THE RELATIVE INVESTMENT PERFORMANCE OF THE COMMUNITY GROWTH FUND

By Anthony Asher

ABSTRACT

This paper examines the impact of social criteria on the investment performance of the Community Growth Fund, a trade-union-controlled South African unit trust. It gives a brief history of the fund, discusses reasons for performance deviations, and shows that there may be reason for believing that some social criteria improve performance.

KEYWORDS

Investment performance; ethical; socially desirable; socially responsible

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1. INTRODUCTION

1.1 The explicit use of ethical or social criteria in the choice of institutional investments grew considerably in the last two decades of the twentieth century. A major question raised by the growth in number and size of institutions adopting such criteria has been the effects on investment performance.

1.2 In South Africa, the Community Growth Fund (CGF) was the first institution to explicitly adopt social criteria. The balance of this paper is divided into four sections. Section 2 gives an outline of the history and structure of the CGF. The third section looks at the reasons why share prices move both absolutely and relative to each other. The fourth then briefly discusses socially responsible investment. The final part looks at the relationship between the CGF social criteria and investment performance.

1.3 The conclusion is that, if anything, and contrary to some prior opinions, the CGF social criteria have had a positive impact on investment performance.

2. HISTORY AND STRUCTURE

2.1 UNIONS AND PROVIDENT FUNDS

2.1.1 The creation of the CGF was rooted in two uniquely South African conditions.

2.1.2 The first is the South African retirement system. State involvement is limited to the provision of the flat basic old-age grant (in 2005 R780 a month), and the regulation of private provision. This is unusual in that there is no mandatory requirement to contribute to state-run earnings-related retirement provision. South Africa may also have been the first country to provide an explicit legal framework for retirement funds with the passing of the Pension Funds Act, 1956. The thriving private industry that has developed is a major contributor to national savings. High and volatile rates of inflation, and the limited availability of other inflation-protected investments have meant that equities play an important role in retirement fund portfolios.

2.1.3 The second root is the links between the black trade unions and retirement funds. Black South Africans were prevented from joining trade unions until the early eighties. This changed following the recommendations of the Wiehahn Commission (1979). The pensions arena became the first in which the new movement showed its strength. As a result of the Meiring Committee report¹, government had, at the same time, put forward a bill proposing to restrict pension fund members from withdrawing their interest when leaving the sponsoring employer. The withdrawal benefits were seen as a critical support during periods of unemployment, and the new unions successfully led a campaign that led to the withdrawal of the bill.

2.1.4 Retirement funds therefore became a critical issue for the new union leadership. After the campaign against preservation, the major issue of the eighties was the transfer of workers' benefits from defined-benefit pension schemes, controlled exclusively by employers, to union-designed provident funds. These are typically defined-contribution schemes controlled by boards of trustees, half of whom are elected by members or appointed by trade unions. They pay lump sum benefits on withdrawal and at retirement, which are much more favourable to lower-paid workers. This is because the benefits on withdrawal are not subject to the penalties previously imposed on early leavers, while the lump sum on retirement allows pensioners to escape the means test that would otherwise have prevented them from drawing the state old age pension. As an example of the latter, one large pension fund, advised by the author, saw 1000 people retire in 1989; 980 of these would have gained no net benefit from the pension fund as their state pension would have been reduced by an equal amount (and sometimes more).

2.1.5 Having gained control of the funds, some unions began investigating ways of exercising greater influence over the companies in which they were investing.

2.2 FORMATION OF THE CGF

2.2.1 From the papers available to the author, the idea of the CGF was first mooted in a meeting between staff of Syfrets Managed Assets (SMA) and the Labour Research Service (LRS) (both based in Cape Town) in May 1991. The LRS facilitated contacts with the union head offices, largely in Johannesburg, leading to the official launch of the CGF in June 1992.

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¹ The First Report of the Interdepartmental Committee of Inquiry into Certain Specific Pension Matters, Government Printer, Pretoria, 1980.

2.2.2 The CGF is operated by a management company, which was initially jointly controlled by SMA and Unity Incorporated, a non-profit company set up by the seven sponsoring unions. The management company subcontracted its functions to SMA and its affiliates. The author became the independent acting chairman of the board of the management company and served as chairman until 2002.

2.2.3 The seven trade unions came from both the large trade union groups. Affiliated to the Congress of South African Trade Unions (COSATU) were the National Union of Mineworkers (by far the largest investor in the fund), the Construction and Allied Workers' Union, the Transport and General Workers' Union, and the Paper, Printing, Wood and Allied Workers' Union. The others were from the National Council of Trade Unions (NACTU): the National Union of Food, Wine and Spirits and Allied Workers, the Transport and Allied Workers' Union, and the Metal and Electrical Worker's Union of South Africa.

2.2.4 The memorandum of association of Unity set out Unity's main business as: "To advance the concept of socially responsible investment and to promote the influence of the Trade Union Movement in the economy through:

- establishing and holding shares in Unit Trust Management Companies;
- establishing financial vehicles, whether on its own or jointly with other organisations, for personal, Trade Union and Retirement Fund investments ..."

2.3 INVESTMENT PROCESS

2.3.1 There were initially 16 social criteria, weighted as shown in Table 1.

	Weighting % (out of 100%)		Weighting % (out of 100%)
Job creation	14	Profit retention - for expansion	5
Industrial relations	14	Affirmative action	5
Employment conditions	13	Operations located in South Africa	4
Training	7	Environment	4
Equal opportunities	7	Worker participation	4
Health and safety	6	Disclosure	4
Product safety	5	Political profile - not abused	2
Rejected participation in privatisation	5	Social spending	1

Table 1. Initial social criteria

2.3.2 SMA nominated those companies that they wished to include in the investment universe. The LRS and Unity then evaluated these companies. The process involved an initial questionnaire to be completed by the company, and then interviews with management and union organisers. It proved difficult at times to get co-operation

from companies and some unions not affiliated to the CGF. The LRS then prepared a report that was submitted to the Unity board of directors for approval.

