



Theory and empirical evidence on socially responsible investing and investment performance: Implications for fund trustees and their members

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ABSTRACT

Guidance is required for investors and trustees as to the potential impact of socially responsible investing on expected returns and risk. This paper examines the theoretical and empirical evidence with respect to this impact.

The evidence suggests that very well governed companies with strong employee relations and strong environmental performance may earn positive abnormal returns. However, for poorly governed companies socially responsible investing may involve agency costs that result in underperformance. Further, investing in firms whose core business is in industries that are widely seen as “sin” industries may earn positive abnormal returns, and avoiding these firms may impose a financial cost on investors. Nevertheless, for investors with a diversified portfolio, the overall financial effect of socially responsible investing may be marginal.

In those cases where socially responsible investing may be expected to result in financial harm to fund members, trustees may be in breach of their fiduciary duties. One possible reform that may be considered is to allow trustees to consider non-financial criteria without breaching their fiduciary duties, provided that other prudential requirements are met.

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1. INTRODUCTION

The Australian Government *Social Impact Investing Discussion Paper* (2017, p.6) defined social impact investments as “investments made with the intention of generating measurable social and / or environmental outcomes in addition to a financial return”. This definition suggests positive screening, whereby stocks with positive characteristics (“virtuous” stocks) are deliberately included in a portfolio. A wider definition that incorporate other aspects of socially responsible investing also includes negative screening, whereby stocks with negative characteristics (“sin” stocks) are deliberately excluded from the portfolio. This wider definition is commonly seen as incorporating environmental, social and corporate governance (ESG) factors. In addition to screening, socially responsible investing may also be undertaken via active engagement between the investor and company management.

At December 2016 the social investment market was \$A64.9 billion or 4.5% of professionally managed assets in Australia (Responsible Investment Association Australasia (2017)). As to the size of the US market, the United States Social Investment Forum Annual Report (2016, p. 9) reported that \$US8.72 trillion, or nearly 22% of total investment assets, were managed using Socially Responsible Investing guidelines at the beginning of 2016. In addition, a survey by the CFA Institute (2015) found that 73% of portfolio managers and research analysts consider environmental, social, and governance issues during investment analyses and decisions.

The *Discussion Paper* sought comment on the existence of regulatory barriers to the growth of such investing, and ways that the Australian Government may address these barriers. With respect to setting the foundation for a discussion of potential barriers, the paper noted that trustees have a fiduciary duty to make decisions in the best interests of members under general trust law and Section 52 of the Superannuation Industry (Supervision) Act 1993 (the ‘SIS Act’). It also stated, “the best interest duty is generally construed as the best financial interest; *which is not inconsistent* with ethical and socially responsible investing” (emphasis added, page 28).

This is a similar position to that adopted by the Australian Prudential Regulatory Authority (APRA) *Prudential Practice Guide SPG 530 Investment Governance* (2013) which notes that trustees may take additional factors into account “where there is no conflict with the requirements of the SIS Act”, including the requirement to act in the best interests of the

members. APRA expressly recognises that “this may result in [the trustee] offering an ‘ethical’ investment option to beneficiaries” (page 8).

However, Section 62 of the SIS Act provides that the trustee “must ensure that the fund is maintained solely” for the “provision of benefits” to members. For a discussion, see, for example, Leigh (1997). While this so-called sole purpose test has not been examined with specific references to socially responsible investment by Australian courts, United Kingdom cases are relevant. For example, in *Martin v City of Edinburgh District Council* it was held that councillors (as trustees) who sought to avoid South African investments at a time when apartheid laws were in effect were in breach of trust. Similarly, in *Bishop of Oxford v Church Commissioners* it was held that a policy of favouring ethical investment over financial gain was inconsistent with the terms of the trust.

Submissions to the Australian Government by a large number of interested market participants demonstrate the wide variety of views with respect to the potential impediments faced by trustees as well as the overall appropriateness of investing funds in socially responsible investments where those funds are designated to support a member’s future retirement. For example, in Unisuper (2017), superannuation fund Unisuper recommends that no further guidance on the topic by the Government is needed based on its belief that socially responsible investing would be likely to lead to lower returns for its members and put fund trustees in breach of their fiduciary duties. Similarly, CPA Australia (2017) recommends against the Government providing any additional guidance that might support superannuation trustees looking to invest in social impact investments that have a “dual purpose” linked to both wider societal outcomes and the member’s financial returns unless it could be unequivocally demonstrated that the primary purpose of superannuation was not compromised. In contrast, in Impact Investing Australia (2017), submitted by an organisation focused on growing “... the market for impact investing in and from Australia” the position put forward is that changes to regulation should be enacted to ensure that trustees have permission to consider environmental, social and governance factors where material and to permit consideration of ethical and impact investments where trustees have good reason to believe that members share those beliefs and there is no risk of significant financial detriment.

This paper presents evidence with respect to the potential impact of socially responsible investing on expected returns and risk, and therefore the impact on the financial interests of investors.

To the extent that the evidence demonstrates that socially responsible investing may, in certain circumstances, result in decreased expected returns and / or increased risk, and is therefore not in the best financial interests of investors, then the guidance provided by APRA is inadequate, and trustees undertaking such investments may be in breach of Section 52 of the SIS Act.

Before presenting that evidence, it is necessary to note the absence of any unified definition of socially responsible investing and the challenges that this absence presents for such a review. The approach taken in this paper is deliberately broad and inclusive. For the purpose of this review, socially responsible investing may include investing in companies engaged in social justice, with environmentally sustainable practices, and ethical treatment of stakeholders including employees. It may include investing in companies with good corporate governance. It may also include not investing in companies that are seen as not meeting social justice benchmarks, not having environmentally sustainable practices and not treating stakeholders in an ethical manner. It may include not investing in companies in industries that are considered undesirable, such as stocks across the adult entertainment, alcohol, and biotechnology (where involved in producing controversial drugs), gaming, tobacco, and weapons industries. It may include positive and negative screening, and active engagement between the investor and company management.

The paper proceeds as follows. Section 2 presents the range of theoretical arguments that have been used to suggest that socially responsible investing may have an impact on expected return and risk. Some of these arguments suggest a positive relationship, while others suggest a negative relationship. Yet other arguments suggest that there may be no relationship. Empirical evidence is presented in Section 3. Having examined this evidence, comment on the regulatory barrier faced by superannuation trustees is presented in Section 4. Section 5 provides a summary.

2. EXPECTED RETURN, RISK AND SOCIALLY RESPONSIBLE INVESTING: THEORETICAL ARGUMENTS

Modern portfolio theory and the capital asset pricing model

Markowitz (1952) demonstrated that utility-maximising investors will hold a well-diversified portfolio of investments. Further, under modern portfolio theory, the optimal portfolio with respect to risk and expected return cannot be improved by imposing constraints with respect to, for example, socially responsible investing, on the individual weights on investments.

The Capital Asset Pricing Model (CAPM) of Sharpe (1964), Lintner (1965) and Mossin (1966) provides that the only firm-specific factor relevant to the expected return on an asset is its systematic or non-diversifiable risk, where this risk may be measured by the covariance of the returns on the asset with returns on the market portfolio of all risky assets, divided by the variance of returns on the market portfolio. This measure of risk of an asset is commonly referred to as its beta factor or simply beta. If the CAPM holds then there would be no abnormal expected return from socially responsible investing, and risk-reduction is maximised by holding a portfolio of all assets.

