

Why do we invest ethically?

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Abstract

Analysis in this paper has proposed three potential motives for ethical investment – financial returns, non-wealth returns and social change. The motives are developed from the literature and illustrated in the context of a ‘best of sector’ fund and a socially screened fund. We find that the proposed motives are neither exhaustive nor exclusive and one single motive will not explain the behaviour of all ethical investors. There may be a trade-off between financial and psychic returns for some investors. The trade-off for consumption-investors is expected to be close to zero (total utility is maximised with small levels of ethical investment in the fun of participation model) and is expected to vary with the ethical intensity of investment-investors, as shown when we include ethical intensity into the investor’s utility function. Psychic return can also be viewed as an increase in happiness and this approach would lend itself to empirical testing to increase our understanding of why we invest ethically.

1. Introduction

Understanding investor behaviour is a difficult task. The capriciousness of human nature generates a seemingly endless variety of behaviours that manifest themselves in interesting ways when individuals pit themselves against the markets. One particular type of behaviour that has emerged over the last twenty years or so is the desire to invest ethically. In this paper, we address the question, “Why do we invest ethically?” Our answers go some way towards advancing our understanding of ethical investor behaviour.

The empirical contribution of this paper is a survey of both shareholders and prospectus applicants (who did not complete purchases) of Earth Sanctuaries Ltd (see Beal and Goyen, 1998a or 1998b for a description of the company). With a stated objective of conservation and a financial focus on stability rather than maximising shareholder returns, ESL provided an ideal opportunity to gather data to aid our understanding of

ethical investor behaviour. At the time the sample for this study was being selected (1999), there were about 7,000 prospectus applicants/shareholders of ESL. A random sample of 1400 (or 20%) was selected. Corporations and overseas investors were excluded from the sample. In all, 943 responses were returned, 788 from the current shareholders and 155 from prospectus applicants giving a net response rate of 67%.

This paper is organised as follows. In the next section, we briefly review the literature pertaining to the traditional view of investor motives, individual investor needs and the ethical investment phenomenon. We then examine the evidence for each of three potential explanations of ethical investment. In the final section, we develop utility curves for investors that explain observed ethical investor behaviour.

2.0 Investor Motivation - A Brief Review of Literature

There is a growing body of literature that acknowledges that investors don't behave in the fashion typically assumed by traditional finance theory. Specifically, we discuss evidence that suggests individuals do not always act as if they were homogeneous with respect to mean-variance optimisation. We then look at some systematic differences in the way investors behave. Some of the burgeoning literature on ethical investment, a specific niche in markets, is then discussed.

2.1 Recognition of the Non-Rational Investor

Since the early 1960s, individual investors have been deemed to be rational. Indeed, as Statman (2004a) affirmed, rationality on the part of investors is the first foundation block of modern finance. The finance discipline of the last four decades has developed the bases that investors are rational, they prefer more to less, they juggle risk and return and they demand higher returns to compensate them for assuming greater risk. In short, the traditional theory does not allow for any influences on the investment decision apart from maximising returns given the constraint of the individual's particular level risk aversion. This state of affairs came about through the publication of work by several influential authors. The early work by Miller and Modigliani (1961) on dividend policy complemented Markowitz's (1959) development of mean-variance portfolio theory that

saw investors as being focused entirely on the expected returns and risk of their whole portfolios. As Statman (2004a) noted, Markowitz's investors are never reluctant to realize losses on stocks, when tax savings are available and add to their wealth, and they do not care about dividend policy nor about the social responsibility of the companies, of which they are part owners, so long as risk and expected returns are unaffected. Rational investors do not reject investment in firms that operate in areas or with methods which contravene their personal value sets – put simply, personal values are irrelevant to the investment decision.

However, Statman (2004a) argued that investors, before finance became overwhelmed by the notion of rationality, were seen as 'normal' in that they exhibited the warm-hearted (soft-headed?) foibles of human nature, rather than the cold calculation of the rationalists. Statman (2004a) drew on early work by Snyder (1957) who highlighted that the 'normal' investors of the day could in fact increase their wealth by realizing losses and claiming tax benefits, if only they could overcome their reluctance to crystallize the losses. Snyder's investors held on to loss-making investments in the hope that one day they would recover their values, and thus they were not indifferent between unrealized and realized losses. In addition, by their behaviour, they showed that they did not prefer more to less, as they eschewed the chance to increase total wealth by claiming tax benefits from the capital losses. Odean (1998a) reported similar findings in relation to losses, four decades later.

If investors actually behave as traditional finance theory assumes, ethical investment would only exist because it provides the opportunity for equivalent return at relatively lower risk or provides higher returns for the same level of risk as 'standard' funds. Hence, our first proposed motivation for ethical investment is that investors are looking for superior financial performance. We will return to this issue in Section 3.

The concept of rationality has dominated finance for four decades but, in the last two of those decades, authors have taken delight in pointing out comprehensively that investors do not uniformly exhibit cool rationality. Workers in the emergent area of behavioural

finance have drawn on concepts and evidence from the psychology literature in an effort to propose better explanations for finance phenomena. For example, well documented in psychology is the tendency of decision-makers to be over-optimistic, to over-estimate their own abilities and to be generally over-confident. Men appear to suffer from these traits more so than do women. In the finance realm, over-confidence is manifest in excessive trading (Odean, 1998b). Barber and Odean (2000) showed that net returns fall as trading activity increases, and that the men in their sample traded 45% more than the women.

