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Part of State Street's Vision thought leadership series

The Future of ESG Investing



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Environmental, social and governance (ESG) issues are increasingly attracting wide attention from all types of stakeholders, from governments and the largest institutional shareholders in the investment community right down to “mum and dad” investors from the general public. Within the investment community, some active investor groups have shifted their focus beyond the short-term financial gains typically favored in the past, to the long-term wellbeing of their grandchildren and their grandchildren’s children. Such investors are mandating that their Trustees incorporate ESG criteria into their investment decision process. They insist on measurable ESG exposure in their investment portfolios as they are not satisfied with the mere paying of lip-service to this ideal.

The Rise of ESG: A Ratings Game

Although the future of sustainable and socially-acceptable investing is now well and truly upon us, ESG still does not enjoy the mainstream position in an investor’s portfolio that many believe it deserves. An increasing number of commercial data providers of ESG ratings are looking to remedy this situation, producing ratings from a comprehensive scoring system with global coverage of companies. But can these ESG ratings enhance the performance of a portfolio? This is a question we hear time and time again.

Numerous statistical studies concerning the forecasting power of ESG ratings have been carried out by academics. They often employ a four-factor model (e.g. Carhart, 1997), running regression tests of forward returns against ESG ratings to obtain risk-adjusted returns to ESG. The results of these empirical studies have been mixed. For example, Bhagat, Romano & Bolton (2008) studied six governance ratings and concluded that *“there is no consistent relationship between governance indices and measures of corporate performance”*. In the Environmental and Social domains, Kempf & Osthoff (2007) found that KLD Research & Analytics’ ratings demonstrated some forecasting power for the very best and worst rated companies through the period 1991 to 2003. The governance rating, however, was excluded from their study as it was found to produce negative returns.

Except for the US and developed Europe, ESG ratings with wide coverage and regular updates have only been available for most countries in the last few years, making it difficult to investigate the evolutionary patterns of their forecasting power. A complicating issue is that the conclusions can vary from one country to another. One of the most comprehensive ESG data-sets accumulated to date is found in an SSgA study by Kennedy, Whiteoak & Ye (2008), where an extensive investigation of the ESG ratings of eleven different commercial providers was undertaken. The outcome suggested that while ESG ratings have little consistent predicting power overall, there are pockets of the universe in which a forecasting ability can be observed. In addition, in some instances, it is found that the predictive power actually tends to strengthen through time. This suggests that the ESG-related matters have gradually become part of the investment landscape over time and that ESG factors may increasingly become a source of alpha for investment processes in the future.

Despite the numerous studies by independent researchers on the link between ESG ratings and stock performance

historically, very few have tried to forecast the effectiveness of ESG ratings in the *future*. It is certainly difficult making forecasts in this non-stationary world where past relationships are often not a reliable indicator of future behavior, and where the future often has the discomfiting habit of confounding forecasts. However, we can nevertheless take a detailed look at how individual ESG ratings are typically assigned, and weigh our belief in these metrics together with knowledge of their limitations to guide us in their future usefulness.

Relevance, Consistency and Timeliness

Generally, the largest commercial ESG rating providers use tens or even hundreds of metrics applied to a company, supported by company-specific information designed to provide additional notes or a description of a company's activities. These individual metrics are then aggregated to obtain a single rating for each company. Different emphasis on the various criteria may be applied in different sectors in the aggregation process using a proprietary weighting program to emphasize those criteria considered to be the most relevant aspects for each sector.

As with any qualitative description that has been converted into a quantitative metric, there are necessary simplifications, approximations, and assumptions applied in undertaking this conversion that can at times seem arbitrary. For example, in some cases, there is the 'one size fits all' assumption that the ESG criteria describing 'good' companies do not vary across the universe; in other cases, there is the simplification that ESG-related criteria can be captured with a simple binary indicator; and then there is the approximation that the different rating criteria are complementary and that they capture different ESG perspectives. Good ESG practices, however, are highly context-specific, and it is difficult with one number alone to fully capture and convey the rich and varying information that is relevant in judging the ESG performance of a company. To some extent, this does not matter. As ESG-related investing gathers momentum and as companies become increasingly judged on these criteria by the investment community, regardless of how relevant the ESG ratings are, we can expect that companies will begin to learn what the most important criteria is in achieving high scores, and it can reasonably be expected that they will begin to change practices in such a manner as to accomplish this.

There is also the question of the relevance of ESG ratings when short-termism is endemic within the financial services

industry, where fund managers keep a close eye on their next monthly performance ranking, and where CEOs are judged on next quarter's earnings per share numbers. With an impending change to compensation structures, such as less variable pay and higher base pay, and a heightened emphasis on the longer-term performance of companies in the future spurred by the global financial crisis, we might expect that such horizon mismatch, as has existed historically, may be mitigated going forward. This should be accelerated somewhat as the environmental and social externalities which cost a company a great deal of money to be internalised today, begin to see the benefits coming through in later years.