While lacking the theoretical rigour of the CAPM, there is voluminous empirical research that has shown there are factors other than beta that also explain realised returns. Fama and French (1992) showed that firm size (as measured by the market value of its shares) and the ratio of the book value of its equity to the market value of its equity (often called the company's book-to-market ratio) were, in addition to systematic risk, dominant factors in explaining realised return. Carhart (1997) added a fourth factor – a momentum effect - where better performing shares (winners) and poorer performing shares (losers) are identified over a period of 6 months. Jegadeesh and Titman (1993) had found that the winners outperformed the losers over the following six months. When Carhart added this momentum effect to the Fama-French three factors, he found that it too explained returns. In a subsequent paper, Fama and French (2015) showed that a five-factor model incorporating market risk, size, book-to-market ratio, and profitability and investment patterns performed better in explaining realised returns. Moreover, in a review paper, Harvey, Liu and Zhu (2016) examined the findings of 313 studies that had examined patterns in realised returns and catalogued 316 different factors.

Of these 313 studies, five (Brammer, Brooks and Pavelin (2006), Cremers and Nair (2005), Edmans (2001), Gompers, Ishii and Metrick (2003), and Fabozzi, Ma and Oliphant (2008)) identify factors that may be related to socially responsible investing. The empirical evidence from these five studies is incorporated into Section 3 below. However, it is noted that none of the theoretical explanations that have been provided for many of the other 311 factors identified by Harvey et al. (2016) present any strong a priori link to factors related to socially responsible investing.

Shunned-stock theory

The work of Merton (1987) on segmented markets provides two reasons to suggest that the returns to sin stocks may be higher than for other stocks. First, the shunning of sin stocks by a set of investors, such as institutional investors, results in the prices of those stocks being

depressed relative to their fundamental values. Due to limits to arbitrage, as detailed, for example, by Shleifer and Vishny (1997), a set of constraints, such as budgetary constraints, prevents investors not affected by ethical concerns from fully arbitraging away this pricing impact. Second, Merton's model also suggests that if risk-sharing of such shunned stocks is limited, then the CAPM no longer holds and idiosyncratic risk and not just beta matters for pricing. As a result, the increased litigation risk associated with the products of sin companies, which is heightened by social norms, should further increase the expected returns of sin stocks.

The application of Merton's model to virtuous stocks is the converse of the above argument. In equilibrium, if virtuous investors deliberately invest in virtuous stocks, in the presence of limits to arbitrage, the price of virtuous stocks will rise, and the expected returns will be lower than for other stocks.

Economic theories of social norms

The theories of social norms (see for example, Akerlof (1980), Elster (1989) and Romer (1984)) provide a framework under which, even when individuals maximize self-interest, they may accept a financial cost, if doing so reduces or prevents sanctions of loss of reputation for disobeying the norm. Under this argument, social considerations of corporate stakeholders (including consumers, employees and shareholders) may incite corporations to care for public goods such as the natural environment, even when such social considerations do not yield a direct benefit to the stakeholders. Similarly, fund managers may accept a lower return if doing so prevents sanctions imposed by various stakeholders.

Stakeholder theory

Under stakeholder theory, firms that are involved in positive activities are at a competitive advantage to those that do not. This argument is widely promulgated in the management literature under the umbrella term of "doing well by doing good". It is reviewed in Benabou and Tirole (2010), Heal (2005), Kitzmueller and Shimshack (2012), and Margolis, Elfeinbein, and Walsh (2009). Examples of doing well by doing good include benefits to consumers, improving employee morale and efficiency, reducing conflicts among stakeholders, deterring potential regulation, signalling product quality, and improving investor and consumer relations.

This literature presents arguments that profitability is increased and idiosyncratic risk – especially tail-risk, is reduced. Reduced tail-risk results from reducing frictions between

responsible firms and the societies in which they operate. Examples of these restrictions include product boycotts, employee strikes and lawsuits.

For there to be an impact of “doing well by doing good” on expected stock returns, firms’ expected future cash flows should have an association with their positive activities. In addition, stock prices should not reflect all of the value-relevant information that relates to these practices, because the superior profits that firms generate through them can only be a source of abnormal stock returns to the extent that investors do not expect them.

Similarly, avoidance of tail-risk events will only be net beneficial to ethical investors if such risks are not fully incorporated into prices by financial markets. For example, if risks are less but this is recognised by the market then prices will be higher and expected return lower, resulting in no impact on value.

Agency problems

Theoretical arguments that run counter to those of stakeholder theory suggest that firms “do good when they are doing well”. See, for example, Cheng, Hong and Shue (2016), Hong, Kubik and Scheinkman (2012), and Masulis and Reza (2015). These arguments employ agency theory to conclude that when firms are doing well, financial constraints on managers to maximize value will be less. This allows managers to spend money on such areas as employee happiness and various philanthropic activities, areas that may be beneficial to managers, but not be value enhancing and may be value destroying.

Smart money effect

Another argument with respect to socially responsible investing is the so-called “smart money effect”. In the conventional fund management industry, there is evidence that investors are able to make smart decisions by selecting funds that out-perform (see, for example, Gruber (1996) and Zheng (1999)). An argument that has been tested is whether this smart money effect may be more or less prevalent with respect to socially responsible investing as compared with conventional investment (see Renneboog, Horst and Zhang (2008a)).

Information generation

Another argument that has been made with respect to socially responsible investing is that responsible funds generate value-relevant information during the screening process. See, for example, Renneboog et al. (2008a). To be sound, this argument also requires a degree of

market inefficiency in that it requires that the value generated by the screening be in excess of the costs incurred in that screening.

Sin is a monopoly

Fabozzi et al. (2008) suggest that many “sin” industries have significant barriers to entry and may enjoy monopolistic power that results in abnormal levels of profitability. This monopolistic power may result from legislative restrictions and the impact of political influences. While this argument may be true, and sin firms may earn monopolistic rents from their activities, such rents would only affect on-going equity returns if financial markets failed to recognise the existence of these rents in pricing.

Headline risk

In addition to increased litigation risk, sin stocks may also face “headline” risk, or the scrutiny associated with operating outside of social norms (see Fabozzi et al. (2008)). Consistent with Merton’s shunned-stock model discussed above, if sharing of this risk is limited, this increased headline risk should increase the expected returns of sin stocks.

Activist investing and the “washing machine” investment strategy

Providing three conditions are met, Gollier and Pouget (2014) suggest that an activist investor can generate positive abnormal returns by investing in companies that are not socially responsible and turning them into ones that are socially responsible. First, the investor must be able to acquire a significant influence on target companies. Second, the investor will require a long-term outlook to implement the strategy. Third, the activist investor must be able to provide credibility to the market that it is capable of implementing socially responsible strategies. To these three reasons, a fourth might be added. The nature of the socially irresponsible activity must be capable of being changed. For example, a company with poor employee relations may be able to rectify this position whereas a company in the gambling industry may not be able to change the nature of its purported socially irresponsible behaviour.

