



ENVIRONMENT AND INVESTMENT: THE ROLE OF PERSONAL INVESTMENT CHOICE IN CREATING SUSTAINABILITY

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Traditionally most investors have sought only financial returns from their investments. The idea of reaping environmental benefits from investment is not widely accepted, primarily because ecology and economy have long been considered mutually exclusive by financial markets. However, as social values change growing numbers of investors are beginning to identify the potential role of investment in assisting moves towards ecologically sustainable development (ESD). With a focus on the sizeable Australian investment market, examples are drawn from overseas of recent research and environmentally screened investment funds providing evidence of a positive correlation between environmental and financial performance. The implications of the deregulation of the investment market in Australia and the importance of corporate environmental reporting (CER) and other methods of communicating

environmental performance to investors, both individual and institutional¹, are discussed. The paper concludes that while the trade-off between ecology and economy remains within the dominant paradigm, and despite a lack of widespread CER, changes in investment patterns are occurring. As this gathers momentum, aided by more transparent corporate environmental behaviour, both environmental and financial returns can be achieved. Copyright © 1999 John Wiley & Sons, Ltd and ERP Environment.

Received 1 June 1998

Accepted 8 June 1998

INTRODUCTION

While the last century has seen economic development which has created unprecedented increases in material wealth, there can be little dispute that the sources of that development are unsustainable into the next century. There is growing physical evidence of environmental degradation and ecologists warn that if existing *per capita* rates of consumption and pollution are maintained and human populations

¹Individual' investment refers to direct share market holdings by individuals whereas 'institutional' investment refers to investments held by institutions such as insurers, fund managers and banks.

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double, we may become vulnerable to dramatic change. Resources such as air, water, land and forests cannot continue to be exploited at the current rate; something must be done to ensure a future for our planet and for our descendants (Institute of Directors (UK), 1992).

Punctuated by the 1992 'Earth Summit' in Rio de Janeiro, the 1990s has become a decade where the ideal of ecologically sustainable development (ESD) has been elevated as an important corporate and social priority. The concept of ESD (defined as development that improves the total quality of life, both now and in the future, in a way that maintains the ecological processes on which life depends (Commonwealth of Australia, 1992)), together with enhanced community awareness, has led to the growth of environmental codes of practice and more stringent regulatory requirements world wide. Connections between business and the public good are being drawn in entirely new ways. There is a realization that the way we do business must change completely if the global economy is to become sustainable.

With the realization that more than a third of the Australian population have direct stock market holdings (Westwood, 1997) there is great potential for individual investors to influence the way business operates. Changing investment patterns may be a catalyst for the evolution of a more sustainable system. This paper discusses the role of investment in effecting change in corporate environmental performance (CEP) and, specifically, how corporate environmental reporting (CER), and other methods of communicating CEP to investors, can facilitate such change.

While it is acknowledged that the terms 'ESD', 'sustainability' and 'sustainable economy' are not synonymous they will be used interchangeably here and refer to the Commonwealth of Australia (1992) definition of ESD above.

THE LEGITIMACY AND EXPECTATIONS OF BUSINESS

We may be in the midst of a period that has witnessed the awakening and consolidation of a new environmental consciousness, but how can it be translated into the achievement of a sustainable economy? Robert Shapiro, CEO of the American chemical giant Monsanto, sums up the task ahead:

Our nation's economic system evolved in an era of cheap energy and careless waste disposal, when limits seemed irrelevant. None of us today, whether we're managing a house or running a business, is living in a sustainable way. It's not a question of good guys and bad guys... the whole system has to change; there's a huge opportunity for reinvention (quoted by Magretta, 1997, p 80).

Clearly business involvement in achieving ESD is crucial. How do we ensure that business goes about changing the 'whole system'? Do we rely on business alone to improve for the good of society or must the changes be initiated and directed by government in the form of regulations, standards and economic instruments? What roles do individuals, local communities, and other stakeholders have in improving business practice?

Business gains its customers, and its legitimacy as an activity, from meeting society's needs (Crosbie and Knight, 1995). Legitimacy theory posits that corporate social responsibility performance and disclosure practices are responsive to environmental pressures (including political, social and economic ones). Management seeks congruence between the outside perceptions of its own social values, and what is deemed by society to be appropriate social conduct (Mathews, 1993). To the extent that these are congruent we can speak of organizational legitimacy (Dowling and Pfeiffer, 1975). It is argued that how a firm operates and reports on those operations will be influenced by the social values of the community in which it exists. The organization seeks legitimacy, and this 'state' of legitimacy will change over time, thereby requiring ongoing modifications to the entity's operations (Deegan, 1996a).