2.3.3 Once a company was approved, SMA was able to buy shares for the CGF. The Unity board was keen to publish the results as quickly as possible, but SMA persuaded them to keep the names of approved companies confidential until they appeared as investments in the published reports of the CGF. SMA had been chosen for its exceptional investment performance in the years preceding the launch and its management was concerned that publishing the names of the companies in which they intended to invest, would push up share prices before SMA had been able to acquire an adequate holding. The relatively low liquidity of the South African share market provides reason for these concerns.

2.3.4 At the meeting of the board of the management company in July 1992, one month after the launch of the CGF, it was reported that 9 companies, out of SMA's list of 51, had been approved, 7 had been rejected, and 11 had been referred back to the LRS for further investigation. The slow rate of approval, arising partly from the limited resources available and partly from the need to obtain consensus from the volunteer directors of Unity, has been a constant, but inevitable, source of frustration to asset managers.

2.4 INITIAL RESPONSES

2.4.1 The first investor in the CGF was Cyril Ramaphosa, then secretary general of the African National Congress, who made out his personal cheque at the initial press conference. This was followed the next day by a R1 million investment from the pension fund of the business- (rather than labour-) orientated Times Media Limited. Its managing director, Stephen Mulholland identified its launch as a "significant departure in the affairs of a trade union". An LRS spokesman was "delighted that Times Media has acknowledged the superior potential of socially responsible investment", but hastily pointed out the possibility that the company's industrial relations practices would disqualify it from appearing on the unions' list of approved shares².

2.4.2 Greenblo³ identified the tensions. Existing participation in provident funds meant that the unions had implicitly accepted the principle of investment in shares and participation in the capitalist system, even though this flew in the face of a COSATU economic policy document released earlier in 1992. The Unity unions' involvement in the CGF made it more explicit. Greenblo expressed the hope that the CGF approach would break down the "adversarial divide between employer and employee".

2.4.3 Other criticisms arose from a fear that the social criteria would reduce investment performance for the reasons set out in section 4 below.

2.5 SUBSEQUENT DEVELOPMENTS

2.5.1 As it transpired, the CGF was the forerunner of much greater union involvement in the capitalist system. While a number of COSATU and NACTU trade

² Weekly Mail, 8–14 May 1992.

³ A. Greenblo: Editorial Comment, Finance Week, 7-13 May 1992.

unions refused to endorse the fund⁴, unions that initially resisted the CGF's apparent compromises subsequently created union investment companies that actively pursued commercial objectives.

2.5.2 Inflows of R100 million were predicted for the CGF in the first year. Given that union-controlled provident funds had some influence over perhaps R20 billion of assets, this did not appear particularly ambitious, but by the end of 1993 the fund had only R70 million. Steady growth, usually below expectations, has been achieved, the fund reaching R900 million by 1998 and currently approaching twice that size.

2.5.3 A number of reasons for the disappointing growth can be identified. The initial opposition of some unions, inadequate management resources and numerous changes to personnel were perhaps the main ones. More important to the subject of this paper, was the question whether socially responsible investment would reduce investment returns.

2.6 NEW INVESTMENT CRITERIA

In the 1996 report to unitholders, "tougher new criteria for companies seeking inclusion in the share portfolio" were introduced. Eight categories, each given an equal weight in the final score, were to be used.

- The creation of jobs through innovation and expansion
 The questionnaire used allocates a maximum of 20 points for this category, 5 are given for growth in jobs, another 9 for expansion plans, 2 for retrenchment procedures and 4 for not creating jobs overseas.
- Training of workers to enhance skills
 2 out of the 9 points allocated to this score are related to training expenditure as a percentage of payroll; the rest are qualitative measures, depending to a significant degree on collaboration with the trade union.
- Economic and social empowerment
 20 out of 30 points here relate to bargaining with unions, 5 to donations to relevant social projects, and 5 to partnerships with emerging black businesses.
- Equity through affirmative action within the workplace
 Half the points here are allocated on whether the company scores better than the LRS average for its industry. The rest of the points are qualitative assessments.
- Good conditions of employment
 6 of the 15 points for this category relate to wages, the rest to benefits.
- Sound environmental practices must be promoted
 This is more complicated. Companies not involved in an industry that could have a potential environmental incident automatically get 9 out of 13 points. Companies in other industries can score these 9 if they have suitable policies—losing 1 if they experienced accidents and another if the accident was not catered for in their policies. Plus or minus 3 points are allocated for the desirability or otherwise of the company's products—and 1 for not having dealings with oppressive regimes.

⁴ Institute of Race Relations Survey, 1992–93, p. 335.

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- High health and safety standards must be applied
 Measures of injuries account for 3 out of 11 points; the rest relate to policies.
- Demonstrate open and effective corporate governance
 The points here are largely allocated in line with the King Report⁵. 3 points are given for the company's response to CGF queries and another 4 for disclosure to unions.

3. DETERMINANTS OF SHARE PRICE MOVEMENTS

3.1 OVERALL LEVEL OF PRICES

The next three sections describe the three underlying forces at work in the determination of share prices. There is the demand for and supply of shares that arises independently of their actual value, and then the factors that drive profitability.

