religious Action Centre for Reform Judaism, 2012) as well as sites for Islamic investors (Muslim Investor, 2012). Islamic investors primarily 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. In similar fashion, Shari’ah compliant funds also excluded companies with high levels of financial leverage (gearing), debtors and interest income.

Other (non-faith-based) responsible investors screen potential investments for highly specialised issues (e.g. uranium and genetically modified food) or cater for the concerns of specific groups such as human and animal rights activists (Whitten, 2004). Exclusionary screens (mainly for tobacco, alcohol, gambling, weapons and pornography) are used by 94% of RI funds in the United States, whereas 38% of RI funds in the Asia-Pacific Rim countries and Africa use Islamic screens (Renneboog, Ter Horst & Zhang, 2011).

In contrast, investors who employ a positive screening strategy invest in the securities of companies which they perceive to be good corporate citizens. An inclusionary screening strategy calls for the evaluation of corporate policies and practices on a wide range of ESG criteria. In South Africa these centre mainly on corporate governance, infrastructure development, employee relations, safety and worker rights, environmental management and water scarcity/sanitation (Eccles et al. 2007). A best-of-sector screening approach combines positive and negative screens. Consequently, responsible investors do not have to exclude entire sectors from their portfolios, but may include those companies across sectors that are making the most effort to improve ESG performance.

2.2 The financial performance of RI funds

Some of the earliest studies of RI fund performance entailed the construction of an RI fund and a comparison of its performance to that of a market index. Researchers such as Rudd (1979) and Grossman and Sharpe (1986) constructed ‘South Africa free’ portfolios in the 1980s to establish the cost associated with limiting an institutional investor’s universe. They found a definite cost associated with reduced diversification. In similar vein, Kahn, Lekander and Leimkuhler (1997) created a ‘tobacco free’ portfolio by removing tobacco companies from the S&P500 index. In line with prior studies, the restricted portfolio underperformed the market index. Other researchers constructed their own positively screened RI funds by using the ESG criteria employed by KLD Research and Analytics or the Domini 400 Social Index (Abramson & Chung, 2000; Hutton, D’Antonio & Johnsen, 1998; Kempf & Osthoff, 2007). The performance of these self-constructed RI funds was then compared to market and unrestricted indices – the findings yielded mixed results.

The majority of academic studies however compared the performance of ‘real’ RI funds to conventional funds (often using a matched sample approach), RI indices (such as the Dow Jones Sustainability indices or the FTSE4GOOD indices), domestic market indices (such as the S&P500 or FT100) and global indices (such as the MSCI World indices).

With the exception of a few studies listed in TABLE 2, the risk-adjusted performance of RI funds was no different from that of conventional funds.

Researchers comparing the performance of RI indices to conventional indices initially only focused on RI indices in the USA (Luck & Pilotte, 1993; Kurtz & DiBartolomeo, 1996; Sauer, 1997), whereas more recent studies compared performance across several geographical regions (Vermeir, et al. 2005; Statman, 2006). Hussein and Omran (2005), for example, compared 50 Dow Jones Islamic indices vis-à-vis 50 conventional Dow Jones index counterparts. They found that Islamic indices yielded significantly better abnormal returns during bull markets, but did worse during bear markets (although this finding was not statistically significant). Schröder (2007) compared the performance of 29 RI indices across the globe to conventional indices and found that RI indices do not exhibit different levels of risk-adjusted return compared to conventional benchmarks.

In the earlier years of RI research, a technique that evaluated the financial impact of individual screens on financial performance was quite prominent. Diltz (1995) found that the market rewarded good environmental performance, charitable giving and the absence of nuclear and defence works, but penalised firms that provide family-related benefits such as parental leave, job sharing and dependent care assistance. Powell and Weaver (1995) likewise found that firms with strong environmental ratings had higher returns than those with poorer environmental ratings. In contrast, Barnett and Salomon (2006) established that the use of environmental and labour relations screens decreased financial performance, whereas community relations screens had the opposite effect. Statman and Glushkov's (2009) results are of particular interest for retail investors – they found that shunning certain investments resulted in a significant disadvantage compared to conventional investors who did not employ any screens. Based on this finding the authors suggested that responsible investors refrain from shunning ‘sin stocks’ and rather adopt a best-in-sector strategy when constructing their portfolios.

2.3 Demand for retail responsible investments

In one of the very few studies dealing with retail RI, Nilsson (2007:307) found that women and better educated investors are more likely to invest in RI funds and that pro-social attitudes play an important role in responsible investment behaviour. Individuals between the ages of 18 and 24, the so-called Generation Y, have been labelled ‘the cause-seeking’ generation as they constantly seek purpose and spiritual meaning in their lives (McCrindle, 2003:5) and factor environmental, social and human rights considerations into their consumption decisions (Bakewell & Mitchell, 2003:95; Cui, Trent, Sullivan & Matiru, 2003:310).

As indicated above, most managers of retail RI funds employ screening strategies when evaluating the moral acceptability of potential investments. Whereas initial studies suggested that screening imposes a financial cost, more recent studies, across geographic regions, found no significant difference between the risk-adjusted performance of RI funds and conventional funds.

TABLE 2: Studies comparing RI and conventional funds

Author(s)	Date of publication	Financial market analysed	Underlying asset class	Time frame analysed	RI fund performance vs. conventional fund performance
Hamilton, Jo & Statman	1993	USA	Equity	Jan 1981 – Dec 1990	Neutral
Maalin, Saadouni & Briston	1995	UK	Equity	1986-1993	Outperform
Gregory, Matatko & Luther	1997	UK	3 categories of funds (general, growth and income)	Dec 1986 – Dec 1994	Underperform
Reyes & Grieb	1998	USA	4 categories of funds (aggressive growth, balanced, growth and income)	Jan 1986 – Dec 1995	Neutral
Goldreyer & Diltz	1999	USA	3 categories of funds (equity, bond and balanced)	Jan 1981 – June 1997	Neutral
Statman	2000	USA	Equity	May 1990 – Sept 1998	Neutral
Bello	2005	USA	Equity	Jan 1994 – March 2001	Neutral
Kreander, Gray, Power & Sinclair	2005	UK, Sweden, The Netherlands and Germany	Equity	Jan 1995 – Dec 2001	Neutral
Vermeir, Van de Velde & Corten	2005	Global	Equity	1998-2004	Neutral
Scholten	2005	The Netherlands	Equity	Nov 2001 – April 2003	Neutral
Bauer, Koedijk & Otten	2005	USA, UK & Germany	Equity	Jan 1990 – March 2003	Neutral
Bauer, Otten & Rad	2006	Australia	Equity	Nov 1992 – April 2003	Neutral
Fernandez-Izquierdo & Matallin-Saez	2008	Spain	Equity and bonds	June 1998 – June 2001	Outperform
Jones, van der Laan, Frost & Loftus	2008	Australia	Equity	June 1986 – June 2005	Neutral
Renneboog, Ter Horst & Zhang	2008	17 countries	Equity	Jan 1992 – Dec 2003	Neutral
Drut	2010	20 countries	Sovereign bonds	Dec 1994 – Dec 2008	Bond funds neutral; Balanced funds – outperform
Renneboog, Ter Horst & Zhang	2011	17 countries	Equity	Jan 1992-D003	Neutral

Source: Researchers' own construction

Given that Generation Y is more discerning about the social and environmental impacts of their investments (compared to the current generation of retail investors), and the fact that they represent almost half of the South African population (Statistics South Africa, 2011), a growing demand for retail RI funds is anticipated. It was, therefore, felt that further insight into the current state of the retail RI market in South Africa would be a valuable contribution to the RI literature.