The growing change in social consciousness, the increasing prominence of business ethicists such as Charles Handy (1995) and the advent of the concept of 'community right to know' (particularly in North America and Northern Europe) are all reflecting the changing needs and attitudes of society. Consequently business is coming under increasingly close scrutiny and growing pressure to change. Edwards (1996) states

The internal and external constraints and opportunities that are encountered by a company will increasingly reflect the need



expressed at the United Nations Conference on Environment and Development in 1992, to move towards more sustainable economic development (p 55).

If society is beginning to demand a more sustainable economy, business must meet those needs and demands by changing its social and environmental conduct so that it may retain its legitimacy. As the global significance of seemingly ordinary behaviours becomes clearer, the pressure on organizations to change those behaviours will increase (Crosbie and Knight, 1995).

THE ROLE OF INVESTMENT IN THE PROCESS OF CHANGE

While legitimacy theory posits that business will change as society's expectations alter, given business's poor record (particularly in Australia) of environmental performance and its alleged counter-attack on environmentalism (Beder, 1997; Stauber and Rampton, 1995; Welford, 1997), it would be foolhardy to rely on industry alone to transform itself for the social and environmental benefit of society. Similarly, relying solely upon government command-and-control methods runs the risk of alienating business from a process that requires cooperation and collaboration, not just between government and industry but also the individual and his/her community.

However, the individual (and collectively as a community) has the potential to encourage the transformation of business practice through consumption and investment choices. Each stakeholder has its own role to play, none is excluded or exempt from the task at hand and each has responsibility for taking some of the many necessary steps towards a greater shift. Success in moving towards a sustainable economy will rely on environmentalists, regulatory agencies, companies and investors rejecting old trade-offs (ecology versus economy) and building on the underlying economic logic that links the environment, resource productivity, innovation and competitiveness (Porter and van der Linde, 1995).

With the realization that changed investment patterns are a necessary precondition to sustainability, the environment needs to be recognized

in both our corporate and individual financial strategies (Crosbie and Knight, 1995). In recognition of a new social responsibility, Young (1992) states

The challenge in establishing a new economic order that includes the environment in economic decision making is enormous . . . it is critical that investment takes on an ecologically astute character which is uncoupled from environmental degradation and resource depletion (p 5).

The term 'investment' can have a variety of different meanings, depending upon the context in which it is being discussed. 'Investment' can mean money used to purchase goods that will be used to produce more goods. In its narrow financial sense, investment refers to the purchase of a security with the belief that its current market price is fair (Radcliffe, 1987). Alternatively, economists define investment as a decision to forego present consumption opportunities in order to increase future opportunities by increasing the value of existing resource stocks (Young, 1992). Investments, whether made by government, institutions or individuals, can create, protect, improve or reduce the value of scarce resources used by people. They can also change value systems and influence the level, nature and distribution of the resources and, hence, resource utilization (Young, 1992). It is in the context of foregoing present opportunities for an improved future that this paper concentrates, focusing specifically on investment in the capital markets; that is, personal and institutional investment through the stock and fixed interest markets, including superannuation, pension and other managed funds.

Australia has one of the highest rates of private participation in investment markets in the world. More than 30% of the population have direct stock market holdings. By late 1998, with the part sale of Telstra and the de-mutualization of National Mutual Limited, it may be as high as 40%. This figure does not include superannuation and pension plans. The superannuation industry in Australia is already sizeable and continually growing, with members ploughing much more than their statutory 6% of salary into their schemes. Overall, superannuation controls some \$300



billion, with \$103 billion invested in shares and unit trusts. 40% is invested through investment managers and 37% through life office funds, with the remaining 23% directly invested by individuals (Murrill, 1997b). Even without considering the fixed interest and commodities markets, these figures serve to illustrate that the investment market in Australia is substantial.

While there is a high proportion of investment participation in Australia, much of the relevant policy, and subsequently the direction of investment, is determined by the large institutional players: investment fund managers, insurance companies and superannuation and pension funds. However, as the financial industry goes through a process of deregulation, this dynamic is beginning to change.