3.2 DEMAND

3.2.1 Demand for shares will depend firstly on the forces that lead to people's saving. This is one of the major concerns of economics, but 75 years of intense debate and research has produced very little in the way of mathematical relationships. Smith (1990) reviews research that shows people tend to save more when:

- they cannot borrow;
- their incomes are rising rapidly;
- their income (current and future in the form of a public pension) is insecure;
- they have less in the way of accumulated wealth;
- they need the money for their own businesses; and
- there are some tax advantages in doing so.

They may, but this is unclear, also save in order to leave money to their children.

3.2.2 People may also shift their savings between cash deposits, real assets—largely property—long-term fixed-interest stock and equities. These shifts will depend partly on inflationary expectations and legislation.

3.2.3 People also save, through retirement funds of various types or directly, for retirement. This aspect at least, we can model, as we can project the amounts people will require for their retirement with some accuracy. Some of the impetus for the higher share prices of the last decade appears to come from this source (Poterba, 2004).

3.3 SUPPLY

3.3.1 The supply of equities will come from new issues of equity, which in turn will depend on matters such as technology, economic growth, labour scarcity, tax and politics (especially privatisation or nationalisation) and the internal politics of family businesses. Changes to these factors are largely unpredictable. Sales may also occur for reasons such as death duties and retirement expenses, which can be modelled.

⁵ *The King Report on Corporate Governance*. King Committee on Corporate Governance, The Institute of Directors of Southern Africa, Johannesburg, 1994.

3.3.2 Even if we could model the factors that underlie the demand and supply curves, they appear to be greatly influenced by changing perceptions, and it is unlikely that we should find any stable relationship to convert them into prices.

3.4 UNDERLYING PROFITABILITY

3.4.1 The other major influence on share prices will be the underlying profitability of the companies that have issued the shares. This in turn will also depend, but in different ways, on technology, economic growth, international trade, legislation, taxation, the relative scarcity of capital and the quality of management. All these relationships are unstable.

3.4.2 This is however not to say that there is no measure of determining a reasonable long-term value for a share. The net asset value (NAV) is not commonly used to price shares, but is useful in providing two (albeit approximate) views of a company's worth. Firstly, if a competitor were to start up from scratch, it would seem that it would have to invest in similar equipment and make similar profits and losses to get to where the company now is. If so, it would have the same net asset value. Of course, inflation distorts this figure, and there are intangible items that enhance a company's future earning capacity: particularly intellectual property such as patents and reputation. On the other hand, newcomers to an industry can avoid the mistakes of the incumbent and focus on its more profitable markets. The point is that more newcomers will be encouraged into an industry as the ratio of price to NAV increases. This ultimately brings share prices down towards NAV.

3.4.3 Secondly, the NAV also provides an estimate of the break-up value of the company, or of its value if it were run down. Again, many adjustments would need to be made. This second argument is of importance when share prices are too low and asset strippers can buy up the shares and make a profit by selling off the assets.

3.4.4 In the economics literature, Tobin's Q—the ratio of share price to NAV—has been used either as a measure of the size of the share bubble⁶, as well as a measure of the company's success in achieving a competitive advantage, or as a measure of lack of competition⁷.

3.4.5 An alternative measure of the underlying value of a share is to discount future dividends at a suitable interest rate. The total return to an investor is given by the dividends and the capital growth. If dividend yields remain constant or fluctuate in a narrow band, the total return is entirely dependent on the dividends, as the capital growth is equal to the rate of dividend growth. Actuarial models built by Wilkie (1995) for other countries, and by Thomson (1996) for South Africa, use mean-reverting dividend yields to model investment returns.

3.4.6 The discounting of dividend yields becomes a less reliable estimator of a share's value if companies do not pay out a consistent proportion of the profits as

⁶ Harney and Tower (unpublished) find that Tobin's Q provides a good indicator of future investment returns. See also Smithers and Wright (2000), which they quote.

⁷ Lindenberg and Ross (1981).

dividends. It appears that one of the Miller Modigliani (1961) propositions, which suggests that investors would be happy to see management keep the dividends if the resultant increase in share price is greater than the value of the dividends, is relatively widely accepted, and has led around the world to a fall in dividend yields. This has been exacerbated in South Africa since secondary tax on companies has penalised companies for paying dividends.

3.4.7 The difficulties with these methods lead to the most popular measure of a share's value, which is the ratio of market price to reported earnings per share. It is normally used as a simple rule of thumb to determine value relative to the whole market. A more rigorous approach would require the earnings to be discounted, as with dividends. Allowance again has to be made for inflation, and the need to retain profits to fund growth.

3.5 INDIVIDUAL SHARE PRICES

3.5.1 FUNDAMENTALS AND PERCEPTIONS

The movement of the share price of an individual company, relative to the average, depends primarily on the underlying profitability of the company relative to others, rather than on overall supply and demand factors. In the short run, perceptions of its relative future are important, as are temporary pressures of demand and supply. For example, it is common to speak of an "overhang" of shares such as followed the demutualisation of the largest South African life assurers, which depressed their price for some time. The relative underlying profitability depends on a number of factors.

3.5.2 Sector

3.5.2.1 Profitability depends in many ways on the industry in which a company competes. It is probable that the demand for the products produced by companies operating in the same industry will be correlated, whether changes arise from demographics, technology or politics. In the same way, the supply of goods offered by competitors affects all companies within a sector. Similarly, companies within a sector are likely to find their costs of production are related, whether because of changes in technology or the costs of inputs.

3.5.2.2 Sectors can be measured, as most stock exchanges allocate companies to appropriate sectors, but classifications change over time. Data on the rest of the factors mentioned below are only obtainable from the company with some difficulty.