3. RESEARCH DESIGN AND METHODOLOGY

3.1 Data collection

The list of RI unit trusts published by Viviers et al. (2008) was updated to include RI unit trusts that were established up to 31 August 2011. As indicated in TABLE 3, 25 RI unit trusts were launched over the study period. Of these, three RI unit trusts were discontinued. Secondary data was collected on each RI unit trust's classification, date of establishment, date of discontinuance (where applicable), investment mandate, benchmark, assets under management and total expense ratio.

Given data constraints, risk-adjusted returns could only be calculated for 16 RI unit trusts. Discontinued unit trusts were included to avoid survivorship bias (Gilbert & Strugnell, 2010:31; Pawley, 2006:21). One conventional unit trust, based on fund classification and date of inception, was identified for each RI unit trust.

Details of the RI unit trusts analysed are presented in TABLE 4. Monthly data on the net asset values (NAVs) of the RI unit trusts, their respective benchmarks, the comparable unit trusts and the risk-free rate (91-day Treasury bills) were downloaded from I-Net Bridge and Datastream. In a few cases data had to be sourced directly from RI unit trust managers.

3.2 Data analysis

Equation (1) was used to calculate the monthly returns of the RI and comparable unit trusts. The NAV prices sourced included cash distributions (re-invested on ex-dividend date), but excluded any initial charges.

$$r_{it} = \frac{\text{NAVprice}_{it} - \text{NAVprice}_{it-1}}{\text{NAVprice}_{it-1}} \quad (1)$$

where $t = 1, 2, 3, \dots, T$; r_{it} = the monthly rate of return of unit trust i in period t ; NAVprice_{it} = the Net Asset Value (NAV) price of unit trust i in period t ; and NAVprice_{it-1} = the NAV price of unit trust i in period $t-1$.

The monthly returns of the RI unit trusts' benchmarks were calculated by replacing NAV_{price} in Equation (1) with *Index value*.

In line with Viviers et al. (2008), a matched pairs design was used to make inferences about the differences between sample means. The Sharpe, Sortino and Upside-potential ratios for the RI unit trusts, their benchmarks and the comparable unit trusts were calculated. As indicated in Equation (2), the Sharpe ratio divides the average annualised differential return of unit trust i by its annualised standard deviation (Sharpe, 1994). For interpretative purposes, a higher Sharpe ratio is seen to be better.

TABLE 3: RI unit trusts established in South Africa (1 June 1992 – 31 August 2011)

Classification	Name of RI unit trust	Status ^(a)	Date of inception	Date of discontinuance	RI strategy	Nature of criteria used
Domestic – Fixed Interest – Bonds	Community Growth Equity Fund	A	14 Jul 1998	-	Positive screening	S
	Old Mutual Albarakia Equity Fund ^(a)	A	1 Jun 1992	-	Positive screening and engagement	E, S & G
	Element Earth Equity Fund ^(b)	A	4 Oct 2001	-	Ethical exclusions	Ethical
	Element Islamic Equity Fund ^(b)	A	1 Feb 2006	-	Engagement	E, S & G
	Stanlib Nationbuilder Fund (A)	A	31 Jan 2007	-	Ethical exclusions and engagement	Ethical, E, S & G
	Stanlib Shari'ah Equity Fund (A)	A	31 Jan 2007	-	Impact investing	S
	Kagiso Islamic Equity Fund	A	13 Jul 2009	-	Ethical exclusions	Ethical
	Sasfin Equity Fund	A	14 Oct 2005	-	Ethical exclusions	E, S & G
	Oasis Crescent Equity Fund	A	31 Jul 1998	-	Ethical exclusions	Ethical
	Neobank Sustainability Equity Fund	D	6 Aug 2002	31 Oct 2003	Positive screening	E & S
Domestic – Equity – Large Cap	Sasfin Twenty Ten Fund	D	1 Nov 2005	31 Jan 2011	Positive screening	S
	NewFunds Shari'ah Top40 Index Fund	A	6 April 2009	-	Ethical exclusions	Ethical
	Sonlight Empowerment Equity Fund	D	15 Sep 1997	30 Apr 2003	Positive screening	S
	Oasis Crescent International Fund of Funds ^(a)	A	28 Sep 2001	-	Ethical exclusions	Ethical
	Oasis Crescent International Property - Equity Feeder Fund	A	30 Apr 2007	-	Ethical exclusions	Ethical
	Element Flexible Fund ^(c)	A	19 Oct 2001	-	Engagement	E, S & G
	Element Islamic Balanced Fund (A)	A	28 Apr 2010	-	Ethical exclusions	Ethical
	Old Mutual Albarakia Balanced Fund	A	12 Nov 2010	-	Ethical screening	Ethical
	27 Four Shari'ah Balanced Fund of Funds	A	16 May 2011	-	Ethical exclusions	Ethical
	Oasis Crescent Balanced Progressive Fund of Funds	A	2 Mar 2005	-	Ethical exclusions	Ethical
Domestic – Asset Allocation – Prudential	Oasis Crescent Balanced High Equity Fund of Funds	A	1 Apr 2010	-	Ethical screening	Ethical
	Oasis Crescent Balanced Stable Fund of Funds	A	1 Apr 2010	-	Ethical screening	Ethical
	Element Real Income Fund ^(d)	A	9 Oct 2002	-	Engagement	E, S & G
	Element Real Return	A	9 Oct 2002	-	Engagement	E, S & G
	Domestic – Asset Allocation – Targeted	A	9 Oct 2002	-	Engagement	E, S & G
	Domestic – Asset Allocation – Prudential	A	9 Oct 2002	-	Engagement	E, S & G
	Domestic – Asset Allocation – Prudential	A	9 Oct 2002	-	Engagement	E, S & G
	Domestic – Asset Allocation – Prudential	A	9 Oct 2002	-	Engagement	E, S & G
	Domestic – Asset Allocation – Prudential	A	9 Oct 2002	-	Engagement	E, S & G
	Domestic – Asset Allocation – Prudential	A	9 Oct 2002	-	Engagement	E, S & G

(a) Classification based on the guidelines provided by the Association for Savings and Investments SA (2011b)
 (b) A = Active RI unit trusts; defined as those RI unit trusts which were launched on or after 1 June 1992 and which were still operational on 31 August 2011. D = Discontinued RI unit trusts; defined as those local RI unit trusts which were established on or after 1 June 1992, but which were either closed or merged with other unit trusts at some point before 31 August 2011. The investment mandates of some RI unit trusts also changed to such an extent that they could no longer be classified as RI unit trusts and were thus treated as discontinued.
 (c) Classification based on the guidelines provided by EuroSIF (European SRI study, 2010)
 (d) E = Environmental; S = Social; G = Corporate governance; ethical = ethical screens based on Shari'ah principles
 (e) This fund used to be called the Future Growth Albarakia Equity Fund. In 2008 Old Mutual Investment Group (SA) (OMGSA), a subsidiary of Old Mutual South Africa, acquired WPHOLD's 69% shareholding in Future Growth.
 (f) The name of this management company changed from Frasers Asset Management to Element Investment Managers on 1 August 2009, hence the name of the unit trust also changed.
 (g) This fund is also called the Oasis Crescent International Feeder Fund.