The superannuation market is a case in point. The continued deregulation and rationalization of the Australian superannuation industry means that employees will soon enjoy some of the freedom of investment choice that previously applied only to the realms of traditional personal investment (i.e. stock, bond and property markets). From July 1999, employers must offer all new employees a choice of at least four funds. Existing workers will be given the same choices from July 2000 (Carrigan, 1998). The advent of DIY (do-it-yourself) superannuation also means that employees now have, within some broad guidelines, more choice as to where their superannuation contributions are invested. 'DIY super' has become a huge industry, with over 140 000 self-managed super funds of five members or fewer, controlling \$27 billion in assets (Murrill, 1997b).

With the advent of new technology, such as telephone and Internet investing, and a loosening of the investment market, it has become much easier and cheaper for investors to participate directly in the share market. For investors and employees, the number of options and level of control over the direction of their investment is greater than ever, and increasing. More people than ever have access to the markets and increasing numbers are likely to take advantage of greater investment freedom. Strong investment market participation together with a more open and flexible market means that, through their investment decisions, shareholders, employees and other stakeholders have increasing ability to bring about change.

INCORPORATING ENVIRONMENT IN FINANCIAL STRATEGY

As the nature of investment is changing, so too is the process of investment decision-making. Traditional investment theory works on the basic premise that, while people may buy and sell securities for a variety of reasons, most do so with the expectation of earning a reasonable profit. The objective of the traditional security selection model (Figure 1) is to maximize the expected rate of return on one's portfolio of marketable securities. However, there are also a variety of constraints which people place upon their holdings. The most important of these in the traditional model is the degree of portfolio risk. It is important to balance the expected returns with the amount of risk the investor is prepared to take (risk versus return) (Radcliffe, 1987).

The evaluation and selection of securities has traditionally consisted of three criteria: valuation (is the stock good value?); management (is the company fundamentally sound and well managed?) and growth (growth determines the return on investment and therefore the success of the fund manager). Individual interpretations of these criteria, different fund aims and objectives and access to investment information will determine security selection. Once the security is selected, performance is subsequently monitored according to its performance. The objective of regulators and the investment community in this process is to establish and maintain a transparent and efficient market between investment opportunities on the one hand and financial capital on the other so that the market may operate efficiently.

However, as investors are becoming increasingly concerned with CEP (Rankin, 1996) the traditional security selection model is being challenged. The past two decades have seen the foundation and rise of the ethical/environmental investment movement which has succeeded in making some people think about how they use their money (Alperson *et al.*, 1991). The very availability of funds that screen organizations on their records of environmental, social and political actions poses questions about overall corporate behaviour and influences the general trading climate and has the ability to change the way the business world functions (Alperson *et al.*, 1991). A recent survey in the UK revealed that ethical

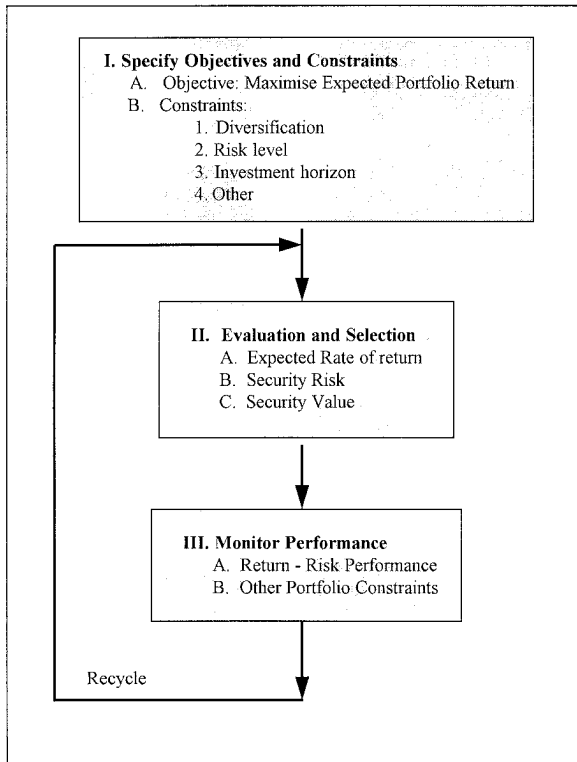


Figure 1. The security selection process. Adapted from Radcliffe (1987).

funds are probably the fastest-growing sector in the UK investment market, and the stewardship range spearheads a billion-pound industry. The survey also found that 95% of people want their investment to benefit companies which are helping rather than harming the world and that 77% of respondents agreed that they were put off investment funds by the thought that their money could benefit companies that are harming the world (*Financial Times*, 1996).