2.1 Summary

Many of the theoretical arguments presented above present no difficulty for trustees seeking to meet their obligations under the SIS Act. Many theories suggest that there is no inconsistency between socially responsible investing and maximizing financial benefits. These arguments include the economic theories of social norms, stakeholder theory, the information

generation argument, and the “washing machine” argument of activist investing. These arguments all suggest that responsible investing may result in financial benefits.

However, the Capital Asset Pricing Model suggests that while socially responsible investing ought to have no impact on expected returns, it may reduce utility due to the portfolio not being fully diversified. This sub-optimality of the portfolio when measured against the CAPM will of course be true for any factor screen that is introduced. Further, theoretical arguments presented by the shunned-stock theory, and applications of agency theory, provide theoretical positions that responsible investing may be inconsistent with maximizing financial benefits. To the extent that these theoretical arguments may be accepted, trustees undertaking socially responsible investments are potentially in breach of the SIS Act.

3. EXPECTED RETURN, RISK AND SOCIALLY RESPONSIBLE INVESTING: EMPIRICAL EVIDENCE

In undertaking this review, we sought to cover as wide a range of academic research papers as possible. The references listed are deliberately fulsome to enable readers who wish to explore the nuances of the different studies and their methodologies to do so. However, we screened out all research that had not been either peer reviewed or widely circulated as a working paper. While academic research may not be free of bias, the potential biases in work published, for example, by ethical and conventional funds, is strong.

The majority of papers also relate to multiple theoretical arguments. Therefore, the order of the presentation of the evidence from these papers follows thematic areas that have been examined and does not sequentially present empirical evidence with respect to each theoretical argument.

3.1 Governance, employee satisfaction and the environment

Before reviewing studies that have examined evidence with respect to wide definitions of socially responsible investing, evidence with respect to three specific components that have been individually examined will be reviewed – namely governance, employee satisfaction and the environment.

Governance

Gompers et al. (2003) constructed a “Governance Index” using 24 distinct corporate governance provisions for US firms. Over the period 1990 to 1999, they found that a hedge strategy of buying firms in the highest decile with respect to shareholder rights, and selling

firms in the lowest decile, would have earned an abnormal return of 8.5% per annum. They found that firms with stronger shareholder rights had higher firm value, higher profits, higher sales growth, lower capital expenditures, and made fewer corporate acquisitions. They explained these results by suggesting that over the sample period investors were not aware of the benefits of good governance.

Following Gompers et al. (2003), Cremers and Nair (2005) examined proxies for internal governance comprising the percentage share ownership of institutional block holders, and the percentage of share ownership by pension funds. They found that measures of internal governance were only associated with long-term positive abnormal returns when they were complemented by external measures of governance such as vulnerability to takeover.

This result was subsequently confirmed in the US by Bebchuk and Cohen (2005) and Bebchuk, Cohen and Ferrell (2009), although Bebchuk et al. (2009) found that only governance measures related to low managerial entrenchment were associated with positive abnormal returns. Further, Bebchuk, Cohen and Wang (2013) found that the association between governance and returns disappeared for the period 2000 to 2008. They concluded that the association over the period 1990 to 1999 and its disappearance were both due to market participants' gradually learning to appreciate the difference between good-governance and poor-governance firms. Consistent with learning, the correlation's disappearance was associated with increases in market participants' attention to governance. Market participants and security analysts were, until the beginning of the 2000s but not subsequently, more positively surprised by the earning announcements of good-governance firms. Although the negative association between governance indices and firm value and operating performance persisted during the 2000s these indices no longer generated abnormal returns, suggesting that the impact on value had already been reflected in stock prices by the beginning of the 2000s. Core, Guay and Rusticus (2006), and Giroud and Mueller (2011) report results similar to those of Bebchuk et al. (2013).

Outside of the US the positive relationship between governance and performance has been reported in a range of studies including Aggarwal, Erel, Ferreira and Matos (2011), Aggarwal, Erel, Stulz and Williamson (2009), Bauer, Gunster and Otten (2004), Bena, Ferreira, Matos and Pires (2016), Brooke, Docherty, Psaros and Seamer (2018), Dahya, Dimitrov and McConnell (2008), Doidge, Karolyi and Stulz (2004), and Durnev and Kim (2005).

Employee satisfaction

US studies of the relationship between measures of employee satisfaction and firm performance include Abowd (1989), Diltz (1995a), Derwall, Koedijk and Ter Horst (2011), Dhrymes (1998), Galema, Plantinga and Scholtens (2008), Kempf and Osthoff (2007), and Statman and Glushkov (2009). Abowd (1989) found that announcements of pay increases reduced firm valuations, Diltz (1995a) found that equity returns were uncorrelated with measures of women in management and negatively correlated with levels of family benefits as published by the Council of Economic Priorities. Dhrymes (1998) found no relationship between firm valuations and the employee relations variable provided by the social research company Kinder, Lydenberg and Domini Research and Analytics (KLD), which is now owned by MSCI ESG Research. However, Derwall et al. (2011), Galema et al. (2008), Kempf and Osthoff (2007) and Statman and Glushkov (2009) also all used the KLD data but different statistical methodologies and each study found a positive relationship between the employee relations variable and equity returns.

Edmans (2011, 2012) analysed the relationship between employee satisfaction and long-run stock returns. Employee satisfaction was measured by inclusion of a company in the list of the “100 Best Companies to Work For in America”, published initially in book form and since 1993 by Fortune magazine. Filbeck and Preece (2003) had reported that firms in the 1998 list had exhibited positive abnormal returns prior to inclusion in the list. Edmans (2011, 2012) found that a portfolio of these companies earned an annual abnormal return of 3.5% from 1984 to 2009. The results were robust to controls for firm characteristics, different weighting methodologies, and the removal of outliers. On average equity returns around earnings announcement dates were positive, a result consistent with the equity market not fully valuing the intangible benefits of employee satisfaction.

Outside of the US, Brammer, Brooks and Pavelin (2006) found no statistically significant association, over the period 2002 to 2005, between the equity return performance of UK companies and their “employee responsibility scores” as provided by the Ethical Investment Research Service. Van de Velde, Vermeir and Corten (2005) also found no statistically significant association, over the period 2000 to 2003, between the equity return performance of European companies and their employee responsibility scores provide by the corporate social responsibility agency Vigeo Eiris.

However, Edmans, Li and Zhang (2018) provided a comprehensive study of the relationship between employee satisfaction and firm performance around the world, using lists of the “Best

Companies to Work For” in 14 countries. Using data for the period 1997 to 2013, they found that, in countries with flexible labour markets, including the US and the UK, employee satisfaction was associated with positive long-run abnormal returns and higher future profitability. Again for these countries, on average equity returns around earnings announcement dates were positive, a result consistent with the equity markets not fully valuing the intangible benefits of employee satisfaction. However, an association between employee satisfaction and returns was not found in countries with rigid labour markets, such as Germany. These results are consistent with employee satisfaction improving recruitment, retention, and motivation in flexible labour markets, where firms face fewer constraints on hiring and firing and employees and have greater ability to respond to higher satisfaction. In rigid labour markets, legislation already provides minimum standards for worker welfare and so additional expenditure may exhibit diminishing returns.