Source: Viviers et al. (2008:10), Equinox (2011), FundsData (2011) and the fund factsheets of the respective unit trusts (2011)

TABLE 4: Details of RI unit trusts, their respective benchmarks and comparable unit trusts included in the quantitative analysis

Classification	Name of RI unit trust	Status	Total expense ratio (%)	RI unit trusts' benchmark	Comparable unit trust	Total expense ratio (%)	Number of months analysed
<i>Domestic – Equity – General</i>	Community Growth Gilt Fund	A	0.57	BEASSA All Bond Index	Metropolitan Gilt Portfolio	0.87	157
	Community Growth Equity Fund	A	0.58	FTSE/JSE All Share Index	Also General Fund (R)	1.71	231
	Old Mutual Albaraka Equity Fund	A	1.88	FTSE/JSE All Share Index	Old Mutual Top Companies Fund (R)	1.15	231
	Element Earth Equity Fund	A	1.73	FTSE/JSE All Share Index with 50% weighting applied to the resources sector	Analytics Managed Equity Fund (A)	1.52	118
	Element Islamic Equity Fund	A	1.75	FTSE/JSE All Share Index	MI PLAN IP BETA EQUITY Fund	0.59	16
	Stanlib Nationbuilder Fund (A)	A	1.71	FTSE/JSE All Share Index	Prudent Equity Active Quant Fund (A1)	0.59	55
	Neobank Sustainability Equity Fund	D	N/A	Edward Nathan Friedland Sustainability Index ^(a)	Foord Equity Fund	N/A	14 ^(a)
	Safin TwentyTen Fund	D	N/A	FTSE/JSE All Share Index	Canon Equity Fund	N/A	60
	Stanlib Shari'ah Equity Fund (A)	A	1.71	FTSE/JSE Shari'ah All Share Index, excluding dividends	Stewart Macro Equity Fund OF Funds	2.35	45 ^(a)
	Kagiso Islamic Equity Fund	A	1.39	Average return of ASISA's Domestic-Equity General Funds category	Efficient Active Quant Fund	2.02	24
<i>Domestic – Equity – Value</i>	Sunlam Empowerment Equity Fund	D	N/A	Baring's ING Empowerment Index ^(a)	PSG Equity Fund (A)	N/A	65 ^(a)
	Oasis Crescent International Fund of Funds	A	3.03	Not indicated	Nedgroup Investment Global Equity Feeder Fund (A)	1.61	120
<i>Foreign – Equity – General</i>	Oasis Crescent International Property Equity Feeder Fund	A	1.69	Not indicated	Fortress REIT Fund (A)	2.10	52
	Element Flexible Fund	A	1.73	Composite Index: All Share Index (45%), Financial & Industrial Index (25%), Property Unit Trust Index (5%), All Bond Index (15%) and Cash (19%)	Prudential Inflation Plus Fund (A)	1.53	112 ^(a)
<i>Domestic – Asset Allocation – Prudential – Variable Equity</i>	Element Islamic Balanced Fund (A)	A	1.95	Average total return of the Domestic Asset Allocation Prudential Variable Equity category	Flagship IP Prudential Variable Fund	1.75	16
	Element Real Income Fund	A	1.40	Consumer Price Index + 3%	ABSA Inflation Beater Fund	1.42	106

Source: Equinox (2011), FundsData (2011) and the fund factsheets of the respective unit trusts (2011)

(a) A = Active; D = Discontinued
 (b) Given the lack of data on this index, the FTSE/JSE All Share Index was used as a proxy.
 (c) Some data points were deleted from the RI unit trust and benchmark as the comparable fund was only launched two months later.
 (d) Some data points were deleted from the SRI unit trusts and their respective benchmarks as the comparable funds were only launched four months later.
 (e) Some data points were deleted from the SRI unit trusts and their respective benchmarks as the comparable funds were only launched six months later.

$$\text{Sharpe}_i = \frac{\bar{r}_i - \bar{r}_f}{\sigma_i} \quad (2)$$

where \bar{r}_i = the mean annualised rate of return of unit trust 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; and σ_i = the annualised standard deviation of the rate of return of unit trust i during the specified time period.

Two alternative performance measures were also used. Through the use of the semi-variance or downside deviation (denoted by the Greek symbol *delta*, (δ) as denominator in Equation (3), the Sortino ratio differentiates between ‘good’ and ‘bad’ volatility (Sortino & Price, 1994).

$$\text{Sortino}_i = \frac{\bar{r}_i - \bar{r}_f}{\delta_i} \quad (3)$$

where \bar{r}_i = the average annualised rate of return of unit trust i during a specified time period; \bar{r}_f = the average annualised rate of return of a risk-free asset during the same time period; and δ_i = the annualised downside deviation of the rate of return of unit trust i during the specified time period.

In order to calculate a unit trust’s downside deviation, a threshold or minimum acceptable return (MAR) value needs to be set. In Equation (4), tau (τ) represents the critical value below which investors would not like to see their investment returns fall.

$$\delta_i = \sqrt{\int_{-\infty}^{\tau} (\tau - r_i)^2 f(r_i) dr_i} \quad (4)$$

where τ = the investor’s threshold or MAR value and r_i = the return of unit trust 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 are averse towards negative returns. As in the case of the Sharpe ratio, investors prefer a high Sortino ratio.

The final performance measure used was the Upside-potential ratio (UPR) (Equation (5)). The upside potential of a unit trust (i.e. returns in excess of a specified threshold or MAR value) is divided by its downside deviation (Sortino, Van der Meer & Plantinga, 1999).

$$\text{UPR}_i = \frac{\theta_i}{\delta_i} \quad (5)$$

where θ_i = unit trust i ’s upside-potential and δ_i unit trust i ’s downside deviation.

Upside-potential (θ) can be calculated by using Equation (6). For the purpose of this research, the MAR value was set at zero. As in the case of the Sharpe and Sortino ratios, a higher ratio is preferred.

$$\theta = \int_{\tau}^{\infty} (r_i - \tau) f(r_i) dr_i \quad (6)$$

where τ = the investor’s threshold or MAR value and r_i = the return of unit trust i with a cumulative probability density function $f(\cdot)$

Differences of paired observations (between the RI unit trust and its benchmark; and the RI unit trust and its comparable unit trust) were calculated and sample means and standard deviations of the observed differences established. The Shapiro-Wilk test was then used to test the distributions for normality. A significance level of 0.05 was used. In cases where the 'difference' distribution was normally distributed, a single-sample t -test was conducted; otherwise a Wilcoxon matched pairs test was used to establish significance. Two sets of null hypotheses were tested. The first set compared the risk-adjusted performance of RI unit trusts to their respective benchmarks:

- **H_{0,1.1}:** there is no significant difference in the Sharpe ratios of RI unit trusts and their benchmarks over the period 1 June 1992 – 31 August 2011.
- **H_{0,1.2}:** There is no significant difference in the Sortino ratios of RI unit trusts and their benchmarks over the period 1 June 1992 – 31 August 2011.
- **H_{0,1.3}:** There is no significant difference in the Upside-potential ratios of RI unit trusts and their benchmarks over the period 1 June 1992 – 31 August 2011.

The second set compared the risk-adjusted performance of RI unit trusts and a matched a sample of comparable unit trusts:

- **H_{0,2.1}:** There is no significant difference in the Sharpe ratios of RI unit trusts and a matched sample of comparable unit trusts over the period 1 June 1992 – 31 August 2011.
- **H_{0,2.2}:** There is no significant difference in the Sortino ratios of RI unit trusts and a matched sample of comparable unit trusts over the period 1 June 1992 – 31 August 2011.
- **H_{0,2.3}:** There is no significant difference in the Upside-potential ratios of RI unit trusts and a matched sample of comparable unit trusts over the period 1 June 1992 – 31 August 2011.

4. RESULTS

4.1 Underlying assets of RI funds

TABLE 5 provides an overview of the underlying assets in which RI funds in South Africa invest. The classification was based on the guidelines provided by the Association for Savings and Investments SA (2011b).