Because corporate and individual investment decisions contribute to the direction of capital through their investment choice, individuals (as economic agents) have the ability to change CEP by encouraging, with their investment choices, good environmental performers and discouraging those with poor records. Joan Shapiro, South Shore Bank senior vice-president, states

The most critical social problems in this country [USA] can't be solved simply by negative screening or divestment. Positive

reapplication of capital is the key (quoted by Alpers *et al.*, 1991, p 16).

Unfortunately, the bulk of investors remain bound by the old 'ecology-versus-economy' paradigm. Recent research, however, is helping to dispel these misconceptions by providing evidence that good environmental stewardship can improve financial performance. Feldman *et al.* (1997) found that improving a firm's environmental management system (EMS) and environmental performance can increase stock price as much as 5%. Essentially, sound environmental management leads to reduced risk to the firm, which is valued by financial markets. Lower risks mean lower required returns, and therefore lower costs for financing the activities of the firm (the cost of capital). The results were produced by first using a financial model and then validating the hypothesis with 'real world' analysis of 300 of the largest public companies in the US. The research suggests that investments in environmental management and improved performance by companies (even beyond regulatory compliance) can be justified, in many cases, on purely financial grounds. That is, environmental performance is fully compatible with superior financial performance.

Adopting a more environmentally proactive posture has, in addition to any direct environmental and cost reduction benefits, a significant and favourable impact on the firm's perceived riskiness to investors and, accordingly, its cost of equity capital and value in the market place (Feldman *et al.*, 1997, p 2).

Edwards (1996), in conjunction with the British investment firm Jupiter Asset Management, examined the historical financial results of 51 companies assessed as environmental leaders from eight industry sectors. These results were compared with those of companies from the same sectors whose environmental performance was not known. Edwards found a positive correlation between environmental and financial performance. Contrary to the belief that investment in environmental improvements is detrimental to the maximization of shareholder value and business value, he found that at the very least the environmental leaders perform as well as the laggards (Edwards, 1996, p 56).



Further, research by Clough (1997) in conjunction with the US investment firm, Winslow Management Company, has found that portfolios invested in environmentally responsible companies generally return one to three more percentage points annually than portfolios of environmentally irresponsible companies. The research indicates that an environmental screen can actually enhance portfolio performance. Over a five-year period the environmentally responsible portfolio returned 17% per annum compared to 15% for the Standard and Poors 500 index on an equally weighted basis. The study indicates that selecting for environmentally proactive companies serves as an effective screen to identify companies with superior financial performance. Environmental initiatives lead to product and process improvements, which then manifest themselves in increased efficiency and a healthier bottom line (Clough, 1997).

Adding more weight to the argument is the World Business Council for Sustainable Development's (WBCSD's) publication *Environmental Performance and Shareholder Value* (Blum *et al.*, 1997). Using a number of case studies, including Sony and British Gas, the report highlights the direct relationship between environmental performance – whether good or bad – and business results, shareholder value and share prices.

Providing market proof of the compatibility of environmental and financial performance are two new investment funds introduced in Europe in 1996 and 1997 respectively: the *Environmental Value Fund* (EVF) jointly designed by American fund manager Scudder, Stevens and Clark, and the Norwegian insurance company Uni Storebrand, and the Swiss Banking Corporation's *Eco Performance Portfolio – World Equities*. Both funds have been designed to identify companies world wide that have a record of environmental awareness and a high level of sustainability in their operations.

The objectives of the EVF include obtaining higher returns than the Morgan Stanley World Capital Index (MSWCI), to invest with a sustainable development philosophy based on eco-efficiency principles, and to develop a knowledge base and reports that serve as a basis for dialogue with companies, thus moving the environmental agenda forward (Storebrand–Scudder, 1996).

In linking the connection between good financial and environmental performance with its objectives, Storebrand – Scudder (1996) state

Companies that are good at environmental management tend to be good at strategic and financial management. Our observations suggest that a company's environmental performance over time is often a good indicator of the quality of its future earnings. Major environmental risks are often also major financial risks. Companies we seek to invest in are good at transforming risk into opportunity (p 5).

Because both funds select stocks from nearly all manufacturing and service industries they are encouraging ESD across all facets of the economy. As well as using a financial analysis rating of the companies based on traditional criteria, the EVF uses an environmental screening methodology derived from the eco-efficiency approach pioneered by the WBCSD (Schmidheiny *et al.*, 1996). Each company's sustainability index is calculated on a weighted index of nine quantitative indicators. These include impact on global warming (tons of carbon dioxide (CO₂)/\$ sales), material efficiency (tons of waste per units of sales), toxic releases (tons of TR per units of sales), energy intensity (Terajoules per units of sales) and environmental management quality (points).