Environment

The first detailed study to examine the relationship between measures of environmental responsibility and firm performance was Derwall, Günster, Bauer and Koedijk (2005). This study used “eco-efficiency” scores provided by Innovest Strategic Value Advisors to evaluate equity portfolios. They reported that a portfolio that contained the 30% of US stocks with the highest eco-efficiency scores relative to industry peers earned an annual abnormal return of 4.15% over the period 1995–2003. A similar result, also using data provided by Innovest Strategic Value Advisors was reported by Günster, Bauer, Derwall and Koedijk (2011).

Subsequent US studies by Galema et al. (2008), Kempf and Osthoff (2007) and Statman and Glushkov (2009) all used the environment variable provided by KLD with only Kempf and Osthoff (2007) finding any statistical association with equity returns. Kempf and Osthoff (2007) reported a statistically significant positive relationship, consistent with the finding of Derwall et al. (2005).

Fernando, Sharfman and Uysal (2017) also use the KLD data for US firms and examined the relationship between environmental performance and firm value from the perspective of institutional investors. They labelled those firms with low environmental performance as “toxic”, and those with high environmental performance as “green”. They reported that institutional investors shun both toxic and green stocks compared with neutral stocks. They reported that both toxic and green stocks have lower Tobin’s Q values than neutral stocks, consistent with institutional investors’ lower propensity to invest in these stocks. However,

equity returns on toxic and green stocks were not significantly different to those of neutral stocks.

Outside of the US, Brammer et al. (2006) found no statistically significant association, over the period 2002 to 2005, between the equity return performance of UK companies and their environmental responsibility performance as provided by the Ethical Investment Research Service. Van de Velde et al. (2005) also found no statistically significant association, over the period 2000 to 2003, between the equity return performance of European companies and their environmental responsibility scores provide by Vigeo Eiris.

In another study outside of the US, Aktas, de Bodt and Cousin (2011) used data from Innovest Strategic Value Advisors to examine the relation between the equity returns of acquirers in mergers and acquisitions and the targets' social and environmental performance. Using takeovers for 17 countries, they reported a positive relation between acquirer gains and the level of the target's environmental risk management practices. They interpreted this finding as being consistent with the equity market rewarding acquirers for making environmentally responsible investments. They also documented that the environmental performance of the acquirer increased following the acquisition of the environmental aware target.

3.2 Corporate social responsibility

In addition to specific components of responsible investing, studies have examined the relationship between firm value and wider definitions of responsible investing.

Diltz (1995a and 1995b), who examined the performance of firms rated on social performance criteria by the Council of Economic Priorities, conducted early studies. He found no evidence of abnormal performance by these firms.

Borgers, Derwall, Koedijk and Ter Horst (2013), Deng, Kang, and Low (2013), Di Giuli and Kostovetsky (2014), Flammer (2015), Galema et al. (2008), Hwang, Titman and Wang (2018), Kempf and Osthoff (2007), Krüger (2015), Servaes and Tamayo (2013) and Statman and Glushkov (2009) all used data provided by KLD. Of the earlier of these studies, by Galema et al. (2008), Kempf and Osthoff (2007), and Statman and Glushkov (2009), again only Kempf and Osthoff (2007) found any statistical association with equity returns. Kempf and Osthoff (2007) reported a statistically significant positive relationship across some measures of corporate social responsibility and equity returns.

Borgers et al. (2013) found that measures of social responsibility were positively associated with long-term risk-adjusted returns over the period 1992-2004. They also found an association between these measures of social responsibility and equity returns at dates of earnings announcements, and that analysts' earnings forecasts underestimated the earnings of socially responsible firms, evidence of the market underestimating the value of social responsibility. However, over the period 2005-2009, these relationships diminished considerably. The authors concluded that, as attention to social responsibility became more widespread, any abnormal returns were eliminated.

Servaes and Tamayo (2013) found that corporate social responsibility and firm value were positively related for firms with high customer awareness, as proxied by advertising expenditures. However, for firms with low customer awareness, the relation was either negative or insignificant. In addition, they found that the effect of awareness on the corporate social responsibility–value relation was reversed for firms with a poor prior reputation as corporate citizens. This evidence is consistent with the view that corporate social responsibility activities can add value to firms but only under certain conditions.

Di Giuli and Kostovetsky (2014) found that firms had higher levels of corporate social responsibility when they had Democratic rather than Republican founders, CEOs, and directors, and when they were headquartered in Democratic rather than Republican-leaning states. However, they found no evidence that firms recover expenditures on corporate social responsibility through increased sales. Indeed, increases in social responsibility ratings were associated with negative future stock returns and declines in firm return on assets, suggesting that any benefits to stakeholders from social responsibility come at the direct expense of firm value.

Deng, Kang, and Low (2013), Flammer (2015), Krüger (2015) use event-study methodology to examine the relationship between social responsibility and firm value. The strength of these studies is that they effectively address a central problem of studies in this area, namely the determination of causality. Studies that report a positive association between long-run returns and corporate responsibility cannot address the basic question of whether firms that are more responsible tend to be more profitable or, alternatively, more profitable firms tend to channel more resources into projects that increase the wellbeing of stakeholders.

Deng et al. (2013) used a large sample of mergers in the US to examine whether corporate social responsibility creates value for acquiring firms' shareholders. They found that compared

with low responsibility acquirers, high responsibility acquirers realized higher merger announcement returns, higher announcement returns on the value-weighted portfolio of the acquirer and the target, and larger increases in post-merger long-term operating performance. These portfolios also realised positive long-term stock returns, suggesting that the market did not fully value the benefits of social responsibility immediately. In addition, they found that mergers by high responsibility acquirers took less time to complete and were less likely to fail than mergers by low responsibility acquirers. These results suggest that acquirers' social performance is an important determinant of merger performance and the probability of its completion.

Flammer (2015) examined the effect of shareholder proposals related to corporate social responsibility on financial performance. Specifically, she focussed on proposals that passed or failed by a small margin of votes. She found that the adoption of these “close-call” proposals lead to positive announcement returns and superior accounting performance, implying that they were value enhancing. When she examined the channels through which companies benefit from responsibility, she found that labour productivity and sales growth increased after the vote.

Krüger (2015) studied the shareholder value implications of positive and negative corporate social responsibility events in the short-run. He showed that investors reacted strongly negatively to negative news about social responsibility. A negative reaction with respect to negative events is consistent with the view that a substantial cost is associated with social irresponsibility.

However, the negative reaction with respect to negative stakeholder news provides a necessary but not sufficient condition for socially responsible policies being in the shareholder's best interest. This is because analysis of shareholder value effects due to negative events does not provide any insights into the costs associated with implementing corporate policies that would prevent such negative events from happening. To examine whether shareholders should encourage the implementation of socially responsible corporate policies, he studied the value implications of positive events. He found that investors reacted slightly negatively when positive news about a firm's responsibility policies were revealed.

A refinement of the analysis provided evidence that improving a firm's social responsibility can be shareholder value enhancing under certain circumstances. When positive news about corporate social responsibility was released for firms where there were less likely to be agency problems between management and shareholders, investors tended to react more favourably.

He also showed that when the positive corporate social responsibility news was more likely to be the result of managerial efforts aimed at offsetting prior corporate social irresponsibility, stock prices did increase on average. Hence, a sufficient condition for environmental and social responsibility being in the shareholder's best interest is borne out by the data for firms with a history of stakeholder-related controversies.