3.5.3 FINANCIAL STRUCTURE

While companies in the same sector may tend to have a similar financial structure, factors other than industry may apply. Growing or family-controlled businesses, for instance, may use greater debt. Different managements may also take a different view on future interest rates, or differently hedge against price movements in their revenues or expenses. The most important of the implications of different financial structures are different exposures to interest-rate, currency and commodity fluctuations.

3.5.4 MARKETS

Even within the same industry, companies develop different niche markets, where one may have a more appropriate product or a stronger distribution, or be better known. Thus, companies may be affected differently by demographic and economic changes—especially, if they operate in different currency areas, by changes in exchange rates.

3.5.5 PRODUCTION

Companies within the same industry may also use different technologies. This may lead, for instance, to greater exposure to changes in wage levels or to the development of different patents.

3.5.6 STAFF AND SYSTEMS

In spite of the importance of the financial and material assets of a company, or its market strength, it is widely recognised that profits may well depend more on the skills, abilities and motivation of the management and staff, and on formal and informal institutional arrangements within the company.

3.5.7 PERCEPTIONS

3.5.7.1 It is clear from the above that each of these headings hides a multitude of other factors, and that it is impossible to accurately model the future relative profitability of any company. The share price also therefore depends on the perceptions of those stock-market participants who might consider buying or selling it.

3.5.7.2 The perceptions of an individual are influenced by the perceptions of others. One readily observable result is the herding of investors into observable fashions. Two often mentioned are the alternating attractions of large and small companies and of growth and value shares.

3.5.7.3 Differences in perception are perhaps indistinguishable from differences in the skill of investors or their managers in understanding likely changes in share prices. The returns earned by different investors will differ randomly; it may be that more skilled investors can expect to earn a higher return.

3.6 EFFICIENT MARKET HYPOTHESIS

3.6.1 Readers may be struck by the difference between this discussion and the common assumption that share markets are efficient: market participants price all assets (and liabilities) so that the expected risk-adjusted rates of return are equal. There are some differences as to how the adjustment for risk is made. Many, such as Malkiel (2005), argue—in his case from that the fact that professional investment managers do not outperform the market averages—that there is good evidence of market efficiency in the USA over the past twenty years or more.

3.6.2 While it may be enormously difficult to outperform the market after fees, few would today argue that investment markets are always and everywhere efficient: recent research has found numerous pricing anomalies. These inexplicable returns arise

from such varying characteristics as market-to-book ratios and calendar months. Section 4 of Cantor and Sefton (2002) provides an overview of changes in the economic literature over the past two decades. In particular, one might expect markets with fewer participants, such as the JSE Securities Exchange, to be less efficient.

3.6.3 If markets are always efficient, participants will quickly adjust prices to reflect expected risk-adjusted returns, and investors using social criteria will obtain the same return as everyone else. The question of relative investment performance only has meaning if markets are not perfectly efficient in adjusting for social criteria. Unsurprisingly therefore, Sauer (1997) finds, on the grounds that two socially responsible indices have not underperformed indices representing the whole market over a nine-year period, that socially responsible investors will not have to 'sacrifice investment performance'. This may not, however, always be true.

4. SOCIALLY RESPONSIBLE INVESTMENT AND SHARE PRICE

4.1 SCREENING

4.1.1 In the light of the above, this section looks at the effects that social criteria might have on share prices.

4.1.2 Alperson (1991) traces socially responsible investment back to the 1920s with funds with a church connection prohibiting investments in 'sin stocks', mainly related to companies producing liquor or tobacco or involved in gambling. This screening approach has been extended to armament manufacturers, serious polluters, companies found offensive for a range of causes and a Sharia (Muslim) avoidance of companies charging interest. This is the basis for the JSE Securities Exchange's social responsibility index introduced in 2004⁸.

4.1.3 Another approach to screening is based on companies' corporate governance structure. Although the underlying reason for such screening may be economic, the connection does not detract from the ethical principles underlying good governance. A positive relationship has been found in a number of studies. One of the most extensive can be found in Gill (2001), who examines and ranks 495 companies in 25 emerging markets and shows strong correlations between corporate governance and share-price performance. He finds that performance, in terms of both share price and underlying profitability measures, is related to his index of corporate governance and social criteria.

4.1.4 The screening approach affects the demand for a particular company's share, and may alter the return. Temporary and permanent effects can be noted:

- If the number of investors applying the screening is increasing, demand for an offensive share will decline as may its price, and vice versa. This is clearly a temporary phenomenon.
- If large numbers of investors permanently avoid a particular company, then its price may well be permanently depressed relative to its earnings. If the company survives, it will necessarily provide higher returns. Investors that ignore the moral stigma attached

8 Details can be found at http://www.jse.co.za/sri/background_criteria/background_criteria.doc

to such companies may be said to be beneficiaries of moral arbitrage. The reverse effect might conceivably apply to a company regarded as a moral exemplar.

4.1.5 The CGF criteria do act as a screening device for shares. At first blush, therefore, it would appear that the only possible long-term impact of the screening per se would be to reduce the performance of its investments. For the screening to increase performance, it would have to include factors that positively correlated with improved performance, and the rest of the market would have to remain in ignorance of these factors.

4.2 ACTIVE SHAREHOLDING

4.2.1 An alternative approach, referred to by Leeman (unpublished) as the 'overlay approach', is for shareholders to actively engage the companies in which they invest in order to influence management practices. The most prominent exponent of this approach is the Californian public pension system (Calpers), which has been prominent as a vocal shareholder. Although its portfolios are indexed, it takes an active interest in companies it feels are poorly managed, and Calpers (1995) reports significant improvements in management, and dramatic increases in share prices, as a result.

