Doing ‘the right thing’ and making money
ESG and the corporate bond investor
Dec 2017
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Introduction

What should a corporate bond investor expect when integrating environmental, social and governance analysis (ESG) into their investment process? Will the insights on ESG risks increase the potential for outperformance? Or will a constrained investment universe more likely result in lower returns and higher risk?

Investors need to understand their motivations. Are they looking to build a portfolio that is consistent with their ethics? Or analyse ESG factors to better understand the risks and opportunities? These are the questions at the heart of this paper.

In part I, we define what it means to do ‘the right thing’, consider the scope of ESG analysis and provide historic context to the decisions facing investors. Readers looking to dive straight into the practical issues facing bond investors can skim through this section.

In part II, we look at how corporate bond investors can incorporate ESG analysis in their investment process, what they can expect to achieve, and examine the role of green bonds.

In part III, we look at how corporate bond investors can do ‘the right thing’ and make money. We also provide the lessons learnt from academic studies of ESG investing.
“If a large enough proportion of investors avoid sin businesses, their share prices will be depressed, thereby offering the prospect of elevated returns to those less troubled by ethical consideration.”

Credit Suisse Global Investment Returns Yearbook, Professors Dimson, Marsh and Staunton, 2015

“There is no evidence that sin stocks provide a premium for reputation risk after controlling for their exposure to factors in today’s asset pricing models.”


“In the long term, there is no trade-off between socio-economic and environmental objectives: there is no human development on an uninhabitable planet.”

Green industrial policy, Tilman Altenburg and Dani Rodrik, 2017
Combining active engagement and active management provides the scope for corporate bond investors to do ‘the right thing’ and make money. Active engagement with companies is necessary to assess ESG factors on a forward-looking basis. Engagement is the most effective tool to bring about change, through successfully encouraging companies to change their behaviour. Active management can allow investors to profit from changes to ESG ratings.

ESG analysis is a fundamental ingredient in understanding the risks of a company, alongside traditional credit analysis. A deep understanding of ESG risks requires active engagement with companies. The attitude of the board of a company to ESG issues and the actions they take will ultimately influence the outcome, both in terms of investment performance and our society. These issues can ultimately show up in the company’s financial results.

Investors need to ask themselves if they are looking to simply improve investment performance or use their influence to bring about change. The tools available to achieve these aims are: credit analysis; screening to include or exclude companies based on their ranking on ESG factors; and engaging with companies.

Responsible investing was put firmly on the investment agenda in the early 1970s. An understanding of investors’ approaches to the apartheid regime in South Africa teaches us that the right approach is always open to debate, the impact of investors’ actions are hard to measure and, while there is a theoretical cost to constraining the investment universe, the true impact cannot be known in advance.

Unlike shareholders, corporate bond investors do not have a vote, but have four other levers to actively engage. First, a constructive dialogue better informs both the investor and the company. Second, investors can clearly set out the information they require to assess ESG risks. Third, they can harness the media to broadcast their message. Fourth, they can buy or sell bonds. In addition, fixed income investors who sit alongside equity investors can form a joined up approach.

Green bonds can bring benefits to both investors and the environment. But there is no standard definition. And while the projects they back may be ‘green’, investors need to take a holistic view of both the ESG impact and credit risk of a company before investing. Investing in green bonds can inadvertently increase the environmentally-related risks in their portfolio.

Academic studies of the results of adopting an ESG approach broadly tell us that it neither boosts nor hampers returns. Nor need it lead to overly concentrated portfolios. Some studies have identified ESG factors that have not been fully factored into security prices that could provide a persistent (but not permanent) source of excess returns.
Part I: Defining ‘the right thing’

- Investors need to understand whether their motivation is improving investment performance, avoiding doing harm or bringing about change.
- ESG analysis covers a wide spectrum of factors, which all need to be understood.
- ESG issues can be framed around both values and/or behaviours. Values are individual.
- The impact of a company is determined by its behaviours

Investors embarking on an ethical, sustainable and responsible approach to investing face two puzzles when they begin. The first is deciphering the jargon used to describe different approaches. We use ESG (environmental, social and governance) throughout this paper as the umbrella term.

Second, they will be faced with conflicting evidence on the effects of ESG investing. Some claim it boosts returns. Others assert that virtue must come with a performance penalty.

Traditional portfolio theory tells us that a constrained optimisation is never better than an unconstrained optimisation. So in its simplest iteration, screening out companies operating in ‘sin’ industries, an ethical approach to investment should be expected to underperform an unconstrained portfolio.