Hwang, Titman and Wang (2018) conducted an event study to examine the impact of corporate social responsibility on returns. To do so, they ranked institutional investors as either socially responsible investors, or not socially responsible investors, based on the social responsibility scores from the KLD database for firms in their portfolios. Based on this calculation, they calculated the ownership percentage of socially responsible investors for each stock. They found that quarterly increases in the ownership percentage of socially responsible investors were associated with increases in KLD scores and more importantly with negative abnormal equity returns in the subsequent quarter. Specifically, they found that most of this negative abnormal return was generated in the second month of the quarter, when the holdings of institutional investors for the previous quarter were revealed. This evidence suggests that corporate social responsibility activities hurt shareholders.

Outside of the US, Brammer et al. (2006) and Van de Velde et al. (2005) found no statistically significant association between the equity return performance of UK and European companies respectively and their social responsibility performance. Margolis et al. (2009) conducted a meta-analysis of empirical studies and concluded that the average relation between social responsibility and returns is positive but small.

3.3 Agency problems

As noted above, studies that report a positive association between long-run returns and corporate responsibility cannot address the basic question of whether firms “do well by doing good” or “do good when they are doing well”. Agency conflicts between management and shareholders may increase when firms are doing well and financial constraints on managers are less. This allows managers to spend money on such areas as employee happiness and various philanthropic activities, areas that may be beneficial to managers, but may not be value enhancing and may be value destroying for shareholders.

A range of papers has addressed this issue. Hong et al. (2012) found that firms that are less financially constrained tend to engage in more corporate socially responsible activity and that

during the “Internet Bubble” period of 1996 to 2000, when these financial constraints were less binding, that previously constrained firms increased these activities. They found increases in corporate social responsibility activity were more sensitive to the lessening of financial constraints than were increases in capital and research and development expenditures.

While Hong et al. (2012) did not examine whether these agency conflicts result in a reduction in shareholder value, other studies have found such an effect. As noted above, Krüger (2015) found that when positive news about corporate social responsibility was released for firms where there were more likely to be agency problems between management and shareholders, investors tended to react more negatively. This result suggests that investors are aware of management spending on corporate social responsibility that decreases shareholder value and react accordingly.

Masulis and Reza (2015) and Cheng, Hong and Shue (2016) examined the 2003 Dividend Tax Cut in the US. This cut in the statutory tax rate on dividends was particularly beneficial to managers because unlike other large shareholders they are unable to filter ownership through tax-advantaged accounts (see Shleifer and Vishny (1986)). It therefore increased the cost of managers pursuing their private preferences toward charitable giving to the extent that these contributions reduce a firm’s profitability and share value. Consistent with the implication of this incentive, Masulis and Reza (2015) found that corporate giving significantly declined after 2003, and that this effect became stronger as management ownership increased. This reduction in philanthropy was also greater where corporate governance was weak. These results suggest that well-governed firms were spending less on corporate philanthropy prior to 2003.

To further examine agency aspects of corporate philanthropy, they expanded on the work of Faulkender and Wang (2006) who demonstrated that investors discount the value of cash retained within companies. Masulis and Reza (2015) found that corporate giving had a substantial impact on firm value through its impact on cash: the estimated marginal value of cash was 8.1 cents lower if a firm raises corporate giving from the 50th to the 75th percentile level. This finding is consistent with the view that shareholders anticipate a greater misuse of cash reserves as charitable giving rises and therefore place a lower value on cash when valuing the company.

Cheng et al (2016) refined the Masulis and Reza (2015) analysis and argued that when managers own close to zero percent of the firm, even a large dividend tax cut would not change their incentives. At the same time, managers with very high levels of ownership are

likely to have incentives that are already closely aligned with those of shareholders. These high ownership managers are likely to spend less on inefficient goodness to begin with, so there would be little scope to reduce agency-motivated goodness following a dividend tax cut. However, they argued that managers with medium firm ownership stakes should respond more to a dividend tax cut than managers with very low or high ownership stakes. Consistent with this argument, they found that firms with medium ownership by management cut corporate social responsibility measures by the most and that these firms experienced larger increases in valuation than did other firms.

The above studies each report a positive relationship between agency problems and corporate social responsibility activity. However, Ferrell, Liang and Renneboorg (2016), using data sets of corporate social responsibility activity across nearly 100,000 firm-time observations across a large number of countries, failed to find any evidence that corporate social responsibility activity is associated with traditional proxies for agency problems such as capital spending, compensation arrangements, ownership structures, and country-level investors protection laws. Indeed, for many of these proxies the evidence suggested that well-governed firms undertake greater corporate socially responsible activity. Further, they found evidence that the negative relation that exists between firms with entrenched management and their value as measured by Tobin's Q value, was weakened where those firms with entrenched management had high levels of corporate social responsibility activity.

3.4 Activist or engaged investors

The discussion thus far has all examined investing without activism or active engagement between investors and company managers. However, a range of studies has examined active or engaged investors in the context of socially responsible investing.

The earliest of these studies relate to investments by the Californian Public Employees' Retirement Fund (CalPERS). CalPERS is the largest pension fund in the United States and manages the pensions and health benefits of Californian public employees, retirees and their families. While activism is widespread, CalPERS was and is a leading corporate social responsibility activist, taking public stands on greenhouse gas emissions, fuel efficiency of cars, labour negotiations, investments in tobacco firms, investments in Sudan and South Africa, as well as general corporate governance matters.

Beginning in 1987, CalPERS began targeting companies with which it had concerns about their corporate governance practices, and from 1992 to 2010 published a “focus list” of these companies. This led to an industry of papers that examined the market reaction to companies targeted by CalPERS. See, for example, Anson, White and Ho (2003 and 2004), Barber (2007), Crutchley, Hudson and Jensen (1998), Del Guercio and Hawkins (1999), English, Smythe and McNeil (2004), Nelson (2006), Nesbitt (1994), Prevost and Rao (2000), Smith (1996), and Wahal (1996).

The most comprehensive and methodologically sound of these studies was Barber (2007). That study confirmed the existence of statistically and economically significant positive short-term abnormal returns around the public announcements of the focus list for companies included in that list, and the existence of economically large but not statistically reliably positive long-term abnormal returns in the years following the announcement. However, as noted by Barber (2007), it needs to be highlighted that CalPERS activism in relationship to the firms on the focus list was, with rare exceptions, related to improving governance and shareholder rights rather than wider social activism such as matters related to greenhouse gas emissions or the fuel efficiency of cars. These matters were addressed separately by CalPERS and their impact on equity value has not been examined.

Studies that have examined the impact of social activism include Carleton, Nelson and Weisbach (1998), Teoh, Welch and Wazzan (1999), Dimson, Karakaş and Li (2015), Hoepner, Oikonomou, Sautner, Starks and Zhou (2018), and Hsu, Liang and Matos (2018).

Carleton et al. (1998) analysed the process of private negotiations between the Teachers Insurance Annuity Association – College Retirement Equities Fund (TIAA – CREF) and 45 firms that it attempted to influence with respect to corporate governance matters. Many of these matters related to shareholder rights but 20 related to attempts to increase board diversity. Carleton et al. (1998) documented significantly negative abnormal returns to equity surrounding the targeting dates of these attempts. Whether these results would translate into the current debate with respect to the impact of board diversity on equity values is a moot point.