In the absence of environmental reporting in most countries, information is sourced by standardized questionnaire and interview process. For a company to be included in the EVF its score must be among the 30% best scores in its sector. The EVF's criteria have been back-tested on Scudder's portfolio of five years ago – those stocks satisfying the criteria yielded an annual return of 22% over the period compared with Scudder's 17% and 12% for MSWCI. In its first year, the EVF's average eco-efficiency was 28% greater than the market average. The firms in the EVF portfolio

- (i) used 73% less ozone depleting substances than the market average,
- (ii) emitted 35% less CO₂ than the market average and
- (iii) supplied products with environmentally related characteristics 28% better than the market average (Storebrand–Scudder, 1997).



The EVF's stock selection process is illustrated below. Compare this to Figure 1, Radcliffe's traditional model of stock selection discussed earlier.

Both the EVF and the Eco-performance Portfolio are achieving two important things:

1) they are re-allocating capital to the best environmental performers by providing funds to companies that are more environmentally sustainable than the market, and thereby encouraging sustainability, and

2) their questionnaires and metrics send strong signals to corporate management that institutional investors are interested in CEP and, implicitly, in the objective reporting of environmental performance information).

What distinguishes these from existing funds is their combination of ethical and environmental investment concepts with those of the mainstream investment market. The EVF has achieved a 24% return in 1997 (its first year), 4% higher than the MSWCI, illustrating that environment and investment are not incompatible. On the contrary, it is adding weight to the idea that combining the two can contribute toward the improvement of CEP and the goal of sustainability.

THE IMPORTANCE OF CORPORATE ENVIRONMENTAL REPORTING (CER)

In a socially and environmentally ideal world, the financial markets would not have to care about the environment because, in a world of internalized environmental costs and taxes on pollution, it could assume that were a company financially successful then it must also be environmentally sound (Schmidheiny *et al.*, 1996). While we may one day see these ideas come to fruition, the reality is that most environmental costs remain externalized. In the meantime the signalling of CEP to the markets remains one of the few mechanisms enabling the inclusion of environmental performance in investment decision-making processes (should it be required).

The examples of the EVF and *Eco-performance Portfolio*, and the research of Clough (1997), Feldman *et al.* (1997) and Edwards (1996) each support that the signalling of CEP to investment markets is crucial. As with financial reporting, the quality of the information communicated by the

firm will affect investors' perceptions of its credibility and overall usefulness for assessing firm risk. Both improved environmental management and environmental performance need to be clearly articulated to the investment community (Feldman *et al.*, 1997). Firms that communicate relevant and comprehensive information about their environmental management programmes and performance are generally perceived by investors as not only having lower financial risk compared to similar firms that provide no information in this area, but also more morally and ethically appealing. Lower risk means lower cost of capital and subsequently investors will be willing to pay more for the firm's future cash flows. Consequently its stock price will rise and shareholder wealth will increase. Shareholders, through increased share prices, also benefit financially (as well as the less immediately obvious social benefits) when the firm's environmental performance continues to improve over time.

CER is essentially about signalling to stakeholders how the company's activities relate to the environment through its consumption of energy and raw materials, its business activities and operations and its wastes, products and by-products. The object is to assess ongoing performance in terms of identifying, controlling, managing and minimizing those impacts (Tromans, 1996). Objective and standard CER allows financial markets to provide more accurate signals between corporations and market participants. Information that allows capital markets to recognize and evaluate environmental risks in advance would benefit the environment because corporate managers and directors would have a stronger and more immediate stake in environmental improvement (UNEP, 1995). Jim Downey, former Chief Executive of the ACF, states

Where environmental reporting has been around for several years, the results have been quite dramatic in improving companies' environmental performance. . . it puts pressure on them to improve their environmental performance. . . it isn't just about reporting to potential shareholders or investors or bankers and financiers, just for the sake of reporting. It's about using what is reported and analysed in that process to get the company to lift its