Other examples are confirmation bias (the tendency to find information which reinforces the original view and to reject other information), conservatism (inability to react or slow reaction to unfolding events), anchoring and framing. Anchoring occurs when a person who is asked to make a quantitative assessment can be influenced by irrelevant suggestions made at the same time. Tversky and Kahneman (1974) reported an influential experiment showing this phenomenon; many variations have been reported in the years since with unchanged results. Framing refers to the way a proposition is presented: the context of the proposition influences the resultant decision. Slovic (1995) summarised nearly three decades of empirical evidence which showed comprehensively that framing changes decisions.

Research in the developing area of behavioural finance has illuminated many facets of individual investor behaviour. Thaler (1993) in an edition of selected influential papers focused on noise in financial markets, price volatility, overreaction in markets, corporate-finance effects (e.g. preference for cash dividends over capital gains) and individual behaviours. Noise is the opposite of news, and noise makes up much of the information that fuels markets. Rational investors may be stimulated to trade on news, but for every buyer there must be a seller. If potential buyers and sellers have the same information, then one side must be contemplating a trade which will prove to be an error and a trade made on noise. Why do people trade on noise? Black (1986) asserted two reasons: firstly, they trade because they like trading and, secondly, they don't know they are trading on noise, they think they are trading on information. Peterson (2002) drew on the

psychology literature to show that anticipation of reward (price appreciation) generates a positive affect (emotion, mood or attitude) which drives increased risk-taking behaviour and buy trading. In contrast, following the anticipated event or news, there is a decrease in positive affect which produces more risk-averse behaviour and drives sell trading.

The volatility in prices of stocks cannot be explained merely by changes in the present value of future dividends. Cutler, Poterba and Summers (1989) showed that large price movements occur in the absence of important news and, conversely, not all potentially price-significant news results in price changes. Overreaction (and underreaction) in markets is concerned with announcement effects and the tendency of investors to overweight recent information and underweight information received previously. De Bondt and Thaler (1986) found stocks which had shown extreme performance over an extended period were likely to subsequently underperform (winners) and outperform (losers). This paper proved controversial in the prevailing rationalist climate.

Shefrin and Statman (1985) highlighted that cognitive biases and emotion affect investors, thus detracting from the traditionally assumed rational behaviour. Normal investors often manage their stocks individually rather than as portfolios, they are reluctant to realize losses, as Snyder observed almost 30 years previously, possibly because they use 'mental accounts' and selling a stock at a loss closes each account with a finality which allows no recovery of value and causes emotional distress.

2.2 Individual Investor Needs

Early research by Lease, Lewellen and Schlarbaum (1976) reported that market segmentation, contrary to mainstream expectations at the time, did exist to the extent that individual preferences could hinder the free flow of capital and interfere with the establishment of coherent risk-return relationships among securities. They isolated five different investor groups with different investment goals, investment approaches and portfolio compositions. The following year, the same authors [Lewellen, Lease and Schlarbaum (1977)] found that age, sex, income and education affect investor preference for capital gains, dividend yield and overall return. Warren, Stevens and McConkey

(1990) again reported lifestyle and demographic factors influenced choices among the asset classes.

Nagy and Obenberger (1994) investigated the investment-decision processes of equity investors with substantial holdings of US Fortune 500 firms and found seven summary factors that captured the major investor concerns. Investors were asked to rank 34 variables which had been identified as potentially affecting investment decisions as significant, considered or ignored in the decision process. They found that most of the variables which impacted on decisions were the traditional wealth-maximization criteria such as those concerned with earnings, diversification, risk, etc. Interestingly, the highest ranked wealth-maximizing criterion (expected corporate earnings) was ranked as significant by less than half the sample (46.6%). Thus, no wealth-maximizing criterion was considered important by more than half the sample. Indeed, the variable coming third in the list of significant factors, 'feelings for firm's products and services', was decidedly an emotional and non-rational decision driver. These authors concluded that investors 'use diverse criteria' and 'do not approach investment decisions in a normative fashion' (Nagy and Obenberger, 1994: 65).

Finally, for this section, Statman (2004b) drew an analogy between food consumption choices and investment choices. Both offer utilitarian and expressive benefits. The utilitarian benefits of food involve nutrition and flavours while the most-favoured utilitarian benefits of investment choices are high expected returns and low risk. Expressive benefits allow people to define and express their values, social class and lifestyle choices to themselves and others. It is readily acknowledged that foods, food supply establishments and in-situ food consumption places (restaurants) all offer expressive benefits to consumers as well as vital nutrition. Statman (2004b) contended that investments also supply expressive benefits and that most of argument over rationality and irrationality in investment decisions stems from the rationalists' being unwilling to acknowledge the existence and influence of expressive benefits. Further, Statman considered that mean-variance optimizers (rational investors) view their portfolios as a whole, whereas non-rationalists build distinct layers into their pyramidal

portfolios, with low-risk safety assets forming the base with more risky and assets fulfilling other purposes occupying the upper layers. Our data supports Statman's assertion. We found about 30% of our respondents considered that ethical investments constituted 20% or less of their equities portfolios. A further 10% considered their portfolios to be 100% ethical, but the majority of these respondents only held shares in Earth Sanctuaries.

Social responsibility is one such 'other purpose'. While socially responsible portfolios are generally private matters and not proclaimed to the world, they still offer self-signalling benefits, where investors reinforce their feelings of social responsibility and generate personal emotional benefits from their feelings of having financially supported good things and having 'put their money where their mouths are'. This rationale leads to our second proposed motivation for ethical investment – non-wealth returns. We investigate this matter in Section 2.

2.3 Ethical or Socially-Responsible Investment

Ethical or socially-responsible investment (SRI) has emerged in the last decade or so as a reasonably legitimate focus of discussion about investor choice. During the 1980s, SRI was confined to the margins of the investment world and publicly manifested itself only in the establishment of a few retail unit trust (mutual) funds, popularly characterised as being supported by the 'loony left'. Since that time, this force in investment has grown rapidly in importance and has been characterised by an expansion in the forms of its expression to encompass retail funds, shareholder activism at AGMs and SRI streams within superannuation (pension) funds.