Teoh et al. (1999) examined the effect of social activism with respect to the South African boycott in the 1980s. Specifically, they examined the price impact of 46 firms that voluntarily divested their South African operations. They found no evidence that these divestments affected firm values.

Dimson, Karakaş and Li (2015) examined active engagement by a large institutional investor ranked in the top 100 institutions worldwide with respect to funds under management. Active engagement involved letters, emails, telephone conversations, and direct conversation with senior management. They examined 2,152 engagements for 613 US firms between 1999 and 2009, and referred to cases in which changes were implemented as successful engagements. They found that engagements generated positive average abnormal returns of 2.3% over the year following the engagement, with there being an average 7.1% abnormal return for successful engagements and no market reaction to unsuccessful engagements. These abnormal returns were similar for engagements related to corporate governance (for example, shareholder rights and transparency) and environment and social matters (for example, climate change, environmental management, human rights and labour standards).

Hoepner, Oikonomou, Sautner, Starks, and Zhou (2018) also examine shareholder engagement by a large institutional investor but focus on the impact of this engagement on the downside risk of targeted firms as measured by lower partial moments and value at risk. They argued that an increasing number of institutional investors actively engage with firms in order to minimise the legal, reputational, operational and financial risks of environmental disasters. They examined 682 engagements for 296 firms worldwide between 2005 and 2014 by a large institutional investor with more than \$US200 billion in assets under management. They showed that engagements reduced downside risk and that this impact varies across engagement themes. For example, they found that engagement substantially reduced environmental risks such as those stemming from climate change, but only if engagement over environmental topics is combined with improving governance. However, they did not find any risk effects of engagement on social themes such as health and safety, and supply chain management.

Hsu, Liang and Matos (2018) examined publicly-listed state-owned enterprises in 45 countries and found that they engaged more in environmental and social issues, and that this engagement did not come at a cost to shareholder value as measured by Tobin's Q values. This effect was more pronounced among firms in emerging market economies and in countries with higher energy risks, and was attributable to ownership stakes held directly by domestic governments, rather than to foreign state ownership or investment via sovereign wealth funds.

3.5 “Sin” stocks

The above studies have examined the impacts of investing in “virtuous” stocks. However, “sin” stock investing has been examined by Derwall et al. (2011), Durand, Koh, and Limkriangkrai (2013), Durand, Koh, and Tan (2013), Fabozzi et al. (2008), Fauver and McDonald (2014), Hong and Kacperczk (2009), Kemp and Ostoff (2007), Naber (2001), Richey (2017), Salaber (2013), Statman and Glushkov (2009), and Visaltanachoti, Zou and Zheng (2009). All of these studies defined sin stocks to include those in the tobacco, alcohol, and gaming industries, with many studies also including stocks in the weapons and nuclear industries. Fabozzi et al. (2008) also included stocks in the adult entertainment industries and certain stocks in the biotechnology industry (where those companies were involved in producing controversial drugs).

The studies by Derwall et al. (2011), Durand, Koh, and Limkriangkrai (2013), Hong and Kacperczk (2009), Kemp and Ostoff (2007), Naber (2001), and Statman and Glushkov (2009) all examined US stocks and uniformly found that sin stocks earned positive abnormal returns. This finding was confirmed in European countries by Salaber (2013), a study of 21 countries by Fabozzi et al. (2008), an analysis of G20 countries by Fauver and McDonald (2014), for a portfolio of stocks from Canada, France, Germany, Italy, Netherlands, Spain, Switzerland and the UK by Hong and Kacperczk (2009), and in China by Visaltanachoti, Zou and Zheng (2009). The only exceptions to these results were the findings by Durand, Koh and Tan (2013) and Richey (2017). Durand, Koh and Tan (2013) confirmed the finding in Australia and New Zealand but not in India, Japan, Malaysia, Singapore or South Korea. Richey (2017) reported that a portfolio of vice stocks earned positive alpha when benchmarking against the CAPM, the Fama-French three-factor model and the Carhart four-factor model, but that this outperformance disappeared when benchmarked against the Fama-French (2015) five-factor model.

The most detailed of these studies was by Hong and Kacperczk (2009). Their study of US stocks covered 193 firms over the period 1926 to 2006. Using a range of methodologies to examine return performance, they concluded that sin stocks earned positive abnormal returns of the order of 3 to 5 percent per annum.

Their analysis of tobacco companies was particularly informative. For the first half of the 20th century, tobacco was not widely regarded as harmful. However, by the mid-1950s the causal association between smoking and lung cancer had been established. By then, at least some investors were shunning the tobacco business. Hong and Kacperczyk date the transition of

tobacco companies from neutral to “sinful” status as occurring in the US during the period before 1965. After 1965, when the health impact of tobacco became well known, US tobacco companies outperformed comparable firms by more than 3% per annum over the period 1965–2006.

3.6 Socially responsible investing and risk

An extensive range of papers have documented that firms with good corporate governance and / or high levels of corporate social responsibility display less probability of negative events impacting returns and display less overall levels of risk. Those papers documenting decreased tail-risk include Alam and Rajjaque (2010), Bouslah, Kryzanowski and Bouchra, (2013), Diemont, Moore and Soppe (2016), Ferreira and Laux (2007), Godfrey, Merrill and Hansen (2009), Hoepner, Oikonomou, Sautner, Starks and Zhou (2018), Kim, Li, and Li (2014), Koh, Qian and Wang (2014), and Luo and Balvers (2014). Papers documenting reduced risk more generally include Albuquerque, Koskinen, and Zhang (2017), Jo and Na (2012), Lee and Faff (2009), Luo and Bhattacharya (2009), and Oikonomou, Brooks, and Pavelin (2012). Consistent with these results, Lins, Servaes and Tamayo (2017) found that during the 2008–2009 financial crisis, high corporate socially responsibility firms earned higher stock returns than did low corporate social responsibility firms.

The studies by Lee and Faff (2009), Luo and Balvers (2014), and Oikonomou, Brooks, and Pavelin (2012) find a positive association between the risks of socially irresponsible stocks and returns, suggesting that there is no mispricing.

3.7 Performance of indices of ethical firm values

A range of indices of socially responsible firms has been in existence since 1990, with indices using an array of screens to determine composition. Studies by Abramson and Chung (2000), Albaity and Ahmad (2008), Belghitar, Clark and Deshmukh (2014), Collison, Cobb, Power and Stevenson (2008), Consolandi, Jaiswal-Dale, Poggiani and Vercelli (2009), Girard and Hassan (2008), Kurtz (1997), Kurtz and Di Bartolomeo (1996), Luck and Pilotte (1993), Sauer (1997), Schröder (2004 and 2007), and Statman (2000 and 2006) have compared the risk / return performance of these indices with conventional indices and, with rare exceptions, have found no differences. Where differences were reported, they were for short periods of between 2 to 6 years, and performance did not take into account the firm-size and book-to-market ratio pricing factors of Fama and French (1992).