It can be expected that ESG ratings will become more consistent across commercial providers in the future due to consolidation among the vendors and more widespread data-buying/sharing among investors, which is already happening. As rating companies expand from the often small units that typically operated in the past to much larger fully-operational groups, it can be expected that ESG datasets will become richer, and that more reliable and relevant information will be collected. As the industry continues to mature, methodologies will also evolve and weighting programs for the different rating criteria are bound to change. One constant among all this change is that it will always remain difficult to transform such soft information as ESG into the hard information required by investors.

One drawback of the ESG ratings published in the past is that they were often not released in a timely fashion. It can take several months from the point of data being collected, merged, and analyzed before it is eventually published. When the ESG ratings do arrive on the user's desk, they may be half a year old and already less relevant to the current status of the company. Fortunately, because of their very nature, ESG ratings do not usually change rapidly, reducing the potential problem of data lags impacting on the usefulness of the data. As we move forward, there is little doubt that the ESG collection and publication cycle will shorten and that ESG information will become more timely. For example, in just the last five years or so, we have already seen a dramatic shortening of the publishing interval from irregular months or annual publications in 2004, to quarterly or even monthly today.

E is for Environment and for "Eventually Will be Widely Adopted"

Historically, Environmental rating providers only considered the less quantifiable aspects of environmentally-friendly practices

such as hazardous material treatment, the recycling of rubbish, the use of sustainable and clean energy sources for power generation, etc. Nowadays, the environmental rating given to a company often centers around its CO₂ emission intensity (=CO₂ emission tonnage/revenue), which is directly related to the expected change of company profitability for any future carbon tax rate imposed. Most providers emphasise the emission produced in the production phase of a company's operations by counting the direct CO₂ emission generated, such as the burning of brown coal by a power plant, as well as the first tier indirect CO₂ emission, such as the electricity consumed by an aluminum producer. A number of providers also count the CO₂ emission produced in the disposal phases, essentially triple-counting the CO₂ emission generated within the whole universe of companies.

A widely-held view concerning the environment rating is that a company that can manage pollution well can also manage its business well, leading to a link between E ratings and the financial performance of companies. The sad fact is that cheap fossil fuel in the past has greatly distorted the picture. The big polluters of yesteryear, such as the largest miners and those in the energy sector, have tended to be highly profitable entities, often driven by the rapidly growing demand from developing countries. Short-termism was reflected in the desire of many managers to win at all costs today, despite the worsening of tomorrow's environment problems. A complicating factor is that adopting environmentally-sustainable practices usually involves a substantial capital outlay, leading to an immediate negative impact on the profitability of a company.

We can, however, expect that the good environmental policies set up by companies today will place them in a stronger position relative to their peers to handle the inevitable changes in years to come, such as the imposition of carbon taxes and various emission penalties by legislated renewable power or energy efficiency standards. The outcome of these changes on a company's profitability will also depend on its ability to pass the increased costs on to its customers, such as an oil-driller increasing the crude oil price to refineries, and the ability of the refineries to subsequently boost the price of fuel provided to airlines, and the ability of the airlines to then increase ticket prices or charge their own emissions departure taxes to passengers. And poised above all these positioning dynamics is the constant threat of government policy risk, with rebates and other incentives likely to be offered along the way to sway companies into behaving one way or another.

Whether having a good environmental rating leads to better relative financial performance for a company in the coming years will also depend on the extent to which the international community can coordinate their actions on greenhouse gases and their commitments to any new policies. For example, if Australia were to apply an emissions trading plan without other countries following suit, those Australian industries most heavily hit by the plan will obviously find themselves at a disadvantage and less able to survive in the global economy of tomorrow.

S is for Socially Responsible and for "Seemingly Unrelated to Company Performance"

The socially-responsible Social rating uses a much larger information set than the other two ESG factors. It often considers more than a hundred different criteria which are divided into sub-categories such as: community relations (e.g. charitable donations, support for community housing), staff diversity (e.g. promotion of women and minority groups to the position of CEO, senior line managers or to serving on the board), human rights (e.g. labor rights in outsourcing or through the supply chain), employee relations (e.g. strong union relations), and product control (e.g. product quality and safety). The companies involved in alcohol, gambling, tobacco and weapons, amongst others, are automatically named as those that belong to sin industries.

Intuitively, the social rating is the rating that should be least related to a company's short-term profitability. Donating money to a charity, for instance, directly hurts the bottom line of a company, although offsetting this to some extent is the perception that the donation of cash signifies a financially strong and healthy company, potentially attracting additional investment in the company and a higher caliber of staff. Having a strong union force in a company contributes to a high social rating, yet arguably those same forces were a contributing factor that helped caused the downward spiral of the US auto giants for example.