Whereas non-unitised (pooled and segregated) RI funds invest mainly in private equity initiatives (alternative assets), no RI unit trusts currently invest in this asset class. TABLE 5 also reveals opportunities for asset managers to develop retail RI funds focusing on responsible fixed interest and property investments. Both of these assets classes have received more attention from responsible investors in recent years (Scholtens, 2005; 2010; Ellison & Sayce, 2007; Derwall & Koedijk, 2009; Drut, 2010).

TABLE 5: Underlying assets of RI funds

<i>Underlying assets</i>	<i>UNITISED RI FUNDS</i>		<i>NON-UNITISED RI FUNDS^(a)</i>		<i>TOTAL</i>
	<i>Active</i>	<i>Discontinued</i>	<i>Active</i>	<i>Discontinued</i>	
Equity ^(b)	12	3	7	2	24
Asset allocation ^(c)	9		3	6	18
Alternative ^(d)			14	2	16
Fixed interest ^(e)	1		5		6
Property ^(f)			1		1
TOTAL	22	3	30	10	65

(a) Given the scope of this article, details on these funds are not included. These can be obtained from the authors.

(b) Equity funds are required to invest at least 75% in equities at all times. The remaining 25% can be invested according to the discretion of the fund manager.

(c) Asset allocation funds may invest in a spread of investments in the equity, capital, money and property markets. They generally hold a long-term view.

(d) Alternative funds generally invest in private equity initiatives by means of equity (including preference shares), debt or a combination thereof.

(e) Fixed interest funds invest in the bond and money markets. However, no money market funds were included in this database.

(f) Property funds invest in real estate through different channels.

Source: *Empirical findings*

4.2 RI strategies employed

A breakdown of the RI strategies used by RI fund managers in South Africa is presented in TABLE 6. More details on the investment mandates of the 25 RI unit trusts analysed in this research are provided in Appendix A. The mandates were classified according to the guidelines of the European Sustainable Investment Forum (EuroSIF) (European SRI Study, 2010).

The majority of RI unit trusts in South Africa use exclusionary screens based on Shari'ah law. RI unit trusts that do not use ethical screens mainly focus on social criteria (such as labour relations and social development). In contrast to RI unit trusts, pooled and segregated RI funds employ impact investing and positive screening strategies.

4.3 Total expense ratios

The claim is often made that the total expense ratios of RI funds are higher than those of conventional funds (Bauer et al. 2005:1751; Chegut, Shenk & Scholtens, 2011:77). Fund managers of RI funds, it is argued, need to spend more time on evaluating prospective investments as they use ethical and/or ESG screens alongside financial criteria. The average total expense ratio of the 16 active RI unit trusts analysed was 1.62% in August 2011, compared to 1.48% for the 16 conventional unit trusts, a statistically insignificant difference.

TABLE 6: RI strategies employed

RI Strategy	UNITISED RI FUNDS		NON-UNITISED RI FUNDS		TOTAL
	Active	Discontinued	Active	Discontinued	
Impact investing ^(a)	1		10	5	16
Ethical exclusions ^(b)	14		1		15
Positive screening and impact investing			10	3	13
Positive screening ^(c)	2	3	4	2	11
Engagement ^(d)	3				3
Positive screening and engagement	1		2		3
Positive screening, engagement and impact investing			2		2
Positive screening, negative screening and impact investing			1		1
Ethical exclusions and engagement	1				1
TOTAL	22	3	30	10	65

(a) Refers to investments in a social and/or environmental purpose-driven company, organisation or enterprise that addresses a social and/or environmental cause by applying market-based strategies in sustainable business models that can deploy and provide both financial returns and social and/or environmental impact.

(b) Refers to the use of negative screens to avoid investments in morally undesirable countries, industries and companies.

(c) Refers to the selection of financial securities that meet a defined set of ESG criteria.

(d) Also called shareholder activism. 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. This is a long-term process whereby investors seek to influence company behaviour related to their ethical and ESG practices.

Source: Empirical findings

4.4 Risk-adjusted performance

The findings relating to the first set of null hypotheses are shown in TABLE 7. The analysis only consisted of 14 RI unit trusts as data for the benchmarks of the Oasis Crescent International Feeder Fund and Oasis Crescent International Property Equity Feeder Fund could not be sourced.

Based on the Sharpe ratio, RI unit trusts underperformed their respective benchmarks, although the extent of underperformance was not statistically significant.

TABLE 7: RI unit trusts vs. their respective benchmarks

	SHARPE RATIO			SORTINO RATIO			UPSIDE POTENTIAL RATIO		
	RI	Benchmark	Difference	RI	Benchmark	Difference	RI	Benchmark	Difference
Community Gift Fund	0.619	1.270	-0.651	2.924	6.682	-3.758	13.579	17.627	-4.048
Community Growth Fund	0.652	0.726	-0.074	2.701	3.375	-0.675	13.721	16.332	-2.611
Old Mutual Albaraka Equity Fund	0.767	0.726	0.041	3.300	3.375	-0.075	14.786	16.332	-1.547
Element Earth Equity Fund	1.027	0.963	0.065	8.492	7.338	1.154	24.231	21.878	2.354
Element Islamic Balanced Fund (A)	1.590	1.375	0.215	22.057	15.386	6.671	16.246	12.776	3.470
Stanlib Nationbuilder Fund (A)	0.374	0.776	-0.403	2.235	5.654	-3.419	10.131	13.833	-3.703
Stanlib Shariah Equity Fund (A)	0.567	0.683	-0.116	3.184	4.036	-0.851	8.853	9.803	-0.950
Kagiso Islamic Equity Fund	2.196	1.658	0.538	33.698	18.954	14.744	24.924	17.017	7.907
Element Flexible Fund	0.991	1.042	-0.051	7.733	8.174	-0.441	22.131	22.271	-0.140
Element Islamic Balanced Fund (A)	1.590	2.029	-0.439	22.057	25.745	-3.688	16.246	16.136	0.110
Element Real Income Fund	0.877	0.973	-0.096	6.417	6.687	-0.269	19.777	18.788	0.990
Nedbank SI Index Fund	1.723	1.441	0.282	28.889	15.467	13.422	18.221	16.210	2.011
Sasfin Twenty-Ten Fund	0.523	0.713	-0.190	3.163	5.310	-2.147	10.570	14.585	-4.015
Sanlam Empowerment Equity Fund	0.042	0.448	-0.406	0.220	1.871	-1.651	8.405	6.741	1.664
Shapiro Wilk W-statistic			0.965			0.794			0.913
Shapiro Wilk W-df			14			14			14
Shapiro Wilk W-p-value			0.802			0.004			0.173
Reference mean			0.000			0.000			0.000
Mean of difference scores (\bar{D})			-0.092			1.358			0.107
Standard deviation of difference scores (S_D)			0.318			5.986			3.329
Nature of distribution			Normal			Not normal			Normal
Single-sample t-test			-7.769			-			-0.014
p-value single-sample t-test			-7.769			-			.989
Wilcoxon matched pairs test (Z-value)			-			.267			-
p-value Wilcoxon matched pairs test			-			.807			-
Outcome of hypothesis test			Cannot reject $H_{0,1}$ (no sig diff)			Cannot reject $H_{0,2}$ (no sig diff)			Cannot reject $H_{0,3}$ (no sig diff)