3.8 Simulation studies

Using applications of modern portfolio theory, a number of studies have examined the impact of screening stocks on portfolio risk and return. These studies include Adler and Kritzman (2008), Ang (2014), Grossman and Sharpe (1986), Guerard (1997a and 1997b), Heinkel, Kraus and Zechner (2001), and Humphrey and Tan (2014). Ex ante, these screens must result in higher risk and / or lower expected return but the difference may or may not be deemed material. Adler and Kritzman (2008) demonstrate some underperformance by constrained portfolios, while Guerard (1997a and 1997b), and Humphrey and Tan (2014) suggest that the difference is marginal.

Grossman and Sharpe (1986) modelled the impact of divestments from South African companies in the 1980s. They found that the exclusion of South African-related stocks resulted in small underperformance. However, the small-stock bias of the South Africa-free strategy increased portfolio returns. No abnormal performance was found after allowing for the firm-size pricing factor.

Ang (2014) estimated the impact of exclusions of different industries from a portfolio formed from the FTSE All World Index, which, in 2012, comprised 39 industries and 2871 stocks. He examined the impact of excluding tobacco companies, then added aerospace and defence to the exclusions, and finally added banks. He found that the impacts on risk / expected return were small. He attributed this result not to the weightings of these industries in the portfolio (1.53% for tobacco, 1.19% for aerospace and defence, and 9.52% for banks), but to the marginal benefits of diversification in a portfolio with a large number of stocks.

Heinkel et al. (2001) model the impact of “green” investors who shun “polluting” stocks. They estimate that the proportion of green investors needs to be more than 20% before “polluting” firms will incur a higher cost of capital and, by implication, provide a higher return to investors who are not “green”. If the percentage of socially responsible investors is as high as 22% as suggested by the United States Social Investment Forum Annual Report (2016, p. 9), and as noted in the introduction to this paper, then the Heinkel et al. (2001) model suggests that “polluting” firms may be expected to provide higher returns than neutral firms.

3.9 Fund performance

A summary of the above evidence with respect to direct investment may be that, while there are important exceptions, at the diversified portfolio level there is no measurable relationship between socially responsible investing and expected return. This evidence would suggest that

any difference in the performance of conventional and socially responsible funds is also likely to not be measurable.

The research on fund performance presents evidence that is generally consistent with this expectation. Methodologies used in this research vary greatly. Some use indices as benchmarks, while others use the performance of conventional funds. In noting these different benchmarks, the long-standing finding that funds in general underperform benchmark indices needs to be recognised. See, for example, Fama and French (2010). Given this finding, assessing ethical fund performance against ethical or conventional indices is a higher benchmark than is assessing their performance against that of conventional funds. In addition to different benchmarks, some studies measure abnormal returns using the Capital Asset Pricing Model, while others use the Fama-French three-factor model.

A voluminous range of studies has found little or no discernible positive or negative abnormal return performance of socially responsible funds. These studies include the following: Bauer, Derwall and Otten (2007), Bauer, Koedijk and Otten (2005), Bello (2005), Benson, Brailsford and Humphrey (2006), Bialkowski and Starks (2015), Blanchett (2010), Climent and Soriano (2011), Cortez, Silva and Areal (2009), Fernandez-Izquierdo and Matallin-Saez (2008), Foerster and Asmundson (2001), Geczy, Stambaugh and Levin (2005), Goldreyer, Ahmed and Diltz (1999), Gregory, Matatko and Luther (1997), Gregory and Whittaker (2007), Hamilton, Jo and Statman (1993), Hassan, Khan and Ngow (2010), Kreander, Gray, Power and Sinclair (2005), Luther and Matatko (1994), Luther, Matatko and Corner (1992), Mallin, Saadouni and Briston (1995), Sauer (1997), Statman (2000), Schöltens (2005 and 2007), Schröder (2004), and Viviers, Bosch, Smith and Buijs (2008). Renneboog, Ter Horst and Zhang (2008b) provide a survey, including a discussion of many of these studies.

Chang and Witte (2010), Derwall and Koedijk (2009), Gil-Bazo, Ruiz-Verdú and Santos (2010), Henke (2016) and Lyn and Zychowicz (2010) all report some evidence of a positive relation between socially responsible investing and abnormal returns. However, consistent with investors paying a price for social responsibility, Jegourel and Maveyraud (2010), Lee, Humphrey, Benson and Ahn (2010), and Renneboog et al. (2008a) all report a negative relation between social responsibility and abnormal returns. Each of these studies reported that the strength of the negative relationship increased as the extent to which stocks considered not acceptable were screened from portfolios. Barnett and Salomon (2006) reported that a low level of screening improved risk-adjusted returns but in a result consistent

with the findings of Jegourel and Maveyraud (2010), Lee et al. (2010) and Renneboog et al. (2008a), found that as the level of screening intensified, risk-adjusted returns decreased.

Borgers, Derwall, Koedijk and Ter Horst (2015), Capelle-Blancard and Monjon (2014), Chong, Her and Phillips (2006), Hoepner and Zeume (2014), and Shank, Manullang and Hill (2005) have all specifically examined the impact of “sin” stocks on fund performance. The Chong et al. (2006) and Shank et al. (2005) studies are limited in their scope and examine a small number of funds over a limited number of years, resulting in findings that are unreliable. Hoepner and Zeume (2014) examine the performance of the Vice Fund which was established in 2002 and focuses investment on companies in the tobacco, gambling, defence / aerospace, and alcohol industries. They found that while Hong and Kacperczyk (2009), amongst others, had found that stocks in these industries earned positive abnormal returns, a fund set up to exploit this regularity was unable to generate abnormal returns. However, Borgers et al. (2015) examined the holdings of US equity mutual funds over the period 2004 to 2012 and found that funds that did not exclude companies that had core operations in the tobacco, alcohol, and gambling industries earned economically and statistically significantly higher returns than funds that excluded these stocks. Capelle-Blancard and Monjon (2014) reported a similar finding to Borgers et al. (2015) in a study of French funds.

3.10 Risk of socially responsible funds

As evidence suggests that corporate social responsibility firms display less probability of negative events affecting returns, it is expected that funds that invest in such firms will also display these characteristics. This is the finding of Areal, Cortez and Silva (2010), Henke (2016), and Nofsinger and Varma (2014). These studies find that compared to conventional funds, socially responsible funds outperform during periods of market crises. This dampening of downside risk comes at the cost of underperforming during non-crisis periods.

Smart Money Effect

Some studies such as Gruber (1996) and Zheng (1999) on conventional funds report a “smart money” effect, where the flow of money to funds can predict short-term fund performance. Renneboog et al. (2008a) found mixed evidence of this effect with respect to ethical funds. Socially responsible investors were unable to identify the funds that would outperform in the future, whereas they showed some fund-selection ability by withdrawing money from funds that subsequently performed poorly. However, Renneboog, Ter Horst and Zhang (2011) adjusted for factors such as fund fees and size and found no evidence of a smart money effect,

as the funds that received more inflows neither outperformed nor underperformed their benchmarks or conventional funds.

3.12 Are ethical funds different from conventional funds?

Given the majority of studies find that the return performance of ethical funds is not measurably different from that of conventional funds, a natural question to ask is whether ethical funds are in fact different with respect to other characteristics. However, this question is impossible to answer categorically because *some* ethical funds are different to conventional funds, while *some* ethical funds would appear to be indistinct from conventional funds. Kempf and Osthoff (2008) resorted to Latin and declared that ethical funds were fundamentally different – *Nomen est Omen* – the name says it all. Conversely, on 25 August 2016 the UK *Independent* newspaper carried the front-page headline “The ‘ethical’ investment funds pumping millions into oil firms and big tobacco”. The article highlighted investments by self-titled ethical funds in companies such as Exxon Mobil and British American Tobacco, Europe’s largest cigarette maker.