4.2.2 The CGF also engages the managements of each company in which it invests. This arises initially with the collection of data from management and union officials, which is often followed up by negotiations between Unity and the company. Although it has not been consistent, Unity also has a programme of encouraging union members to attend annual general meetings with CGF proxies, and of asking questions. The interaction with the company is, unlike the Calpers interaction, intended to improve the company's social performance rather than its profits. It may, however, have other side effects.

4.2.3 These interactions may achieve improved performance of management and staff, as mentioned in $\P3.5.6$ above. The Calpers approach may also provide motivation to management to give better returns to shareholders. They may therefore create better returns by avoiding the mistakes and losses that can be caused by bad management.

4.2.4 The CGF approach is more indirect, and the results may well not always lead to better returns. Managers may, for instance, be reluctant to create jobs for a variety of reasons not related to profitability. One reason might be that the managers fail to distinguish between maximising the rate of return on capital and maximising shareholder returns. Chew (1998: 165–88) reports a panel discussion in which ten senior business people and academics make these assertions. Pressure to create jobs may then lead to profitable new ventures or reductions in their required rates of return. Whether the latter will lead to an increase or reduction in profit depends, however, on the company's cost of capital.

4.2.5 The impacts of all the CGF's social criteria are ambivalent in this way. They may well promote good management practices that will lead to higher profitability and reduce the risk that the company will be subject to labour unrest and liability claims. On the other hand, they could be taken beyond the optimum level and lead to expenditure that does not provide a return to shareholders. 4.2.6 It is highly unlikely that the same effects will be observable over many years. Even if it were possible for good managers to achieve a balance between the social criteria and returns, the proportion of good and bad management in the market is bound to change, so changing relative performance.

4.3 PROFITS AND RENT

4.3.1 One can distinguish between legitimate profits earned by shareholders for providing capital at some risk to themselves, and monopoly rents extracted from other stakeholders because of a company's stronger market position. In Asher (1998), it is suggested that the latter is morally reprehensible.

4.3.2 The impact of rents on share-price movements would be similar to the points raised in section 4.1.4 above:

- An increase in rents would see a temporary increase in share prices, and vice versa; and
- to the extent that the market permanently saw rents as reprehensible, or risky, moral arbitrage could lead to higher profits from monopolist firms.

4.4 FIDUCIARY DUTIES

4.4.1 Given that the CGF is intended as a vehicle for retirement fund investment, the management would have to conform to the fiduciary duties expected of fund trustees. A conservative view was set out in the Megarry judgement⁹. The British Coal Board as employer had prevented the trustees of their pension fund from using non-investment criteria in asset selection. In this case, the criteria were relatively eccentric. Apart from not wanting to invest in any company investing outside the UK, they also wanted to avoid energy sources competing with coal. Yaron (unpublished) also points out that the union-appointed chairman of the trustees personally argued the case, so depriving the judge of more nuanced legal debate. The judgement stated that trustees are obliged:

"to do the best they can for the beneficiaries ... and ... take advantage of the full range of investments authorized, rather than narrowing that range, and ... [are] required to consider the need for diversification of the trust investments.

"... Accordingly, trustees of a pension fund could not refuse for social or political reasons to make a particular investment if to make that investment would be more beneficial to the beneficiaries of the fund."

4.4.2 Yaron (unpublished) summarises the objections to this narrow view, and suggests various defences of socially desirable investment, even if it does reduce investment returns:

- The retirement fund rules may permit the use of social criteria.
- To the extent that the additional profits arise from moral arbitrage, it would seem to be within the rights of the trustees to refuse such profits if their view is shared by the majority of beneficiaries.

⁹ Cowan and others v Scargill and others [1984] 2 All ER 750.

- A more common view of trust law is that trustees should aim for a reasonable rate of return; it is not necessary to aim at the maximisation of risk-adjusted returns.

4.4.3 To the extent that social criteria do not reduce returns, and within these constraints if they do, there is plenty of room to apply social criteria.

4.5 TRUTH, GOOD GOVERNANCE AND CREATIVITY

4.5.1 Most of the reasoning above led to the expectation that socially desirable investment is likely to underperform, if anything, over the long term. If permanent sources of outperformance are to be found, one would have to have to look for entrenched behaviour by the managers of those companies that fail the social criteria. One such possibility is that the single-minded pursuit of shareholder profit so alienates their other stakeholders as to reduce their ultimate profitability.

4.5.2 The issue can be seen as one of justice, the virtue that governs the use of power: in this case that of shareholders over other stakeholders. As Lucas (1980) puts it:

"Justice is the bond of society ... We have been pursuing the wrong political goals—productivity, efficiency, equality—and have neglected the cardinal political virtue of justice, which, together with liberty, is the condition under which I and every man can identify with society, feel at one with it, and accept its rulings as my own."

4.5.3 It might be put that the human rewards of working for a company that adequately cared for all its stakeholders would unleash creativity that overflowed into greater profits for shareholders. Cynically, this could be phrased that the fulfilling of social criteria enabled shareholders to better motivate staff.

4.5.4 In either case, the boot is on the other foot. It is not those trustees that adopt social criteria that fail in their fiduciary duty, but those who place their funds' returns at risk.

5. MEASUREMENT

5.1 EARLIER STUDIES

5.1.1 From the above, it is clear that there are many influences on share prices, and that the effects of social criteria are at best going to be small, and may well be transitory. The measurement of relative performance may, however, offer some insight into investment markets, company profitability and the importance of corporate governance. From a fiduciary perspective, it is important to have some confidence that performance was not significantly affected adversely; from a marketing perspective useful to know if performance was positively affected. Two informal studies examined relative performance in the mid-nineties.