Source: Empirical findings

TABLE 8: RI unit trusts vs. comparable unit trusts

	SHARPE RATIO			SORTINO RATIO			UPSIDE POTENTIAL RATIO		
	RI	Comparable	Difference	RI	Comparable	Difference	RI	Comparable	Difference
Community Gift Fund	0.619	0.618	0.001	2.924	2.913	0.011	13.579	13.540	0.039
Community Growth Fund	0.652	0.592	0.060	2.701	2.550	0.151	13.721	14.335	-0.614
Old Mutual Albaraka Equity Fund	0.767	0.829	0.138	3.300	2.695	0.605	14.786	14.465	0.321
Element Earth Equity Fund	1.027	0.862	0.165	8.492	6.399	2.093	24.231	20.781	3.451
Element Islamic Balanced Fund (A)	1.590	1.323	0.268	22.057	16.893	5.164	16.246	14.656	1.590
Stanlib Nationbuilder Fund (A)	0.374	0.649	-0.275	2.235	5.218	-2.983	10.131	15.045	-4.914
Stanlib Shariah Equity Fund (A)	0.567	0.669	-0.102	3.184	3.792	-0.608	8.853	9.158	-0.305
Kagiso Islamic Equity Fund	2.196	1.355	0.840	33.698	14.066	19.632	24.924	14.793	10.131
Element Flexible Fund	0.991	0.872	0.120	7.733	6.128	1.605	22.131	19.415	2.716
Element Islamic Balanced Fund (A)	1.590	1.334	0.257	22.057	13.224	8.833	16.246	11.273	4.973
Element Real Income Fund	0.877	0.855	0.022	6.417	5.521	0.897	19.777	17.247	2.531
Oasis Crescent International Feeder Fund	0.454	0.295	0.158	2.955	1.884	1.071	16.700	15.943	0.757
Oasis Crescent International Property Equity Feeder Fund	0.039	-0.060	0.099	0.191	-0.289	0.480	7.081	6.649	0.432
Nedbank SI Index Fund	1.723	1.803	-0.080	28.889	21.077	7.812	18.221	18.739	-0.518
Sasfin Twenty-Ten Fund	0.523	0.533	-0.010	3.163	3.716	-0.553	10.570	12.838	-2.268
Sanlam Empowerment Equity Fund	0.042	0.178	-0.136	0.220	0.800	-0.580	8.405	7.037	1.368
Shapiro Wilk W-statistic			.868			-.806			.946
Shapiro Wilk W-df			16			16			16
Shapiro Wilk W-p-value			.025			.003			.424
Reference mean			0.000			0.000			0.000
Mean of difference scores (d)			0.095			2.727			1.231
Standard deviation of difference scores (S _d)			0.246			5.487			3.308
Nature of distribution			Not normal			Not normal			Normal
Single-sample t-test			-			-			1.488
p-value single-sample t-test			-			-			.157
Wilcoxon matched pairs test (Z-value)			.210			.077			-
p-value Wilcoxon matched pairs test			.121			.039			-
Outcome of hypothesis test			Cannot reject H _{0,2,1} (No sig diff)			Can reject H _{0,2,2} (There is a sig diff)			Cannot reject H _{0,2,3} (No sig diff)

Source: Empirical findings

Based on the two more sophisticated risk-adjusted performance measures, the Sortino and Upside-potential ratios, RI unit trusts outperformed their benchmarks, but these differences were also not statistically significant. As a consequence, none of the three null hypotheses ($H_{0,1.1}$, $H_{0,1.2}$ and $H_{0,1.3}$) could be rejected.

TABLE 8 compares the risk-adjusted performance of RI unit trusts with that of comparable unit trusts.

All three risk-adjusted performance measures shown in **TABLE 8** indicate that RI unit trusts outperformed the matched sample of comparable unit trusts. In the case of the Sharpe and Upside-potential ratios, the findings were not statistically significant. Thus hypotheses $H_{0,2.1}$ and $H_{0,2.3}$ could not be rejected. In the case of the Sortino ratio, null hypothesis $H_{0,2.2}$ could, however, be rejected as RI unit trusts significantly outperformed the matched sample of comparable unit trusts.

These findings, which are in line with international research evidence (see **TABLE 2**), are encouraging for responsible retail investors in South Africa.

4.5 Fund performance and RI strategy

Given that the majority of active RI unit trusts are based on ethical screens that severely reduce the investment universe, closer investigation at the Islamic RI funds is warranted.

When evaluating the UPRs of ethically screened unit trusts over the entire research period (**TABLE 9**), the Kagiso Islamic Equityfund featured in the top performance quartile. The UPRs were also computed during four sub-periods.

The best performing RI unit trust in sub-period one (a period of lacklustre economic growth) was the ethically screened Old Mutual Albaraka Equity Fund. This fund was, however, one of the weakest performers in sub-period two, a period during which the economy showed slight improvement. The two best performing RI unit trusts in sub-period two both employed positive screening strategies. During the bull market which characterised sub-period three, the RI unit trusts managed by Element Investment Managers dominated the rest. None of these funds employed ethical screens. The Kagiso Islamic Equity Fund did very well in sub-period four, a period during which the market had to recover from the 2008/9 global financial crises. Unfortunately no other ethically screened unit trusts featured in the top performance quartile in the bearish market in sub-period four (as suggested by the literature).

5. CONCLUSIONS AND RECOMMENDATIONS

This study set out to describe the retail RI market in South Africa. The findings reveal that a limited range of RI unit trusts are available to retail investors, especially those interested in responsible fixed income and property investments. Most RI unit trusts use exclusionary screens based on Shari'ah law, with the remainder screening potential investments and/or engaging with boards on social issues, such as labour relations and social development.

Although not statistically significant, the total expense ratios of RI unit trusts were found to be slightly higher than those of conventional funds. This finding, which is in line with international research, may reflect the additional efforts taken by RI fund managers to evaluate potential investments using ethical and/or ESG screens.

TABLE 9: Upside-potential ratios of RI unit trusts over sub-periods

RI UNIT TRUST NAME	RI STRATEGY	UPR SUB-PERIODS				UPR ENTIRE PERIOD
		1 ^a	2 ^b	3 ^c	4 ^d	
Community Gilt Fund	Positive screening		5.715	11.557	10.959	13.579
Community Growth Equity Fund	Positive screening and engagement	6.886	4.267	12.979	15.200	13.721
Old Mutual Albaraka Equity Fund	Ethical exclusions	6.940	4.883	13.388	13.813	14.786
Element Earth Equity Fund	Engagement		1.430	19.794	19.884	24.231
Element Islamic Balanced Fund (A)	Ethical exclusions				16.246	16.246
Stanlib Nationbuilder Fund (A)	Impact investing			4.902	10.686	10.131
Stanlib Shariah Equity Fund (A)	Ethical exclusions			2.904	8.136	8.853
Kagiso Islamic Equity Fund	Ethical exclusions				24.924	24.924
Element Flexible Fund	Engagement			17.347	18.169	22.131
Element Islamic Balanced Fund (A)	Ethical exclusions				16.246	16.246
Element Real Income Fund	Engagement			14.934	24.978	19.777
Oasis Crescent International Feeder Fund	Ethical exclusions		4.917	13.438	16.435	16.700
Oasis Crescent International Property Equity Feeder Fund	Ethical exclusions			2.591	5.888	7.081
Nedbank SI Index Fund	Positive screening			18.221		18.221
Sasfin Twenty-Ten Fund	Positive screening			5.516	9.812	10.570
Sanlam Empowerment Equity Fund	Positive screening	3.051	6.542	3.723		8.405
Lowest UPR		3.051	1.430	2.591	5.888	7.081
Highest UPR		6.940	6.542	19.794	24.978	24.924

(a) Sub-period 1: 1 June 1992 – 31 July 1998. Note: This sub-period is a slightly longer period than the others given that few RI unit trusts existed in this period.
 (b) Sub-period 2: 1 August 1998 – 30 June 2002.
 (c) Sub-period 3: 1 July 2002 – 30 September 2008.
 (d) Sub-period 4: 1 October 2008 – 31 August 2011.