Concomitant with the growth in investor support for SRI has been the development of academic interest in the phenomenon. A decade or so of academic interest has produced possibly some thousands of studies in the USA, UK, Canada, France, Germany, Australia and other countries around the world. These studies have been concerned with:

- The definition of SRI;
- The processes of SRI or the use of screens;

- The historical returns from SRI mutual funds versus conventional funds;
- The effect of SRI on corporate behaviour;
- Who are the SRI investors and
- why do people choose SRI.

The last is the issue of concern in this paper.

Rosen and Sandler (1991) reported an early US study of investors in two socially-screened mutual funds. They found the SRI investors in their sample, when compared with other mutual fund investors (MFI), were younger, white-collar employed, better educated and lower salaried than MFI. On average, SRI investors were 13 years younger (39 years compared with 52 years), with 60% having graduate degrees, but currently earning 15% less than the incomes of the MRIs, possibly due to their earlier stages in their careers. SRI accounted for only 49% of their investments.

Beal and Goyen (1998a) studied investors in an Australian company (ESL) which openly acknowledged that it had replaced wealth maximization with nature conservation as its primary motivation. They found ESL shareholders are more likely to be female, to be educated to a tertiary level and probably to postgraduate degree level than typical shareholders of companies listed on the Australian Stock Exchange (ASX). They are professionally employed or retired, likely to have a lower household income, high household assets and a share portfolio containing more than 11 stocks.

In further research, Beal and Goyen (1998b) investigated whether investors in ESL with its unconventional mission could really be considered to be donors rather than investors. Drawing on Cullis, Lewis and Winnett's (1992) findings that a distinction may be drawn between 'consumption-investors' who gain utility from investing ethically and 'investment-investors' who gain utility from the financial outcomes of their investments, Beal and Goyen (1998b: 219) found the vast majority of their shareholder respondents met the definition of 'investment-investors' – they derived significant benefit from the conservation activities of the company. These authors concluded that 'investors are far more complex creatures than the current state of theory would suggest'. Further, investors

apply many criteria in the decision-making process, although each investor weighs the criteria differently.

Lewis and Mackenzie (2000a) studied the motivation of more than 1000 UK ethical investors. They found ethical investors to be middle-aged, middle-income activists (in politics, community and church) with a vast majority holding mixed portfolios. Only 20% held ethical investments exclusively. In concert with the Australian findings of Beal and Goyen (1998b), this UK research found ethical investors to be not extremists, but merely one arm of the investment community.

A consistent theme of the literature which has reported SRI investor characteristics and the rapid growth of SRI in many countries around the globe is the importance of the movement of women into higher-paying jobs (and thus to become savers and investors in ever increasing numbers) and the influence of higher education. Schueth (2003) complemented the above-mentioned Australian and UK findings with the argument from the US that the rapidly growing SRI industry there is fuelled by better education, the appointment of women as senior executives and directors giving them access to power and also the ability to invest personally, and the realization that socially-screened portfolios do not necessarily underperform the market. It is estimated that, in the US, about 60% of SRI investors are women, a far greater proportion than in the general investor population.

3.0 Motivations for ethical investment

Based on traditional finance theory and the ethical investment literature, there are three potential reasons why people may invest some or all of their funds ethically:

- (1) For superior financial returns;
- (2) For non-wealth returns
- (3) To contribute to social change

These motivations are neither exclusive nor exhaustive, but offer a starting point for advancing our understanding of ethical investors and the choices they make. In this section we develop these three proposed motivations for ethical investment.

3.1 Is ethical investing a fair game?

In this section, we examine the issue of the over- or underperformance of SRI investments. If, on balance, the risk-return profiles of SRI funds are the same as those for ordinary funds, ethical investment can be considered to be a fair game.

Discussion of a posited relationship between the level of social responsibility of a firm and its financial performance has been a contentious topic in academic (see, for example, Ali and Gold 2002; Bauer, Koedijk and Otten 2002,) and professional literature (see, for example, Chan 2003; Rothchild 1996) as well as the popular press (Emery 2001; Johnson 2001). To advance this thorny issue of the relationship between corporate social performance and corporate financial performance, Orlitzky, Schmidt and Rynes (2003) conducted a meta-analysis of 52 studies. They concluded that, after considering methodological and measurement issues, previous empirical analyses do suggest socially responsible firms outperform financially.

Ali and Gold (2002) approached the issue of the relative performance of SRI by assessing the impact of excluding sin stocks on portfolio returns. They found portfolio returns on Australian stocks would have increased via the inclusion of alcohol and gambling stocks during the period from 1995 to 2001. Bauer, Otten and Tourani-Rad (2004) used Australian funds data from 1992 to 2003 and found the returns for SRI funds were not significantly different from the returns on market index.

The empirical analysis of returns and social responsibility has yet to provide a convincing causal link between the two factors. A reasonable conclusion, based on the prior research, is that SR investments neither over- nor under-perform their non-SRI counterparts. The single objective of generating financial returns cannot, therefore, explain ethical investment.

We argue against the traditional finance theory assumption of homogeneous mean-variance optimizing investors. The differing levels of intensity that investors have in the consideration of ethics in their investing makes a discussion about comparative returns and purported trade-offs less important. To explain better the range of investments that are considered acceptable by different SRI investors, we need to move beyond the concept of financial return to that of more holistic definition of utility.