5.1.2 Abdulla (1993) studied the relative performance of the 21 shares approved and the 10 shares rejected by Unity, against various benchmarks over the five-year period ended 31 December 1992. He found that the approved share outperformed the rejected shares by an average of 8% annually over the period. First Bowring Consulting

and Actuarial Services¹⁰ reported that the standard deviation of the average returns of 17 asset managers over the five years to December 1991 was 2,5% p.a.. Although the periods are not identical, an average of 8% would appear to be statistically significant.

5.1.3 Asher (unpublished) considered a similar time period a little more closely by distinguishing between shares in different sectors. This was to remove the influence of sector on share price (cf. \$3.5.2 above). The difference in the percentage increase in share price during 1993 between accepted and rejected shares by sector is shown in Table 2.

Sector	%
Gold	63
Industrial	31
Engineering	26
Hotels	10

Table 2. Outperformance of approved shares in 1993

5.1.4 Again, the results can be argued to be statistically significant, as there is only one chance in 16 of outperforming in all four sectors.

5.2 PRESENT STUDY

5.2.1 This study considers the relative performance of the data of 54 companies for which evaluations on the new (post-1996) social criteria could be found in the Unity Corporation offices. To these were added 7 additional companies that had been rejected¹¹ although reports were not available.

5.2.2 The relative performance was calculated as the total return on each share less the average return for its sector. Share and sector prices and dividend information were obtained for the years 1998 to 2001 inclusive. The relative performance in each year was calculated, and then averaged for each share.

5.2.3 Only 38 companies had been listed for the whole four-year period. For the other companies, the relative performance was averaged over the period over which they had been listed. There were 45 data points for calendar 1998, 48 for 1999 and 55 from the last two years. It is not thought that this distorts the results significantly.

5.2.4 The pattern of the earlier investigations is shown in Table 3, and is confirmed.

5.2.5 The differences are impressive, but not statistically significant. There is a probability of almost 30% that these differences are the result of random or other unobserved affects.

¹⁰ First Bowring Consulting and Actuarial Services, 1991 Survey of Investment Performance of Investment Managers, unpublished.

¹¹ These have been obtained from the Unity board minutes of 3 March 1997, updated by reports sent to unitholders, viz. the quarterly 'CGF Report' until December 1998 and 'CommUnity Investment Update' subsequently.

A-rated; accepted	6%	
B-rated; pending further investigation	-1%	
C-rated; rejected	2%	

Table 3. Relative outperformance: 1998 to 2001

5.3 FURTHER ANALYSIS

The correlation matrix for the 54 companies with social criteria data was calculated, and is shown in Appendix A. The most significant was the positive relationship between job creation and conditions of employment. This relationship did not appear to be related to sector: financial companies in particular appeared in both extremes. It seemed to have no significance for performance.

5.4 EMPOWERMENT

5.4.1 Empowerment had a positive correlation with all the other social variables; it was statistically significant in 4 of the 7 cases. This is hardly surprising, given that the questions in this category are heavily weighted to relationships with the unions, as are questions in each of the other categories.

5.4.2 Only 5 of the 30 points in this section relate to the form of black empowerment popular from 1994 to 1998, when individual black people were first given soft finance to take significant shareholdings in relatively small companies. Shares in these companies experienced something of a bubble, which had not entirely passed at the beginning of the period of this investigation. The impression of the author, when he attended meetings of the Unity board, was that the evaluation of black-empowerment companies was initially less critical than those of other companies.

5.4.3 In order to test this possibility, the five approved black-empowerment companies (defined by their shareholders) were separately examined. Their average relative return over the period was very low (-14%) given the ending of the bubble. This was not statistically significant (there was a 17% chance of error), but sufficiently large to consider excluding them from the sample. When this was done the outperformance of the A-rated companies increased from 6% to 9%. The probability that this outperformance is random reduces to 13%.

5.5 REGRESSION ON ALL DATA

It was assumed that relationships, if they existed, would be more or less linear. A linear regression using the relative returns as the dependent variable, and the social scores as the independent variables was therefore performed. The procedure used was to see the effect of using all the variables, and then progressively eliminating the least significant variables until the remaining variables were significant at least at the 10% level. The results using all the data proved fruitless: no variable was ever found statistically significant even at this level of significance.

5.6 REGRESSION EXCLUDING BLACK EMPOWERMENT COMPANIES

The analysis was repeated excluding the black-empowerment companies. The results did achieve a significant result for affirmative action. Appendix B shows details of the regression. The points allocated for affirmative action were largely from objective comparisons of the level of black people and women in higher levels of management. This is information not widely available, so that outperformance from this source should not relate much to perceptions but to real underlying causes. Two possibilities are that high scores on this dimension relate to companies with good personnel practice, and that the promotion of blacks and women led to greater profitability for the company because their skills had previously been unrecognised.

5.7 REGRESSION EXCLUDING OTHER OUTLIERS

5.7.1 The plot of the residuals in Appendix B shows that the model fails to predict outperformance of up to 100% (1 on the vertical axis). (Residuals refer to results—outperformance in this case—that the regression model fails to explain.) The reasons are relatively easy to explain when one examines the data, which are set out in Appendix D. There are a few companies that have very large outperformance—of up to 103%. The reasons for this outperformance are not likely to relate to the social criteria. A particular problem with methods of linear regression is that extreme outliers of this nature can completely change the relationships between variables.

5.7.2 Two further progressive regressions were therefore performed. The first restricted the outperformance to a maximum of 50%, and a minimum of -30%. It produced very similar results to those of Appendix B. Corporate governance, however, came close to statistical significance as positively correlated with increasing performance.

5.7.3 The second approach was to exclude these extreme companies altogether. The results are shown in Appendix C. Unexpectedly, but in a reversal not unknown with regressions, affirmative action is no longer significant, but corporate governance and job creation become significant.