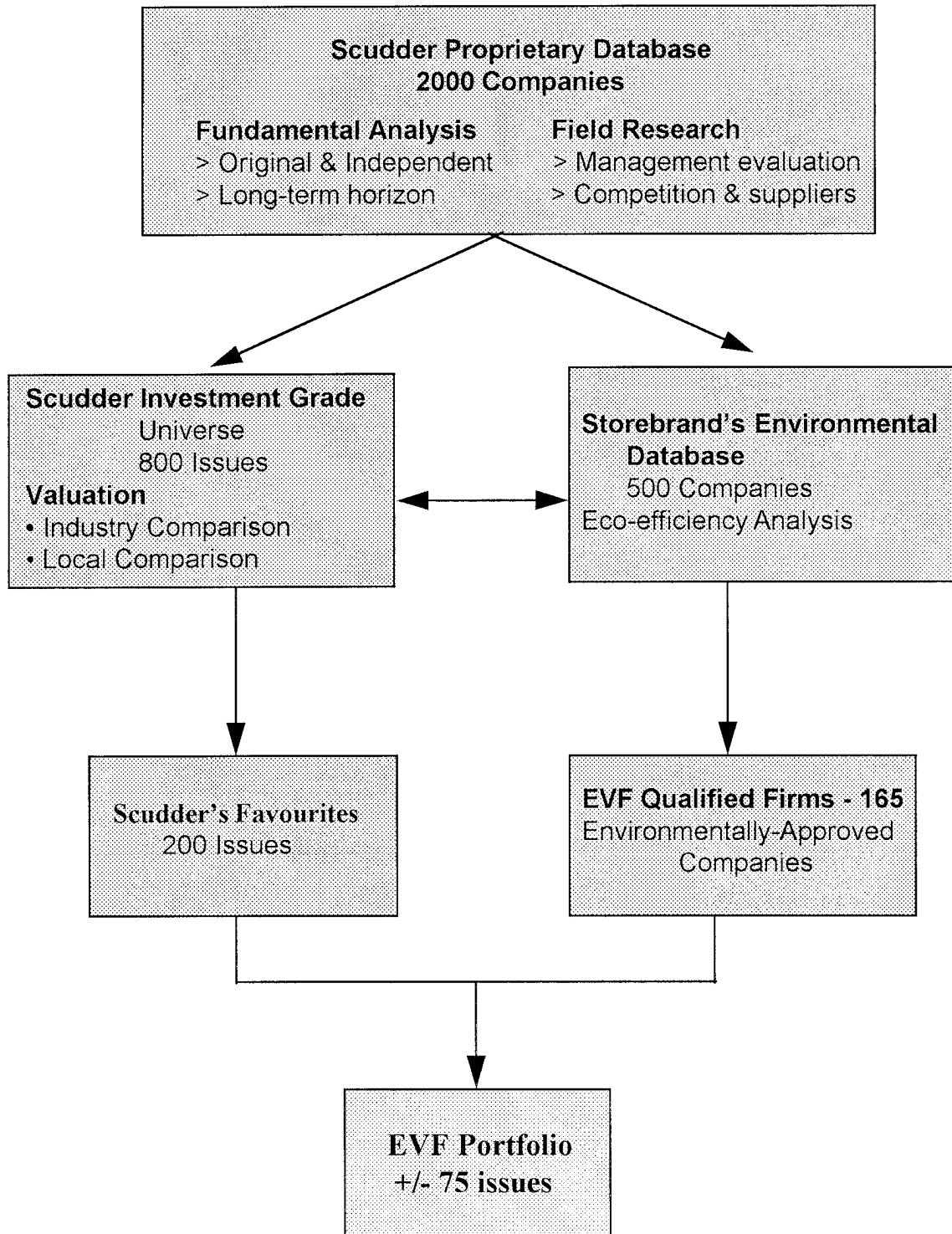


Figure 2. Adapted from Storebrand-Scudder, 1996.



performance (quoted by Hainsworth, 1996, p 21).

Those entities engaging in environmental reporting remain in the minority, indicating that there is still widespread resistance to the concept of CER. However, most evidence points to the conclusion that CER is improving world wide in terms of both quality and quantity (Deegan and Rankin, 1996; Deegan, 1996a, 1996b; Elkington and Spencer-Cooke, 1996; Elkington *et al.*, 1998; Tromans, 1996). While there is still resistance to the concept of CER, most evidence points to the conclusion that it is improving world wide. Growing numbers of companies are now producing environmental reports, innovation is rapid and best practice has evolved considerably (Elkington and Spencer-Cooke, 1996; Elkington *et al.*, 1998). The first report of the Storebrand-Scudder (1997) EVF states

Over the past year, we have observed remarkable increases in the number of firms that are beginning to publish environmental reports (or are disclosing environmentally-related data by means of the EVF's customised questionnaires), improvements in the quality of the firms' environmental reporting, as well as improvements in the environmental performance of the firms in the EVF universe (p 5).