3.2 Product differentiation of SRI funds

As the amount of investment in SRI has increased, so too has the number and variety of funds offered to investors. Bauer, Otten and Tourani-Rad raised the possibility that some ethical funds are really ‘conventional funds in disguise’ (2004 p15). If this is the case, we would expect some SRI funds to hold portfolios that do not differ greatly from ordinary funds. SRI funds adopting a ‘best of sector’ investment strategy would appear to do this. One Australian ethical investment fund has the stated investment objective providing ‘capital growth and some income over the long term from investment in Australian shares, while maximising the sustainability focus (economic, environmental and social) of the portfolio’ (Westpac 2005). However, the ‘maximising’ of the sustainability focus would appear to be more of a ‘moderating’ activity. The fund advertising material advises that when necessary ‘we select companies with lower sustainability ratings to manage the overall risk of the portfolio’ (Westpac 2005). This ‘sustainability fund’ is one of a suite of predominantly non-SRI options offered by the provider. More than 50 of the fund’s Australian equities investments are disclosed on its website (Westpac 2004). Perusal of these investments reveals quite a number of companies that have attracted negative media attention for poor environmental performance, especially those in the extractive industries.

Funds at the other end of the spectrum use positive and negative screens in portfolio selection. One such fund discloses the 35 listed Australian equities it holds (Australian Ethical Investment 2005). While the provider of this fund does offer a number of investment options, they only offer SRI investments. The best of sector fund discussed

above and this screened fund hold only four equities in common. This overlap is small, especially given that there only around 1 700 companies listed in the Australian market. The opportunity for diversity is significantly lower in Australia than it would be in the US where there are many more listed companies. Why would fund managers offer such a range of SRI funds?

Cowton (2004: 249) considered ethical funds to be 'retail financial products that specifically add social or ethical goals or constraints to normal financial criteria'. Products are marketed to attract customers and the customers of SRI funds are ethical investors. Viewing SRI funds as products can help us understand the large differences in the investment styles of the screened and best of sector funds and why there is demand for both. Consider a best of sector fund where the equities held in the 'ethical' portfolio are not significantly different from those held in an ordinary fund. One would expect that the primary difference between these funds would be the higher transaction costs associated with holding the 'ethical' fund. So although the risk-adjusted returns would be similar on both portfolios, the ethical investor will receive a lower return net of transaction costs.

Bateman, Fraedrich and Iyer (2001) stated that consumers use rule-based (or heuristic) processes when making decisions that are similar to prior situations. Thus, in a world of mean-variance optimisers (with no first-time investors) who make their investment choices on the basis of risk and return, there would be no demand for the 'ethical' fund because investors chose the fund with the higher net return. For unfamiliar decision situations, consumers use a cost-benefit (or utilitarian reasoning) process to make the decision (Bateman, Fraedrick and Iyer 2001). Again, we are left with zero demand for the 'ethical' fund because the financial benefits are lower than they would be from the standard fund.

This leads us to ask why investors would support an additional goal in the investment decision. Auger et al. (2003) used a structured choice experiment to elicit the willingness to pay for the social product features of soap and running shoes and found some

consumers were willing to pay a significantly higher amount for an ethical product. The size of the ethical premium was related to the demographic characteristics of the participants. If we view SRI funds as products it is reasonable to extend the findings of Auger et al (2003) to SRI funds. Non-wealth motivations for ethical investment are the most likely explanation for the observed demand for best of sector 'ethical funds'. To pay higher transaction costs for what is essentially the same product, these customers must derive an incremental benefit solely from the fund's branding as a SR investment. The incremental benefit is a psychic return (or expressive benefit in Statman's terms). This psychic return bridges the gap between financial return and utility. Cullis, Lewis and Winnett (1992: 7) stated the 'extent of an individual's ethical investment activity is dependent on the size of the marginal benefits, which may be psychic or more tangible, relative to the marginal costs of such actions'

Some would argue that an 'ethical' fund that is not substantially different from the market index could not be counted as an SRI investment at all. Sparkes (2001: 203) considered that funds '...not fulfilling generally accepted notions of ethics, are at least attempting to meet the ethical concerns of the underlying investors'. No matter how small the ethical component of the fund's investment selection, there are apparently investors who receive sufficient psychic return to create demand. Investors willing to purchase best of sector funds fit Cullis, Lewis and Winnett's definition of consumption investors – 'those who gain direct utility from investing ethically' (1992 p 9). Consumption investors may be motivated simply by fashion – they feel good because they are engaging in an activity that is viewed as desirable by their peer group. Ethical investors in this category are motivated by a combination of financial returns and non-wealth factors.

3.3 Investing to improve the world

Our final proposed motivation for ethical investment is an objective of achieving social change. In contrast to the consumption-investors discussed above, those with an objective of achieving social change can be identified as 'investment-investors'. Investment-investors gain their psychic returns indirectly from the real outcomes of the activities of the firms in which they invest (Cullis, Lewis and Winnett 1992).

It has been argued that SRI provides a vehicle for social change (cf Heinkel, Kraus and Zechner 2001; Kreander, McPhail and Molyneaux 2004; Lewis and Mackenzie 2000b). We are unaware of any research that documents systemic social change attributed to SRI funds. Shareholder activism is increasing in the first world nations (Ethical Investment Association 2004) and has achieved some significant outcomes. Rehbein, Waddock and Graves (2004) found that shareholder activists are most likely to target large companies and deal with specific issues. While some SRI funds are well placed for shareholder advocacy with their investments in large firms, the fund managers are unlikely to seek or receive consensus on which social issues the investors wish to pursue or with how much vigour such issues should be pursued. Further, Haigh and Hazelton (2004) concluded that the focus of shareholder activism has not been one of systemic change.