5.7.4 Job creation has a negative correlation with performance. Given the large number of job losses within the South African economy over the nineties, this suggests that companies that have responded most quickly to the technological changes at the root of these changes have been more profitable. If so, given the enormous social costs of the losses, it is to be hoped that this situation will come to a speedy end.

6. CONCLUSIONS

6.1 The social criteria adopted by the CGF have, if anything, enhanced its investment performance over the years. It appears that three of the criteria have been important. Affirmative action, which relates mainly to the number of blacks and women in senior positions, and good corporate governance were seen to have a positive effect. Job creation, under which heading is included general business expansion in South Africa as opposed to internationally, was found to have a negative impact.

6.2 The discussion of the process of share-price determination in this paper suggests that, with the possible exception of corporate governance, which could have an ongoing effect on company profitability, social criteria are likely to have small and transitory affects on investment performance.

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REFERENCES

- Abdulla, I. (1993). *The analysis of the equity component of the Community Growth Fund*. Labour Research Service, P O Box 376, Salt River
- Alperson, M. (ed.) (1991). *The Better World Investment Guide*. The Council on Economic Priorities Prentice Hall, New York
- Asher, A. (1998). Effective and Ethical Institutional Investment. BAJ 4(V), 969-1027
- Asher, A. (unpublished). *Profitability and Socially Responsible Investments Recent Progress with Union Initiated Projects*. International Executive Seminars, 1994
- Calpers (1995). *Why Corporate Governance Today? A Policy Statement*. California Public Employees' Retirement System, Sacramento
- Cantor, A.C.M. & Sefton, J.A. (2002). Economic Applications to Actuarial Work: Personal Pensions and Future Rates of Return. *BAJ* 8(I), 27–74
- Chew, D.H. (ed.) (1998). The New Corporate Finance. (2nd edition) Irwin/McGraw-Hill
- Gill, A. (2001). Saints and Sinners: Who's got religion? Credit Lyonnais Securities Asia Emerging Markets, www.clsa.com
- Harney, M. and Tower, E. (unpublished). Rational Pessimism: Predicting Equity Returns using Tobin's Q and Price/Earnings Ratios, 2002. http://www.econ.duke.edu/Papers/Other/Tower/ Pessimism.pdf
- Lindenberg, E. & Ross, S. (1981). Tobin's q Ratio and Industrial Organization. *Journal of Business* 54, 1–32
- Leeman, M.G. (unpublished). Corporate Citizenship, Fiduciary Responsibility and Shareholder Activism. Convention of the Actuarial Society of South Africa, 2002 (www.assa.org.za/ downloads/events/papers2002)
- Lucas, J.R. (1980). On Justice. Clarendon Press, Oxford
- Malkiel, B.G. (2005). Reflections on the Efficient Market Hypothesis: 30 Years Later. *Financial Review* 40.1, 1–9

- Miller, M.H. & Modigliani, F. (1961). Dividend Policy, Growth and the Valuation of Shares. *The Journal of Business* 34, 411–413
- Poterba, J. (2004). *The Impact of Population Aging on Financial Markets*. NBER Working Papers 10851, National Bureau of Economic Research (http://www.nber.org/papers/ w10851.pdf)
- 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, 137–49
- Smith, R.S. (1990). Factors Affecting Saving, Policy Tools, and Tax Reform: A Review. IMF Staff Papers 37, 1–70
- Smithers, A. & Wright, S. (2000). Valuing Wall Street: Protecting Wealth in Turbulent Markets. McGraw-Hill, New York

Thomson, R.J. (1996). Stochastic Investment Modelling: the Case of South Africa. BAJ 2, 765-802

Wiehahn Commission (1979). The Challenge of the New Industrial Relations Dispensation in South Africa. Government Printer, Pretoria

Wilkie, A.D. (1995). More on a Stochastic Asset Model for Actuarial Use. BAJ V.5, 777-964

Yaron, G. (unpublished). Answers to Common Questions about Pension Trustee Fiduciary Duties and Socially Responsible Institutional Investment. Canadian Shareholder Association for Research and Education (SHARE), 2001 (www.share.ca/files/pdfs/)

APPENDIX A

	Average performance	Job creation	Training	Empowerment	Affirmative action	Conditions of employment	Environmental practice	Health & safety	Corporate governance
Average	1,00								
Job creation	0,03	1,00							
Training	0,13	0,21	1,00						
Empowerment	0,13	0,22	0,38	1,00					
Affirmative action	0,20	-0,19	-0,07	0,29	1,00				
Conditions of employment	0,03	0,71	0,44	0,37	0,06	1,00			
Environmental practice	-0,12	0,05	0,30	0,27	-0,22	0,25	1,00		
Health & safety	-0,08	0,05	-0,17	0,44	0,32	0,15	0,27	1,00	
Corporate governance	0,21	0,04	-0,03	0,34	0,20	-0,13	0,09	0,21	1,00

	Table A1.	Correlations	between	variable
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Significant values are shown in bold.