From an empirical standpoint, the (socially-unacceptable) sin industries (e.g. gambling and tobacco), which have always rated lowly in terms of social criteria, have consistently shown significant capital appreciation in good times and in bad, and are, therefore, considered almost recession-proof. Avoiding stocks in these sectors outright may, therefore, have implications for the volatility of investment performance. Unless much higher penalties are applied to stocks in these industries, we might expect that they will continue to perform in the future much as they have in the past. The link between company performance and

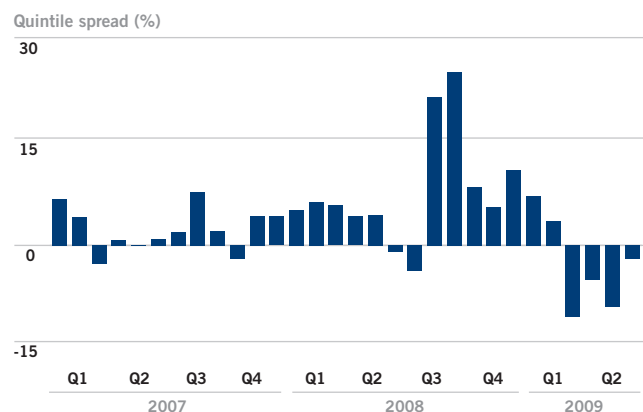
high social rating can at best be called tenuous at this time, and this is likely to remain the case going forward.

G is for Governance and for “Good Factor in Bad Times”

Of all the ESG indicators, corporate governance is the most closely watched. The governance rating is often calculated simply by summing up the number of ticks in boxes that are designed to capture such aspects of a company’s structure as executive compensation, political accountability, financial transparency, board structure, company takeover provisions, auditor turnover, and shareholder rights.

Corporate governance is an instrument that has several objectives, one of which is to align the company’s managers’ interests with those of the various stakeholder groups. In a practical sense, governance is a protective mechanism that helps guarding against financial failure, fraud and legal action. It acts as a source of risk reduction, but is not considered a means of revenue enhancement. Companies with poor governance are often found to be more aggressive and to perform better in boom times, although during recessions they can also be more susceptible to collapse. Enron is often cited as an example that demonstrates the importance of good governance. Good governance is important for company stability and performance, and is increasingly encouraged both through the actions of governments as well as stakeholders whose investments are at risk.

Chart 1: Three-Month Quintile-Spread* Returns to the Governance Factor in Australia



Data Source: Governance Metrics International, 2009.

*Quintile-spread is the median return of the 20% of companies with the highest governance scores minus the median return of companies with the lowest 20% of governance scores.

Past performance is not a guarantee of future results.

It is expected that governance ratings will forecast company performance most accurately during recessions, liquidity crises and in times of de-leveraging. In such downturns, companies, that have poor governance and have been chasing return but ignoring risk, will be the most exposed. Published governance ratings can help foresee this to the extent that they reflect the true state of governance within a company. Indeed, in the global financial crisis, the governance factor has been one of the most successful factors in predicting stock performance in the Australian market (see Chart 1). This suggests that there is indeed information in governance ratings, despite the numerous difficulties of obtaining an accurate reflection of the state of governance within a company by ESG rating providers. This difficulty is compounded by the fact that it is sometimes difficult for even the management itself to obtain an accurate picture of the risks within their own company.

The Future of ESG Investing

Looking forward, as ESG becomes increasingly mandated by investors, those companies with good ESG ratings will become the preferred holdings, while the portfolio weights of poorly-rated ESG rated companies will likely be reduced. This self-fulfilling process will make ESG ratings “work” better in the future in terms of forecasting company share price movements than we have been accustomed to in the past, at least in the short-term while investors adapt their portfolios to the new reality and companies respond by altering their workplace practices and evolve their products over time.

This can already be seen to be occurring. Striving to be at the forefront of responsible investing, SSGA has previously examined the whole question of ESG ratings and how reliable they are as indicators of future company share price performance; it continues to monitor the situation very closely. As part of the development process, the forecasting power of the ESG signal will be reviewed through time, and the necessary adjustments made to adapt to the rapidly-changing ESG landscape.

References

- Bhagat, S., Romano, R. & Bolton, B., 2008. “The Promise and Perils of Corporate Governance Indices”, *Columbia Law Review*, Vol. 108, 1803-1882
 - Carhart, M.M., 1997, “On persistence in mutual fund performance”, *Journal of Finance*, Vol. 52, 57-82.
 - Kempf A. & Osthoff, P., 2007. “The Effect of Social Responsible Investing on Portfolio Performance”, *European Financial Management*, Vol. 13, 908-922.
 - Kennedy, T., Whiteoak, J.B. & Ye, T., 2008. “A Comprehensive Analysis of the Relationship between ESG and Investment Returns”.
- http://www.ssga.com/library/esps/A_Comp_Analysis_of_Rel_Between_ESG_Todd_Kennedy_11.17.08CCRI1228407230.pdf

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