Source: Empirical findings

Through the use of the Sharpe, Sortino and Upside-potential ratios, the risk-adjusted performance of RI unit trusts was found to be no different from that of the unit trusts' benchmarks or a matched sample of conventional funds. Based on the Sortino ratio, RI unit trusts significantly outperformed conventional unit trusts over the research period. These findings bode well for responsible retail investors who wish to invest in line with their personal values.

Recent international research suggests that various ethical and ESG screening criteria impact on financial performance to different extents. This warrants closer investigation in South Africa.

Given a growing awareness among Generation Y of the impact their consumption (and, by extension, their investment) decisions are having, a growing demand for retail RI products in South Africa is anticipated. It is thus suggested that local assets managers seize the opportunity to expand the range of retail RI unit trusts available in the country. Specific attention could be given to:

- the use of non-faith-based screens (as there are already quite a number of ethically screened RI unit trusts available).
- fixed income and property as asset classes. The latter recommendation is supported by Swart (2011), who argues that the responsible property investment market in South Africa is likely to see substantial growth in the next decade.
- positive and best-in-sector screening strategies. This recommendation is based on research illustrating that shunning certain investments could harm investment performance (Kahn et al. 1997; Statman & Glushkov, 2009).
- the use of more environmental screening criteria. The rationale behind this recommendation is that polluting companies are likely to face increased carbon taxes and fines in future given the South African government's commitment to reduce the country's environmental footprint (Moholola, 2011).

LIST OF REFERENCES

- Abdulla, F.; Hassan, T. & Mohamad, S. (2007). Investigation of the performance of Malaysian Islamic unit trust funds: comparison with conventional unit trust funds. *Managerial Finance*, 33(2), pp. 142-153.
- Association for Savings and Investments SA. (2011a). *Local fund statistics*. [Online]. Available: <http://www.asisa.co.za/index.php/local-fund-statistics.html>. (Accessed 1 December 2011).
- Association for Savings and Investments SA. (2011b). *An introductory course to collective investment schemes*. [Online]. Available: <http://www.asisa.co.za/index.php/collective-investment-schemes/an-introductory-course-to-collective-investment-schemes.html>. (Accessed 1 December 2011).
- Abramson, L. & Chung, D. (2000). Socially responsible investing: viable for value investors? *Journal of Investing*, 9(3), pp. 73-80.
- Bacher, D. (2004). Fondse belê traag in etiese beleggings. *Sake Rapport*, 12 September, p. 4.
- Bakewell, C. & Mitchell, V-W. (2003). Generation Y female consumer decision-making styles. *International Journal of Retail & Distribution Management*, 31(2), pp. 95-106.

- Barnett, M.L. & Salomon, R.M. (2006). Beyond dichotomy: the curvilinear relationship between social responsibility and financial performance. *Strategic Management Journal*, 27, pp. 1101-1122.
- Bauer, R.; Koedijk, K. & Otten, R. (2005). International evidence on ethical mutual fund performance and investment style. *Journal of Banking and Finance*, 29(7), pp. 1751-1767.
- Bauer, R.; Otten, R. & Rad, A.T. (2006). Ethical investing in Australia: is there a financial penalty? *Pacific-Basin Financial Journal*, 14(1), pp. 33-48.
- Bello, Z.Y. (2005). Socially responsible investing and portfolio diversification. *Journal of Financial Research*, 28(1), pp. 41-57.
- Bridge, S. (1999). Empowerment finance deals come of age. *Business Times*, 14 March, [On-line]. Available: <http://www.btimes.co.za/99/0314/comp/comp18.htm>. (Accessed 5 October 2006).
- Chegut, A.; Schenk, H. & Scholtens, B. (2011). Assessing SRI fund performance research: best practices in empirical analysis. *Sustainable Development*, 19, pp. 77-94.
- Christian Brothers Investment Services. (2012). [On-line]. Available: <http://www.cbisonline.com>. (Accessed 1 April 2012)
- Christian Financial Association. (2012). [On-line]. Available: <http://cfaa.co/>. (Accessed 1 April 2012).
- Crosswalk. (2012). [Online]. Available: <http://www.crosswalk.com>. (Accessed 1 April 2012).
- Cui, Y.; Trent, E.; Sullivan, P.M. & Matiru, C.N. (2003). Cause-related marketing: how generation Y responds. *International Journal of Retail and Distribution Management*, 31(6), pp. 310-320.
- De Cleene, S. & Sonnenberg, D. (2004). *Socially responsible investment in South Africa, 2nd edition*. Johannesburg: African Institute of Corporate Citizenship.
- Derwall, J. & Koedijk, K. (2009). Socially responsible fixed income funds. *Journal Of Business Finance and Accounting*, 36(1&2), pp. 210-229.
- Diltz, J.D. (1995). The private cost of socially responsible investing. *Applied Financial Economics*, 5, pp. 69-77.
- Drut, B. (2010). Sovereign bonds and socially responsible investing. *Journal of Business Ethics*, 92(Supplement), pp. 131-145.
- Eccles, N.; Nicholls, S. & De Jongh, D. (2007). *The state of responsible investment in South Africa*. Pretoria: UNISA Centre for Corporate Citizenship.
- Ellison, L. & Sayce, S. (2007). Assessing sustainability in the existing commercial property stock: Establishing sustainability criteria relevant for the commercial property investment sector. *Property Management*, 25(3), pp. 287-304.
- European SRI study. (2010). *European Sustainable Investment Forum (EuroSIF)*. [On-line]. Available: <http://www.eurosif.org/research/eurosif-sri-study/2010>. (Accessed 3 December 2011).
- Equinox. (2011). [On-line]. Available: <http://www.equinox.co.za>. (Accessed 2 December 2011).
- Fernandez-Izquierdo, A. & Matallin-Saez, J. (2008). Performance of Ethical Mutual Funds in Spain: Sacrifice or Premium? *Journal of Business Ethics*, 81(2), pp. 247-260.
- FundsData. (2011). [On-line]. Available: <http://www.fundsdata.co.za>. (Accessed 2 December 2011).