APPENDIX B REGRESSION EXCLUDING BLACK EMPOWERMENT COMPANIES

Table B1. Summary output

Regression statistics	
Multiple R	0,286976
R Square	0,082355
Adjusted R Square	0,062407
Standard error	0,312728
Observations	48

Table B2. ANOVA

	df	SS	MS	F
Regression	1	0,403747	0,403747	4,128342
Residual	46	4,498743	0,097799	
Total	47	4,90249		
	Coefficients	Standard error	t Stat	P-value
Intercept	-0,42576	0,243378	-1,74938	0,086896
Affirmative action	0,008775	0,004319	2,031832	0,04797





APPENDIX C REGRESSION EXCLUDING BLACK EMPOWERMENT COMPANIES AND OUTLIERS

Table C1. Summary output

Regression statistics	
Multiple R	0,406955
R Square	0,165612
Adjusted R Square	0,118577
Standard error	0,161076
Observations	41

Table C2. ANOVA

	df	SS	MS	F	Significance F
Regression	2	0,20084	0,10042	3,870425	0,029519
Residual	39	1,011875	0,025946		
Total	41	1,212716			
	Coefficients	Standard error	t Stat	P-value	
Intercept	0	N/A	N/A	N/A	
Job creation	-0,00496	0,001837	-2,69749	0,010267	
Corporate governance	0,005214	0,00185	2,819276	0,007525	



Figure C1. Job creation: residual plot

Figure C2. Corporate governance: residual plot



APPENDIX D

Table D1. Basic Data

Company	Relative return	Job creation	Training	Empowerment	Affirmative action	Conditions of employment	Environmental practice	Health & safety	Corporate governance	Average	Status
Advtech Group Ltd	-3%	68	67	65	45	67	99	67	62	63	A
African Media	-32%	10	43	50	76	31	56	65	77	51	В
Alacrity Fin Services	-21%	65	67	65	47	63	61	52	65	61	A
Angloplat	0%										C
Anglovaal Industries	80%	56	61	63	61	99	67	59	64	62	Α
Aplitec: Net 1 App Tech	103%	60	65	60	62	64	65	50	66	61	A
Avis South Africa	-25%	62	60	61	46	58	64	53	65	59	В
Barlo World	22%	50	78	86	51	72	93	59	78	71	\mathbf{A}^+
Barplats	19%	75	53	55	49	67	61	52	58	59	В
Bidvest	7%	65	67	65	47	99	61	53	54	60	В
BoE	-7%	67	64	68	67	66	61	65	67	66	A
Carson Holdings	-19%	76	65	76	67	74	85	78	65	73	A
Cashbuild	92%	70	70	76	09	68	68	70	70	69	Α
Ceramic Industries	20%	59	63	63	50	67	59	47	69	60	В
Clientele Life	-1%	65	67	57	47	65	67	65	60	62	A
Del Monte Royal	30%	65	67	71	64	61	62	56	63	64	A
Discovery Holdings	-16%	70	68	67	46	68	65	60	58	63	Α
Energy Africa	86%	63	75	69	70	72	43	53	65	64	Α
Enviroserv Hdgs	-35%	50	54	66	56	60	67	64	72	61	А

Fedsure	-40%	60	60	71	55	67	63	55	63	62	Α
Firstrand	-2%	62	67	67	69	69	61	68	70	67	Α
Fraser Alexander	-28%										С
Gensec	-8%	93	72	43	24	70	75	33	73	60	А
Greenwich Group	-46%	67	65	55	50	70	60	58	57	60	А
Highveld	-10%	72	72	55	45	64	65	40	65	59	В
Illovo	-5%	60	99	74	65	67	65	60	99	65	А
Iscor	11%	51	59	57	45	57	60	50	53	54	С
L A Retail Stores	-8%	65	60	67	59	59	60	51	59	60	Α
Liberty Group	-13%	70	72	74	68	75	60	60	68	68	А
Liberty Life	-18%	59	65	67	50	60	60	51	60	59	В
Massmart	27%	58	56	99	78	73	61	59	56	63	А
Med Clinic	0%0										С
Mercantile Lisbon Bank	-52%	57	62	58	45	67	68	60	60	09	В
Metro Cash & Carry	17%	71	72	59	61	69	60	60	70	65	А
M-Net	12%										С
Mutual&Federal Ins	-3%	62	65	55	69	65	62	64	64	63	А
Nandos	8%										С
New Clicks Holdings	21%	50	45	45	52	50	54	55	81	54	В
Northam Platinum	4%	70	61	64	54	60	60	68	65	63	А
Nu-World Holdings	-31%	09	78	55	50	78	62	45	24	57	В
Oceana Fishing	22%	78	61	83	35	64	75	64	73	67	А
Old Mutual Group	5%	26	74	55	53	41	75	45	63	54	В
Omnia Holdings	-17%	50	45	46	40	55	61	60	43	50	В
Polifin	28%	65	65	67	50	60	62	50	65	61	А

mpany	Relative return	Job creation	Training	Empowerment	Affirmative action	Conditions of employment	Environmental practice	Health & safety	Corporate governance	Average	Status
	-5%	61	72	70	62	72	96	73	62	71	\mathbf{A}^+
m Holdings	-5%	63	60	99	68	99	61	52	09	62	A
est Group	-25%	75	65	67	42	70	65	60	64	64	А
wodr	42%	56	59	60	52	57	60	55	09	57	В
/ant	-48%										C
tsure Holdings	-27%	63	60	72	49	65	69	70	62	64	А
nert	49%										C
Trueform	-6%	38	60	38	43	57	75	45	38	49	C
nbou	-19%	65	65	67	65	67	61	53	63	63	А
e Life	-15%	80	58	62	68	75	64	55	55	65	А
am	∿ 0∠	45	64	62	47	63	67	60	61	59	В
am	11%	58	59	65	50	58	60	51	61	58	В
del Inv Cor	0%0	63	56	69	63	63	61	59	57	61	A
dard Bank Group	8%	54	71	74	68	75	70	47	76	67	А
International A)	17%	45	72	60	60	47	50	41	09	54	В
House of Busby	-1%	70	55	68	70	60	09	60	70	64	A
herlys Investment lings	21%	76	48	43	57	70	60	52	63	59	В