While one shareholder alone cannot cause social change, shareholders acting in concert with others can. We see this in the formation of ethical shareholder groups in some large companies (BHP shareholders for social responsibility and Boral green shareholders, for example). This track to achieving social change is unpalatable to some as it involves generating financial return from the activities they oppose. An alternate route to social change is by supporting a non-governmental organisation (NGO) to act on your behalf. Guay, Doh and Sinclair (2004) noted the increasing level of activity of NGOs designed to effect social change via investing. Greenpeace, for example, has sought the backing of individual shareholders and fund managers for resolutions that reduce environmental damage. The major dichotomy with these two alternate routes to achieving social change is the number of social issues that can be addressed by each approach. The SRI fund's objectives could be viewed as achieving some social change across a range of issues, while the NGOs tend to focus on one issue (eg Greenpeace and the environment). Thus, the objective of social change is not met in a direct sense by investment in an SRI fund. However, the joint objectives of financial returns and some reduction in damaging corporate activities can be met through SRI funds.

Haigh and Hazelton (2004) argued that both shareholder advocacy and investment in SRI funds are incapable of inducing significant corporate change. We conclude that the main benefits derived by SRI fund investors from the social change aspect of their investment is one of psychic return – feeling good about not supporting undesirable activities – rather than any tangible external benefit from making significant change. Therefore, these investors are motivated by all three of our proposed objectives, with the social change factor being the least important in the decision to invest in an SRI fund.

We conclude that a range of SRI products helps to meet the varying levels of satisfaction obtained by individuals from investing ‘ethically’. Our data show considerable heterogeneity in the way ethical investors make investment decisions. We asked respondents if they always considered social factors in their analysis of investments. Ethical aspects were always considered by about 24% of respondents, never considered by a further 14% while the majority (62%) considered them ‘sometimes’.

We also found considerable disparity in judgements of company environmental performance by our respondents. These two questions were structured with open responses to avoid disclosing our opinions. Respondents identified 273 ‘good’ companies and 114 ‘bad’ companies. Many of the companies were rated by only one or two respondents, demonstrating that not all investors looking for environmentally sound investments are looking for the same type of thing. More interesting was the tendency for some respondents to rate companies as good environmental performers while those same companies were identified as bad performers by a greater number of respondents. This phenomenon was particularly strong for mining companies. BHP Billiton, for example, was classified as a good environmental performer by 10 respondents while 189 thought this company was a bad environmental performer. BHP is held by the best of sector sustainability fund discussed earlier, but is not held by the screened fund. North Ltd, which through its subsidiary ERA owned a uranium mine whose tailings dam was leaking into the Kakadu National Park, was rated by 9 respondents as a good environmental performer and bad by a further 138.

4.0 The utility of ethical investment

This section of the paper develops utility curves that can be used to accommodate the expanded investment objectives of ethical investors. As discussed in Section 3, ethical investment provides SR investors with more than financial return. Investing in an ethical company or ethical fund is, to a certain extent, like investing in fine art – in addition to financial returns, the investment yields a flow of pleasure and even social status. In this section some tentative first steps are made towards incorporating this aspect of ethical investing into a theoretical economic framework.

There are three ways that one might approach the task of placing ethical investing within a theoretical economic framework.

- (1) By treating the psychic returns from ethical investing as equivalent to a gambler's 'fun of participation'.
- (2) By including the perceived level of ethicalness of an investment in the investor's utility function; and
- (3) By treating the psychic returns from ethical investing as equivalent to the happiness or well-being derived from other pleasurable activities. In this case, we can make use of the tools developed by happiness researchers.

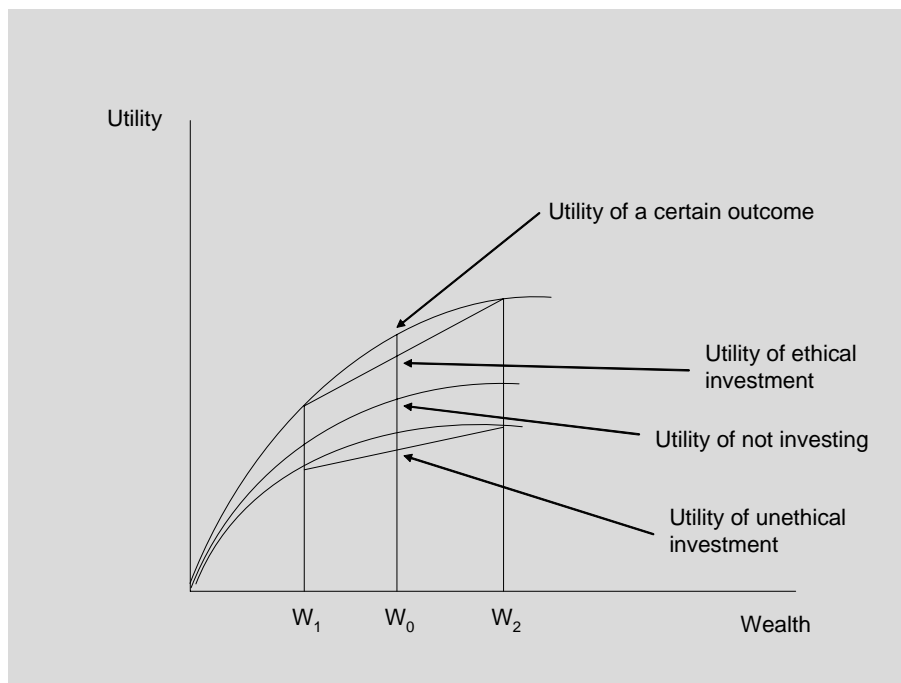
We examine each of these in the following sections.