- Gilbert, E. & Strugnelli, D. (2010). Does survivorship bias really matter? An empirical investigation into its effects on the mean reversion of share returns on the JSE (1984-2007). *Investment Analysts Journal*, 72, pp. 31-42.
- Goldreyer, E.F. & Diltz, J.D. (1999). The performance of socially responsible mutual funds: Incorporating socio-political information in portfolio selection. *Managerial Finance*, 25(1), pp. 23-36.
- Gregory, A.; Matatko, J. & Luther, R. (1997). Ethical unit trust financial performance: Small company effects and fund size effects. *Journal of Business Finance and Accounting*, 24(5), pp. 705-724.
- Grossman, B.R. & Sharpe, W.F. (1986). Financial implications of South African divestment. *Financial Analyst Journal*, July/August, pp. 15-29.
- Hamilton, S.; Jo, H. & Statman, M. (1993). Doing well while doing good? The investment performance of socially responsible mutual funds. *Financial Analyst Journal*, 49(6), pp. 62-66.
- Herringer, A.; Firer, C. & Viviers, S. (2009). Key challenges facing the socially responsible investment (SRI) sector in South Africa. *Investment Analysts Journal*, 70(Nov), pp. 11-26.
- Hirsch, A. (2005). *Season of hope - Economic reform under Mandela and Mbeki*. [On-line]. Available: http://www.idrc.ca/en/ev-91107-201-1-DO_TOPIC.html. (Accessed 5 October 2006).
- Hussein, K. & Omran, M. (2005). Ethical Investment Revisited: Evidence from Dow Jones Islamic Indexes. *Journal of Investing*, 14(3), pp. 105-124.
- Hutton, R.B.; D'Antonio, L. & Johnsen, T. (1998). Socially responsible investing: Growing issues and new opportunities. *Business and Society*, 37(3), pp. 281-306.
- Jones, S., van der Laan, S., Frost, G. & Loftus, J. (2008). The Investment Performance of Socially Responsible Investment Funds in Australia. *Journal of Business Ethics*, 80(2), pp. 181-203.
- Kahn, R.N.; Lekander, C. & Leimkuhler, T. (1997). Just Say No? The Investment Implications of Tobacco Divestiture. *Journal of Investing*, 6(4), pp. 62-70.
- Kempf, A. & Osthoff, P. (2007). The effect of socially responsible investing on portfolio performance. *European Financial Management*, 13(5), pp. 908-922.
- Kreander, N.; Gray, G.; Power, D.M. & Sinclair, C.D. (2005). Evaluating the performance of ethical and non-SRI funds: a matched pairs analysis. *Journal of Business Finance and Accounting*, 32(7), pp. 1465-1493.
- Kurtz, L. & DiBartolomeo, D. (1996). Socially screened portfolios: an attribution analysis of relative performance. *Journal of Investing*, 5(3), pp. 35-41.
- Luck, C.G. & Pilotte, N. (1993). Domini Social Index Performance. *Journal of Investing*, (2)3, pp. 60-62.
- Mallin, C.A.; Saadouni, B & Briston, R.J. (1995). The financial performance of ethical investment funds. *Journal Of Business Finance And Accounting*, 22(4), pp. 483-498.
- McCrinkle, M. (2003). Understanding generation Y. *Principal Matters*, 55, pp. 28-31.
- Moholola, R. (2011). Urgent need for low carbon SA. *Parliament of the Republic of South Africa – News*. December. [On-line]. Available: http://www.parliament.gov.za/live/content.php?Item_ID=1870. (Accessed 16 January 2012).
- Muslim Investor. (2012). [Online] Available: <http://muslim-investor.com/>. (Accessed 1 April 2012).

- Nilsson, J. (2007). Investment With A Conscience: Examining The Impact Of Pro-Social Attitudes And Perceived Financial Performance On Socially Responsible Investment Behaviour. *Journal Of Business Ethics*, 83, pp. 307-325.
- O'Rourke, A. (2003). A New Politics Of Engagement: Shareholder Activism For Corporate Social Responsibility. *Business Strategy And The Environment*, 12(4), pp. 227-239.
- Pawley, M.G. (2006). The impact of survivorship bias on South African unit trust performance: 1972 – 2004. *Investment Analysts Journal*, 64, pp. 2126.
- Powell, G.E. & Weaver, D.G. (1995). Do investors price social responsibility? *Business and Professional Ethics Journal*, 14(3), pp. 61-77.
- Religious Action Centre for Reform Judaism. (2012). [On-line]. Available: <http://rac.org/advocacy/issues/issuesri/#values>. (Accessed 1 April 2012).
- Renneboog, L.; Ter Horst, J. & Zhang, C. (2011). Is ethical money financially smart? Nonfinancial attributes and money flows of socially responsible investment funds. *Journal of Financial Intermediation*, 20, pp. 562-588.
- Renneboog, L.; Ter Horst, J. & Zhang, C. (2008). The price of ethics and stakeholder governance: The performance of socially responsible mutual funds. *Journal of Corporate Finance*, 14, pp. 302-322.
- Reyes, M.G. & Grieb, T. (1998). The external performance of socially responsible mutual funds. *American Business Review*, 16(1), pp. 1-7.
- Rudd, A. (1979). Divestment of South African equities: How risky? *Journal of Portfolio Management*, 5(3), pp. 5-10.
- Sauer, D.A. (1997). The impact of social responsibility screens on investment performance: Evidence from the Domini 400 social index and Domini equity mutual fund. *Review of Financial Economics*, 6(2), pp. 137-150.
- Scholtens, B. (2005). Style and performance of Dutch socially responsible investment funds. *Journal of Investing*, Spring, pp. 63-72.
- Scholtens, B. (2010). The environmental performance of Dutch Government bond funds. *Journal of Business Ethics*, 92(Supplement), pp. 117-130.
- Schröder, M. (2007). Is There a Difference? The performance characteristics of SRI Equity Indices. *Journal of Business Finance & Accounting*, 34(January), pp. 331-348.
- Schwartz, M.S. (2003). The “ethics” of ethical investing. *Journal of Business Ethics*, 43(3), pp. 195-231.
- Sharpe, W.F. (1994). The Sharpe ratio. *Journal of Portfolio Management*, (Fall), pp. 49-58.
- Sinclair, G. & Yao, R. (2011). Sustainable investment in sub-Saharan Africa. *International Finance Corporation*. [On-line]. Available: [http://www.ifc.org/ifcext/sustainability.nsf/AttachmentsByTitle/p_SI-SubSaharanAfrica/\\$FILE/IFC_Sustainable_Investment_in_Sub-Saharan_Africa.pdf](http://www.ifc.org/ifcext/sustainability.nsf/AttachmentsByTitle/p_SI-SubSaharanAfrica/$FILE/IFC_Sustainable_Investment_in_Sub-Saharan_Africa.pdf). (Accessed 1 September 2011).
- Sortino, F. & Price, L. (1994). Performance measurement in a downside risk framework. *Journal of Investing*, Fall, pp. 59-65.
- Sortino, F.A.; Van der Meer, R. & Plantinga, A. (1999). The Dutch triangle (portfolio performance measure). *Journal of Portfolio Management*, 26(1), pp. 50-59.

- Sparkes, R. & Cowton, C.J. (2004). The maturing of socially responsible investments: A review of the developing link with corporate social responsibility. *Journal of Business Ethics*, 52(1), pp. 45-57.
- Statistics South Africa. (2011). *Mid-year population estimates: 2011*. [On-line]. Available: <http://www.statssa.gov.za/publications/P0302/P03022011.pdf>. (Accessed 4 January 2012).
- Statman, M. (2000). Socially responsible mutual funds. *Financial Analyst Journal*, 56(3), pp. 30-39.
- Statman, M. (2006). Socially Responsible Indexes: Composition, Performance, and Tracking Error. *Journal of Portfolio Management*, 32(3), pp. 100-109.
- Statman, M. & Glushkov, D. (2009). The wages of social responsibility. *Financial Analyst Journal*, 65(4), pp. 33-46.
- Swart, K. (2011). *Responsible property investments in South Africa*. Unpublished BCom Honours treatise. Stellenbosch: Stellenbosch University.
- Vermeir, W.; Van de Velde, E. & Corten, F. (2005). Sustainable and Responsible Performance. *Journal of Investing*, 14(3), pp. 94-100.
- Visser, W.A.M. (2005). Corporate citizenship in South Africa - a review of progress since democracy. *Journal of Corporate Citizenship*, Summer(18), pp. 29-38.
- Viviers, S.; Hand, D. & Ractliffe, T. (2011). From philanthropy to impact investing: shifting mindsets in South Africa. *Corporate Ownership and Control*, 8, pp. 25-43.
- Viviers, S.; Bosch, J.K.; Smit, E.vd M. & Buijs, A. (2008). The risk-adjusted performance of responsible investment funds in South Africa. *Investment Analysts Journal*, 68(November), pp. 1-17.
- Whitten, D. (2004). Socially responsible investment pays in Japan. *JapanInc*, February, [On-line]. Available: <http://www.japaninc.com>. (Accessed 20 December 2004)

APPENDIX A:

Details of R1 strategies pursued by Fund Managers of South African R1 Unit Trusts

Name of R1 unit trust fund	Relevant sections in investment mandate
<i>Community Growth Gilt Fund</i>	To support the reconstruction, development and 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.
<i>Community Growth Equity Fund</i>	To promote sustainable and responsible investing. The fund invests in 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. The fund, established by trade unions, has become an influential enforcer of social responsibility in firms and attends AGMs of the companies it invests in.
<i>Old Mutual Albaraka Equity Fund</i>	To invest in accordance with Shari'ah law. The fund therefore does not invest in shares that have an association with alcohol, gambling, non-halaal foodstuffs or interest-bearing instruments.
<i>Element Earth Equity Fund</i>	To invest in a portfolio of JSE-listed equities and use its presence to promote an awareness of corporate responsibility performance measurements, including environmental management, social responsibility, economic empowerment and corporate governance. This is achieved through constructive engagement with management of the companies in which the fund invests.
<i>Element Islamic Equity Fund</i>	To provide Muslim investors, locally and in sub-Saharan Africa, with exposure to a portfolio of Shari'ah compliant South African equities. As such the fund is restricted from investing in companies involved in alcohol, tobacco, entertainment, gambling, non-Halaal foodstuffs, armaments and any interest-bearing financial services including conventional banks and insurance companies. 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.
<i>Stanlib Nationbuilder Fund (A)</i>	To support infrastructure and economic development.
<i>Stanlib Shari'ah Equity Fund (A)</i>	To generate capital growth over the medium to long term, whilst conforming to the religious and cultural beliefs of Muslim investors. The generation of income will be a secondary objective. This portfolio will invest in a mix of predominantly South African equity securities, as well as foreign equity securities, and when appropriate, other securities such as non-equity securities as may be permitted by the Shari'ah Standards of the Accounting and Auditing Organization for Islamic Financial Institutions (AAOIFI). The manager may invest in participatory interests or any other form of participation in portfolios of collective investment schemes or other similar

Name of RI unit trust fund	Relevant sections in investment mandate
	collective investment schemes as the Act may allow from time to time, provided that the investments are done in accordance with the manner, limits and conditions as determined by the Registrar from time to time, as well as the Shari'ah Standards of the AAOIFI. No limits are specified with regard to a specific sector(s). The manager may invest in financial instruments in accordance with the manner, limits and conditions as determined by the Shari'ah Standards of the AAOIFI.
<i>Kagiso Islamic Equity Fund</i>	To provide steady capital growth and a total portfolio return that is better than the average domestic general equity fund. The generation of income is of secondary importance. The Fund will not invest in any interest-bearing instruments. The portfolio's main bank account is with ABSA bank, and will make use of ABSA's Islamic banking services which cater specifically to Shari'ah Fund compliance. The Fund is be managed in accordance with the guidelines and standards as set from time to time by the Accounting and Auditing Organization for Islamic Financial Institutions.
<i>Sasfin Equity Fund</i>	To invest in SRI listed equities. Investments will be limited to the shares of companies included in the FTSE/JSE SRI Index. Companies included in this index address each of the three pillars of the triple bottom line namely environment, society and economy and adhere to the principles of fairness, accountability, responsibility and transparency.
<i>Oasis Crescent Equity Fund</i>	To provide 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.
<i>Nedbank Sustainability Equity Fund</i>	To track 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.
<i>Sasfin TwentyTen Fund</i>	To deliver consistent growth over the long term through investing in listed equities. The manager will focus on 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, basic industries, transport, elimination of disease, health and similar developmental projects.
<i>NewFunds Shari'ah Top40 Index Fund</i>	To track Shari'ah compliant companies identified from the FTSE/JSE Africa Top 40 index by Yasaar Limited (Yasaar), which provides independent Shari'ah compliance solutions in terms of stringent Shari'ah standards and principles. The Shari'ah ETF has been certified Shari'ah compliant by Absa Bank's Shari'ah Board. NewFunds Shari'ah ETF is structured as a portfolio within NewFunds CIS, an FSB approved Collective Investment Scheme, and listed on the JSE Limited. The Shari'ah ETF is a cost efficient, transparent, and easy-to-access

Name of RI unit trust fund	Relevant sections in investment mandate
<i>Sanlam Empowerment Equity Fund</i>	investment product that conforms to the principles of Shari'ah law. To invest in shares that were directly or indirectly involved in the process of economic empowerment. 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.
<i>Oasis Crescent International Fund of Funds</i>	To 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.
<i>Oasis Crescent International Property Equity Feeder Fund</i>	To provide income and to achieve medium to long term growth of capital from high-quality property and property related listed companies globally. This Shari'ah compliant Property Fund provides investors with the opportunity to invest in a product that conforms to moral and cultural beliefs.
<i>Element Flexible Fund</i>	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.
<i>Element Islamic Balanced Fund (A)</i>	To provide investors with Shari'ah compliant returns and the opportunity to achieve long-term wealth creation within a moderate level of risk. The fund aims to preserve capital with a reasonable level of income that is halaal (permissible) for investors and will comply with the prudential investment requirements that govern the management of South African retirement.
<i>Old Mutual Albaraka Balanced Fund</i>	To offer investors an ethical investment that provides steady, long-term capital growth, as well as a moderate level of income via a portfolio that diversifies across asset classes and regional exposure. The Shari'ah Supervisory Board oversees adherence to the applicable Shari'ah principles. This fund specifically adheres to the standards of the Accounting and Auditing Organisation for Islamic Financial Institutions (AAOIFI) as interpreted by the Shari'ah Supervisory Board.
<i>27 Four Shari'ah Balanced Fund of Funds</i>	To deliver consistent and stable long-term investment performance and reduce the risk of investing in a single fund or asset class. The portfolio is a balanced fund that offers investors a single fund that combines both growth (equities) and income (through Sukuk, which are non-interest bearing Islamic bonds) objectives. By combining local and global equities (high risk) and Sukuk (low risk), they have been able to create a risk/return balance that provides capital appreciation, while avoiding excessive risk.
<i>Oasis Crescent Balanced Progressive Fund of funds</i>	To provide investors with an opportunity to hold a wide range of underlying asset classes within the ethical parameters of Shari'ah-governed investment. These underlying asset classes comprise: domestic and international listed equities, property, Islamic Bonds (Sukuks) and money market (for Pensions Fund Act regulatory compliance). As a Shari'ah compliant collective investment scheme, the Fund adheres to the ethical investment guidelines that

Name of RI unit trust fund	Relevant sections in investment mandate
	are prescribed by the Shari'ah Advisory Board.
<i>Oasis Crescent Balanced High Equity Fund of Funds</i>	To provide moderate capital appreciation; income will be incidental to the objective. The portfolio will be based on a selection of underlying investments that comply with moral and ethical considerations. To achieve this objective, the portfolio will be well diversified by asset class in accordance with prudential investment regulations. The Fund shall be a Shari'ah compliant fund.
<i>Oasis Crescent Balanced Stable Fund of Funds</i>	To provide moderate capital appreciation. The secondary objective is to provide moderate income growth based on a selection of underlying investments that comply with ethical and moral considerations. To achieve this objective, the portfolio will be well diversified by asset class in accordance with existing prudential investment regulations. The Fund shall be a Shari'ah compliant fund.
<i>Element Real Income Fund</i>	To achieve the highest sustainable income payout that is possible without eroding the fund's inflation adjusted capital base. The Fund 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.
(a) A = Active; D = Discontinued	(b) Classification based on the guidelines provided by EuroSIF (European SRI study 2010)

Source: *Equinox (2011), FundsData (2011) and the fund factsheets of the respective unit trusts (2011)*