Increasingly, organizations are beginning to implement environmental management systems (EMSs), using tools such as the international standard ISO14000 and the European Eco Management and Audit Scheme (EMAS). Because an EMS enables an organization to monitor and measure its environmental performance, more and more companies will find it increasingly easier to communicate the results to stakeholders.

While Northern European and North American countries (Denmark and Sweden in particular) are leading the way (Elkington and Spencer-Cooke, 1996), in Australia the picture is not so rosy. Deegan (1996b) suggests this is partly due to the general absence of Australian environmental disclosure regulation and guidance. While there are some positive examples of proactive environmental reporters such as WMC (WMC, 1997), the vast majority do not report and those that do are predominantly self-laudatory and selective in the

provision of information (Deegan, 1996a; Owen, 1994). Further, recent research in Australia has found that while many stakeholders (investors, shareholders, academics and review organizations) see environmental reporting as increasingly important for investment, consumption and other related decisions, the information provided to them in annual reports falls short of their expectations. While the majority of users see environmental reporting as an opportunity, the majority of preparers were ambivalent. Corporate reporters in Australia are not fulfilling the environmental information needs of their stakeholders (Rankin, 1996).

While CER may not be meeting expectations, particularly here in Australia, other methods of obtaining CEP information do exist. These include independent corporate ratings organizations such as the Council on Economic Priorities (CEP, 1997) and the Franklin Research and Development Corporation (FRDC, 1997) in the US, and the Ethical Investment Research Service in the UK (EIRIS, 1997). Unfortunately, in the absence of mandatory CER and bodies such as the FRDC and CEP, finding out about the social and environmental performance of companies in Australia is quite difficult. While there are a variety of sources that can provide useful material, such as business reference guides and the Company Review Service of the Australian Stock Exchange (ASX), finding objective and complete information is an onerous task. This realization is supported by a recent discussion paper released by the Environmental Accounting Task Force of the Institute of Chartered Accountants in Australia which specifically raises the issues of environmental accounting, auditing and reporting (EATF, 1998). The introduction of the National Pollutant Inventory (although it appears that its implemented form will be a weakened and downgraded version of the intended original) and the development of environmental ratings systems will also contribute to greater corporate environmental transparency and the subsequent re-allocation of capital.

A properly regulated financial market needs to provide objective and standard CEP information so that all stakeholders are accurately and equally informed to allow the efficient allocation of capital that reflects all factors, including community and future interests and the information that they may demand. Until there is widespread availability of



transparent, objective and comparable CEP information, attempts at informed investment decision-making will be limited, as will the ability of the direction of investment to make significant improvements to the sustainability of business practice.

THE FAILURE OF INVESTMENT PROFESSIONALS TO CONSIDER CER

Investment professionals are responsible for much of the direction of investment in Australia through funds management, the allocation of institutional investment, private client recommendations and media coverage. However evidence presented by Rankin (1996), Business in the Environment (Anon, 1994) and Joly *et al.* (1997) suggests that brokers and analysts are mostly ambivalent about environmental management and performance information, and those that do consider them do so within a strictly financial perspective. Because of the strength of their influence, the fact that investment professionals do not value environmental performance issues as highly as other stakeholders has ramifications, not just for the possible introduction of CER, but also for the impact that CER has upon investment decisions, the allocation of capital and moves towards a sustainable economy. Investment professionals may well be one of the key barriers impeding the development of a sustainable economy.

ENVIRONMENTAL PERFORMANCE AND THE INVESTMENT DECISION-MAKING PROCESS

Having discussed the possible environmental benefits of improved CEP influenced by the re-allocation of capital via investment decisions, and the role that transparency of corporate performance has in this process, how do we ensure in Australia (i) that objective and standard environmental performance information is made available to stakeholders and (ii) that stakeholders, particularly investors, will use that information in their investment decision-making process?

While there is increasing evidence of society making the connection between poor CEP and environmental degradation, it will clearly take more than a gradual shift in public consciousness to force the wholesale adoption of corporate environmental reporting and to dispel the myth that financial performance and environmental performance are mutually exclusive. The research discussed earlier will help to this end, as will publications such as the World Business Council for Sustainable Development's (WBCSD's) recent report *Environmental Performance and Shareholder Value* (Blum *et al.*, 1997). The good results of both the Storebrand–Scudder EVF and the Swiss Bank Corporation's *Eco-Performance Portfolio* provide market support for these hypotheses. Further, they each give strong messages that it is crucial for good environmental performers to communicate results to stakeholders. Communicating this positive message to the general investing public is the next task and this will happen through the provision of consistent results of good corporate environmental and financial performers and environmental funds. As more and more realize the value (financial and environmental) of environmentally screened investments, the pressure for corporate environmental transparency will also increase. Storebrand–Scudder (1997, p 6) state

Stakeholders, such as the EVF, have played a considerable role in influencing the environmental performance of firms, and we will continue to move the environmental agenda forward in the future.