4.1 Fun of participation

The psychic returns from ethical investments are somewhat analogous to the 'fun of participation' that some gamblers may derive from participating in a game of chance. Casual observation reveals that some individuals who participate in small gambles (compared to their overall level of wealth) are quite satisfied with the experience regardless of whether they win or lose. Winning is an added bonus. The fun of participating in a fair game generates a higher level of utility than would be derived from the financial return on the gamble. The additional utility gained from the fun of participation is independent of the outcome of the gamble itself. Applied to ethical

investing, we could say that the utility derived from an ethical investment is the expected financial returns of the risky investment outcomes plus the utility of investing ethically and that the latter is independent of the former. Assuming that ethical investors display some degree of risk aversion, simple geometry can be used to display the ethical investor's utility functions:

Figure 1: Ethical Investor's Utility Function



In this diagram a risk-averse individual with initial wealth W_0 faces an investment in a fair game gamble that results in wealth of W_2 if won and W_1 if lost. The utility that the investor derives from participating in the investment depends on whether the investment is perceived as ethical or unethical. If the investment cannot be viewed as ethical, the SR investor will derive less utility from the investment than he or she would derive from avoiding it. That is, the fun of participation is negative and outweighs the expected financial return. On the other hand, the investor receives more utility from an ethical

investment than he or she would derive from avoiding the investment. That is, the fun of participation is positive and is added to the expected financial payoff. An important implication of this model as it stands is that the expected utility of the investment increases as the amount at stake diminishes. Imagine that W_1 and W_2 move inwards and approach W_0 . At the limit, where W_1 and W_2 are extremely close to W_0 , the expected utility of the ethical investment is highest. This analysis implies that the ethical investor experiences more utility, the less money is at stake in such investments.

This simple model captures the ‘psychic’ augmentation to total utility derived by the ethical investor independently of the investment outcome. To determine whether or not the model has explanatory power—to determine whether it explains some of the observable behaviour of ethical investors—we must compare the main prediction of the model with observed behaviour. The central prediction of this model is that utility maximising ethical investors will invest nominal sums (compared to their total wealth) in their ethical investments. This does appear to accord with the observed behaviour of our sample with about 30% of respondents classifying the proportion of ethical investments in their portfolios at 20% or less. It is also consistent with the U.K. results of Lewis and Mackenzie (2000a) and Rosen and Sandler (1991) in the U.S. Our fun of participation model provides a good depiction of the consumption-investors utility function, where the investor’s objective is to achieve close to a market rate of return with the additional feel-good factor from the label ‘ethical investor’.

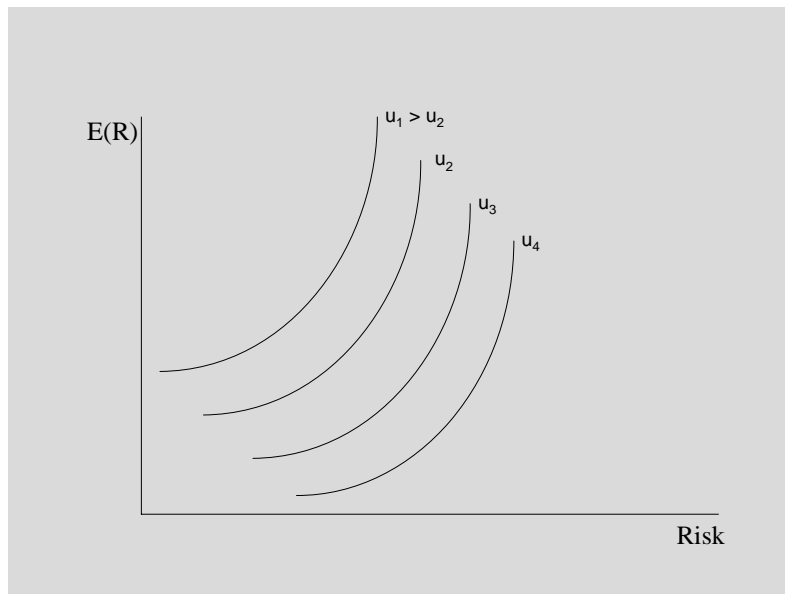
4.2 Including ethical intensity in the utility function

A second way that the task of placing ethical investment within a theoretical economic framework may be approached is to make an adjustment to the utility function that is usually assigned to investors in modern finance theory. In finance, the standard treatment of investor behaviour is to assign a utility function to the investor in which the two arguments in the function are expected return and risk (the standard deviation of the possible divergence of actual investment outcomes from expected investment outcomes):

$$U = f(E_R, \sigma_R) \quad (1)$$

Because the investor is assumed to like expected return and dislike risk, E_R has a positive influence on utility and σ_R has a negative influence. In expected return-risk space, the investor's indifference curves are upward sloping because additional expected return is required to compensate the investor for bearing additional risk. This is depicted below.