Studies that have examined the differences between ethical and conventional funds include Bauer, Derwall and Otten (2007), Bauer, Koedijk and Otten (2005), Benson and Humphrey (2008), Bollen (2007), Cortez, Silva and Areal (2009), and Kempf and Osthoff (2008). Interestingly, Bauer, Derwall and Otten (2007), Bauer, Koedijk and Otten (2005) and Cortez, Silva and Areal (2009) all report that ethical fund returns correlate more with conventional market indices than ethical indices, suggesting that for some ethical funds the difference is more about name than form.

3.13 Australia

As this review of the evidence is set within the context of the Australian regulatory environment, a separate coverage of the Australian evidence is presented. Before presenting that evidence, it may be noted that a priori the evidence from other markets might be expected to apply to the Australian market. However, some differences might be expected to pertain. For example, what constitutes “sin” in one culture or country may not constitute “sin” in another. Furthermore, cultural and religious differences may affect what are considered social norms and impact investor decisions. For example, Hood, Nofsinger and Varma (2014), and Kumar and Page (2014), showed that investors belonging to different religious denominations have different portfolio weights in the shares of companies with different social policies. For instance, they showed that Catholic investors are more likely to own sin stocks, such as

alcohol and tobacco stocks, than Protestant investors are. Salaber (2013) found that alcohol and tobacco stocks earned positive abnormal returns in countries with a predominantly Protestant environment but this was not so for stocks in those countries that had a predominantly Catholic environment.

Nevertheless, the extant evidence is consistent with that from other markets. Limkriangkrai, Koh and Durand (2017) studied the ESG ratings provided by Regnan, a company that provides ratings on the largest 200 companies by market capitalisation on the Australian market. After adjusting for risk factors, over the period 2009 to 2014, they found no evidence of abnormal returns with respect to any of these factors.

However, Ali and Gold (2002) found that a portfolio of alcohol, tobacco and gambling stocks earned positive abnormal returns over the period 1994 to 2001, while Fabozzi et al. (2008) also found positive abnormal returns over the period 1970 to 2007 for their sample of 34 Australian “sin” stocks. Similarly, Durand, Koh and Tan (2013) also found positive abnormal returns over the period 1990 to 2009 for their sample of 74 stocks in the alcohol, tobacco, gaming and defence industries.

With respect to fund performance, Bauer, Otten and Tourani-Rad (2006), Cummings (2000), and Humphrey and Lee (2011) found that any differences in returns on ethical and conventional funds were not statistically significant, while Jones, van der Laan, Frost and Loftus (2008), and Tippett (2001) both reported some evidence of underperformance of ethical funds.

A simple examination of the Australian market is also relevant to any discussion of the impact of ethical investing – at least with respect to listed equities. Institutional investors rarely invest outside of the largest 300 companies in Australia. These companies comprise more than 80% of the Australian market by capitalisation and may be considered the “investable universe” for institutional investors. At February 2018, of the 11 sectors used in the Global Industry Classification Standard (GICS) taxonomy, Financials represented 32% of market capitalisation of the largest 300 companies, while Materials represented 18%. These weightings are such that any portfolio that excluded either or both of these sectors, or was deliberately under-weight these sectors, would lack basic diversification.

Of the 157 sub-industry classifications used within the GICS taxonomy, the largest 300 companies represent 104. Of these the only candidates that could reasonably be considered “sin” sub-industries are casinos and gambling, distillers and vintners, and aerospace and

defence. These sub-industries make up 2.4%, 0.7%, and less than 0.05%, respectively of the market capitalisation of the largest 300 companies, with there being six companies in the casinos and gambling sub-industry, and one company each in the distillers and vintners, and aerospace and defence, sub-industries. It is also debatable as to whether Australian social norms would deem aerospace and defence to be a “sin” industry.

The weight of empirical evidence from Australia and other markets would suggest that the six companies in the casinos and gambling industry might have higher expected returns than other stocks, and that excluding these stocks from a portfolio might lead to some, at least marginal, reduction in expected return at a given level of risk or increase in risk at a given level of expected return.

4. REGULATION

Before discussing the regulatory implications of the evidence presented in Sections 2 and 3 above, two points may be noted. First, trustees have a duty to diversify investments, a duty that is consistent with the general application of modern portfolio theory. Second, prudence of investments must be assessed at the time the investments are made and not in hindsight. These principles, together with a detailed discussion of specific Australian regulation, is provided in Freshfields Bruckhaus Deringer (2005).

The most liberal interpretation of the Freshfields Bruckhaus Deringer (2005) report is that social responsibility criteria may be considered by fund managers provided they do no financial harm. That is, that they do not decrease expected return and / or increase risk.

A summary of the evidence presented in Sections 2 and 3 might be that in the majority of circumstances, that recognising social responsibility may do no harm and may indeed, in some circumstance, provide financial benefit. However, trustees are still exposed to claims of breach of trust in other circumstances.

Australian funds that exclude firms whose core business is in a “sin” industry, with casino and gambling being the obvious example, would appear, prima facie, to potentially be in breach of trust. One possible legislative reform that may be considered is to follow the legislative reforms of the Canadian province of Manitoba and expressly allow trustees to consider non-financial criteria without breaching their fiduciary duties, provided that other prudential requirements are met. This Canadian evidence is noted in Freshfields Bruckhaus Deringer (2005) and is

based on the recommendation made by the Manitoba Law Reform Commission Report which concluded:

“The law should make it clear that the consideration of non-financial criteria is not imprudent or improper per se, so long as it does not displace the primary obligation of maximizing the financial benefit of the trust. In our view, The Trustee Act, should be amended to dispel the suggestion that the use of non-financial criteria in investment policy is necessarily proscribed. The balance to be achieved should be the creation of a defined scope for the proper consideration of non-financial criteria on the one hand, with the fundamental need to protect the financial benefits, on the other hand.”

The evidence that *some* ethical funds would appear to be ethical in name only also suggests the need for maximum transparency. However, given the empirical evidence documenting the lack of attention that fund members pay to their superannuation decisions (see for example Agnew, Balduzzi and Sunden (2003) and Gerrans (2012), the benefits of transparency might be debatable.

5. SUMMARY

This paper examines the theoretical and empirical evidence with respect to socially responsible investing. The evidence suggests that very well governed companies with strong employee relations and strong environmental concerns may earn positive abnormal returns. However, for poorly governed companies socially responsible investing may involve agency costs that result in underperformance. Further, investing in firms whose core business is in industries that are widely seen as “sin” industries may earn positive abnormal returns, and avoiding these firms may impose a financial cost on investors. Nevertheless, for investors with a diversified portfolio, the overall financial effect of socially responsible investing may be marginal.

Where socially responsible investing may be expected to result in financial harm to fund members, such as funds excluding investments in companies whose core business is in “sin” industries, trustees may, on the basis of this evidence, be in breach of trust. One possible reform that may be considered is to allow trustees to consider non-financial criteria without breaching their fiduciary duties, provided that other prudential requirements are met.

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