While the accounting profession may be showing interest in environmental reporting issues in Australia, there are also a variety of other possible mechanisms and measures that may assist greater corporate environmental transparency. These include industry associations providing reporting guidelines, Environment Protection Authorities (EPAs) increasing the levels of required disclosure, financial institutions developing the ethical investment market and the ASX introducing listing requirements for environmental disclosure. The growing adoption of EMSs through ISO 14001 and EMAS will also assist corporations to monitor and measure



their environmental performance, thereby making it easier for them to provide standardized external reporting information.

The release of the 'Wallis report' (Financial System Inquiry (Australia), 1997), a federal government commissioned investigation into the financial services industry in Australia released in April 1997, is likely to have particular ramifications for corporate environmental transparency and increased patronage of the ethical and environmental investment movement in Australia. Essentially, it recommends that the financial services industry become less restrictive and regulated in its operations and that all aspects of both the industry and the investment products that it deals in become more transparent. If the bulk of the 'Wallis' recommendations are adopted, it will give investors greater access to better information (Murrill, 1997a). A key recommendation is that employees be given a choice of superannuation fund, providing opportunities for personal preferences to be followed. Providing employees with choice opens up much of the superannuation market to ethical and environmental investment alternatives. Clearly there are a number of opportunities in the reform process for the inclusion of CER in an overhaul of corporate transparency mechanisms.

One of the greatest challenges and opportunities for the investment market is the impact of the Internet and the development of an Internet share trading. The ASX sees this as one of the greatest future challenges (Murrill, 1997c). With the prospect of widespread use of electronic prospectuses, information services and trading, the Internet provides opportunities for the integration of environmental and ethical criteria into the investment decision-making process. CER and environmental ratings information could be included, either through voluntary or mandatory means, in on-line investment information. For example, such information could be included in company Websites (as WMC now does), be available through links to independent ratings agencies such as the CEP and FRDC, or be located centrally, with links to each broker's or company's Website. Clearly such a system would need to be developed in conjunction with regulatory bodies such as the ASX and ASC but the possibilities are enormous. Those involved would need to be convinced of the importance of their participation, but with the

likely advent of some type of environmental reporting guideline, this will become increasingly easier.

CONCLUSIONS

While investment practices are beginning to change to include environmental and ethical drivers, the trade-off between ecology and economy remains a key aspect of the dominant paradigm². There is strong evidence suggesting that ecological sustainability and good financial performance are compatible, but the connection is still not being made by the majority of investors. The present inadequacy of CER is partly responsible for this situation and the availability of environmental performance information needs to improve to facilitate these connections.

Successful ethical and environmentally screened funds have a role to play in promoting the compatibility of good environmental and financial performance, thereby encouraging greater corporate environmental transparency, and contributing to changing investment behaviour. These funds, together with business organizations such as the WBCSD, which is promoting eco-efficient performance and greater transparency, have the potential to improve corporate behaviour. Business will be further encouraged to make improvements in environmental performance through subsequent changes in the nature of investment. Unfortunately many companies are still questioning the external value of CER. The link between reporting and board-level accountability (due diligence) and corporate governance issues may well be crucial in removing barriers to its widespread use. As yet this relationship has not been fully explored and remains a key area for further study.

Changed investment patterns can make a significant contribution towards achieving a sustainable economy. From the 1987 text *Investment*, Radcliffe (p 3) provides the following quote. The

²The dominant paradigm is corporatist, placing its faith in the marketplace, free trade and the global economy (Saul, 1997). Specifically it is derived from the flood of commerce over the past 100 years that has enriched capital cities, ruling families, powerful governments and corporate elites, producing a dominant commercial culture that believes all resource and social inequities can be resolved through development, invention, high finance and growth (Hawken, 1995).



use of the word 'welfare' has far broader social and environmental connotations than he most likely ever envisioned.

Yet for all the psychic pleasures and possible monetary rewards which people receive from security trading, the game is played in earnest. The future *welfare* of individuals and families depends upon the strategies which they use to select securities.

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