Figure 2: An Investor's Indifference Curves

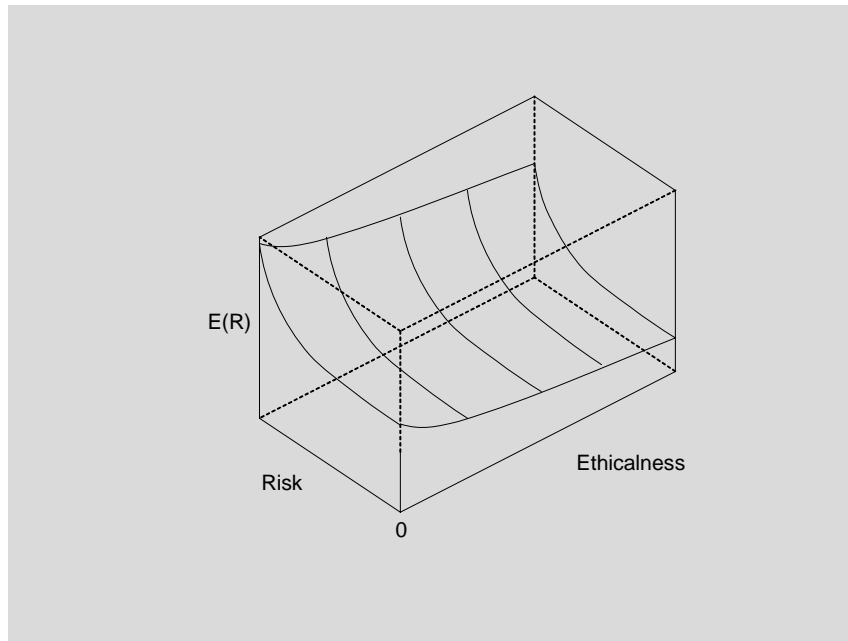


To adapt this particular utility configuration to the ethical investor, an additional argument must be inserted into the utility function. This might be called the 'degree of ethicalness' of an investment. Letting e denote the degree of ethicalness of an investment, the utility function for the ethical investor might be stated as

$$U = f(E_R, \sigma_R, e) \quad (2)$$

In this case, the indifference map derived from this utility function will contain, not curves, but indifference planes. The diagram below displays one such plane in expected return-risk-ethicalness space.

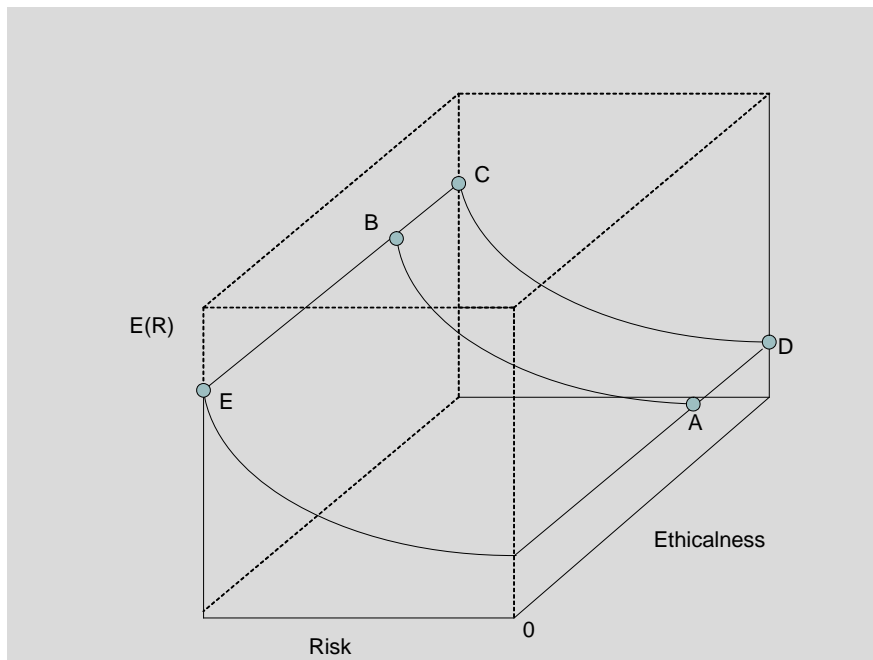
Figure 3: Indifference Plane of an Ethical Investor



This diagram depicts the indifference plane of an ethical investor. The individual is indifferent between any two points that lie on this indifference plane. It shows the trade-offs the investor is willing to make. In accordance with conventional analysis, the investor demands compensation in the form of additional expected returns for bearing additional risk. However, the investor also takes into account the degree of ethicalness of a particular investment. In this model, he or she is willing to accept diminished expected returns if the investment is more ethical (even if the risk-return trade-off for ethical investments is equivalent to those of ordinary investments). However, this may not be true of all ethical investors.

If ethical investors are unwilling to make any concessions regarding the ethicalness of their investments, regardless of how much additional return they could procure, we remove the trade-off between return and ethicalness and make certain parts of the indifference plane ‘off-limits’. With these changes it is possible to consider a wide range of behaviour within this framework. For example, an investor uninterested in the ethicalness of his or her investments (14% of respondents in our sample) will inhabit the front edge of the indifference plane, just like the orthodox investor in modern finance. Investment-investors will restrict themselves to parts of the indifference plane that correspond with the level of ethicalness they are willing to accept and the level of ethicalness they can obtain given the current set of investment options. This is displayed geometrically in the following diagram.

Figure 4: Indifference Planes for a Range of Investor Types



In this diagram, the orthodox investor who is uninterested in ethicalness again inhabits the edge of the indifference plane (line 0, E). The consumption-investor will lie a little further into the plane, but close to the orthodox investor. The investment-investor may choose some minimum level of ethicalness, say A. In this case the relevant portion of the

indifference plane would be the area ABCD. Investors whose objectives fall somewhere between those of consumption investors and investment-investors may choose some level of ethicalness that they are willing to accept, say A. In this case, the relevant portion of the indifference plane will be line AB. It is a simple exercise in geometry to account for a variety of different combinations.

It is clear that this model is flexible enough to account for a variety of the observed behaviour of ethical investors. By altering the shape of the indifference plane one could consider the actions of ethical investors who are (1) interested in return, risk and ethicalness and willing to make tradeoffs between all three (the 62% of our respondents who ‘sometimes’ consider ethical performance in their investment decisions); (2) interested in return, risk and ethicalness but are unwilling to make tradeoffs between return and ethicalness (the 84% of our sample who considered some companies were too bad to invest in); and (3) uninterested in return or risk (NGO activists, for example). For this last possibility we could remove return and risk from the utility function entirely. In which case, the investor would attempt to maximise the ethicalness of his or her investments (subject to any income or budgetary constraints). The model just described is flexible and provides a useful framework for thinking about different types of ethical investors and their behaviours. The downside of this particular type of analysis is its abstractness. It does not shed any light on how the psychic utility derived from ethical investing might be quantified or measured. In order to develop a model where the utility from the ethicalness of the investment can be quantified and measured we must take a further step away from conventional economic analysis of investor behaviour.

4.3 Incorporating happiness into the model

Another and certainly more revolutionary way of modelling the behaviour of ethical investors is through the deployment of the new methods of ‘happiness’ research. In both of the models developed above, the type of utility under consideration is *decision utility*. According to Kahneman, (1997: 375), ‘Decision utility is the weight of an outcome in a decision’. This means that the investor assesses the possible outcomes of a decision and accords them weights in his or her investment decision. Decision utility is inferred from

observing the choices of economic agents and is then used to explain these choices (Kahneman, Wakker and Sarin 1997: 375). Happiness researchers have made use of another type of utility. This is called *experienced utility*. Experienced utility is subjective in nature. It refers to the flow of pleasure (or displeasure) that the individual experiences whilst engaged in a particular activity. We can make use of this ‘experienced utility’ concept in our attempt to place ethical investing within a theoretical economic framework.

One particular advantage of experienced utility is that it may be measured directly and does not have to be inferred from observation of investor behaviour. Recent advances in measuring experienced utility have been found to yield accurate and consistent results (Kahneman, Krueger, Schkade, Schwarz and Stone, 2004). One measure of experienced utility that may be particularly useful for research into the behaviour of ethical investors is *net affective experience*. Net affective experience is the name given to the result generated by a survey-type instrument deployed in the aim of extracting a measure of the well-being that individuals attribute to various activities and events. To obtain a value for net affective experience, psychologists use a method called Experience Sampling Method (ESM). According to Kahneman et al. (2004:431),

ESM is carried out by supplying subjects with an electronic diary (*e.g.* a specially programmed palm pilot) that beeps at random times of the day and asks respondents to describe what they were doing just before the prompt. The electronic diary also asks respondents to indicate the intensity of various feelings (*e.g.* happy, frustrated *etc.*). These may be averaged to produce a metric reflecting actual daily experience. ...Net affective experience is defined as the average of the positive adjectives less the average of the negative adjectives, for individuals engaged in each activity.

The key problem at hand is, of course, how to incorporate these ideas into a model of ethical investor behaviour. Actually, the problem is solved very easily. Assume first of all that ethical investments yield their owners a flow of pleasure (happiness, psychic return or experienced utility) over time and that that flow of pleasure is measured by net

affective experience. The utility derived from this flow of pleasure over the course of the investment is equal to the sum of the product of the investment period and the net affective experience associated with the ownership of the ethical investment:

$$u_i = \sum_j h_{ij} \mu_{ij} \quad (3)$$

In this function h_{ij} is the amount of time an individual i is engaged in a particular activity j , μ_{ij} is the net affective experience of activity j (see Kahneman et al. 2004:432). Now assume that, additional to this flow of pleasure, the individual also derives utility from the expected return associated with the investment and disutility from the risk associated with the investment. In accordance with standard analysis, this part of the utility derived from the investment can be represented by a quadratic function of the form

$$u_i = (1 + b)E_R + bE_R^2 - c\sigma_R^2 \quad (4)$$

E_R and σ_R^2 denote the expected financial return and the variance of returns respectively. b is a parameter that adheres to the restriction $-1 < b < 0$ when investors are risk averse and c is a parameter that adheres to the restriction $0 < c < 1$ (see Tobin (1958:76) for the caveats associated with the use of this particular quadratic function).

The total utility, U_i , derived from an ethical investment may therefore be represented by the following function that aggregates both the experienced and decision utility associated with the ethical investment:

$$U_i = \sum_j h_{ij} \mu_{ij} + [(1 + b)E_R + bE_R^2 - c\sigma_R^2] \quad (5)$$

This function is derived by assuming that the ethical investor wishes to maximise utility. Total utility is represented by a quadratic function of the rate of return on the investment with decreasing marginal utility *plus* the net affective experience during the period of ethical investment. For those who are unconcerned with the risk and return of the

investment, the function reduces to equation (3). For the orthodox investor uninterested in ethics, the function reduces to equation (4). Variations in the level of ethical intensity will be accounted for somewhere between these two extremes by equation (5). This function captures the essential characteristics of ethical investing as an economic behaviour. Furthermore, the subjective utility derived from the ethical investment, identified here as experienced utility, can be measured and quantified. Hence, our first steps towards a theoretical economic framework for ethical investing has led us to a combination of psychology and happiness research with orthodox financial economics.

4.0 Conclusions

In this paper, we addressed the question, “Why do we invest ethically?” We proposed that there are three motivations for ethical investment: financial returns, non-wealth returns and social change. These motives are neither exhaustive nor exclusive and one single motive will not explain the behaviour of all ethical investors. The requirement for some financial return is necessary for the activity to be considered an investment. There may be a trade-off between financial and psychic returns for some investors. The trade-off for consumption-investors is expected to be close to zero (total utility is maximised with small levels of ethical investment in the fun of participation model) and is expected to vary with the ethical intensity of investment-investors, as shown when we include ethical intensity into the investor’s utility function. Psychic return can also be viewed as an increase in happiness and this approach would lend itself to empirical testing to increase our understanding of why we invest ethically.

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