In a study of equity markets, Professors Dimson, Marsh and Staunton of London Business School studied ‘sin’ stocks in the Credit Suisse Global Investment Returns Yearbook 2015. They found this to be true in practice. The Vice Fund (since renamed the Barrier Fund), which invested in US-listed tobacco, alcoholic beverages, gaming and defence/aerospace shares, rose 336% between 2002 and 2014, outperforming the S&P500 index. In contrast, the Vanguard FTSE Social Index Fund, which follows an index screened on social, human rights and environmental criteria, rose 278%, underperforming the S&P500 index over the same time period.

A Barclays study on Sustainable Investing and Bond Returns (2016) came to a similar conclusion for corporate bond investors. They compared the performance of companies with high and low scores on ESG factors. "Just overweighting better ESG companies can result in lower yields and, consequently, lower returns."

Yet the same study isolated the ESG effect and found it generally generated a positive return premium. It isolated the ESG effect by constraining the model to be neutral to the benchmark along multiple risk dimensions, such as difference in yield, maturity, credit quality and sector allocation. They measured the ESG effect by comparing the cumulative return of a portfolio of bonds with high ESG scores over a portfolio with low ESG scores.

This paper will consider the conundrum at the heart of these two somewhat contradictory conclusions. But we start by looking at defining what doing ‘the right thing’ means.

Just overweighting better ESG companies can result in lower yields and, consequently, lower returns

Sustainable Investing and Bond Returns, Barclays (2016)
Motivation: altruism or risk reduction?

The first step for any investor embarking on incorporating ESG analysis into their investment process is to understand their own motivations. There are three competing objectives: doing the right thing, reducing risk and generating returns. Is the investor looking to build a portfolio that is consistent with their ethics? Or analyse ESG factors to better assess the risk and opportunity of their investments?

The pioneers of responsible investing were religious organisations, whose approach focused on screening out stocks associated with what they considered to be ‘sin industries’. Increasingly the motivation behind responsible investing is more financially driven and focused on avoiding risk. This can in part be explained by the financial impact of events such as the BP Deepwater Horizon disaster and the VW diesel emissions scandal. But it is also linked to the rising concerns over global warming and its potential negative implications for businesses.

An increasing focus on ESG issues is also creating business opportunities. Impact investing seeks to identify companies that profit from making a positive contribution towards ESG issues (see page 13). Financial returns can be targeted alongside social and environmental impact.

Defining what doing ‘the right thing’ means – for example, what constitutes a ‘sin stock’ or ‘sin industry’ – is far from straightforward. It raises philosophical questions. The decision will be based on the judgements of individuals alongside quantitative measures.

Even the phrase itself – doing ‘the right thing’ – sits more comfortably in a conversation than in a white paper on fixed income investing. In contrast, the plethora of terms employed in our industry to describe responsible investing – ethical investing, sustainable and responsible investing, impact investing – all have different nuances and can mean different things to different people. This paper covers the full spectrum.

Investors need to ask themselves if they are simply looking to improve investment.

Investors also need to ask themselves if they are simply looking to improve investment performance, avoid doing harm, or use their influence to bring about change. It is possible to argue that there are some things universally deemed so terrible that a responsible investor has to avoid any exposure. For example, investing in cluster munitions is in direct violation of the UN Global Compact. But in most areas there is ambiguity. Avoiding an investment may make the investor feel better but, in isolation, it does not bring about change. Investing in a company that is doing a great job may be consistent with a responsible approach. However, the companies leading the way are likely to continue to do so whether we invest or not.

So how do you change things? In reality, the difficulty in bringing about change is significant. However, asset managers do have the ability to influence company management. They can identify those companies where their influence is likely to have the greatest effect, and engage.
ESG scope

ESG analysis covers a wide spectrum of factors, as illustrated in the table below. Global warming and its impacts dominate the agenda in terms of environmental concerns, but pollution, recycling of scarce resources and sustaining biodiversity are also live issues. Social concerns range from workers’ rights to the treatment of suppliers, to the impact on the broader community. Governance sits at the heart of ESG analysis. The attitude of the board to these issues and the actions they take ultimately influences the outcomes.

Values versus behaviours

The decisions on ESG issues can be framed around both values and/or behaviours.

Values are individual. Your own values will dictate your attitude to investing in, for example, tobacco, arms manufacturers, gambling, pork products and coal mining. You will have a view on what constitutes acceptable media content and what is pornography. Your views may change over time. For instance, the rise in obesity and diabetes is changing attitudes to sugar.

Yet the majority of assets under management are managed on behalf of groups of people. Reaching a consensus view on issues that are purely based on individual choice is particularly challenging. Surveys provide a mechanism for collating a group view without the need to share personal values or reach compromise on issues that offer little middle ground. This is the approach we adopt for the ethical funds we manage.

The impact of a company is determined by its behaviours, which may or may not be consistent with its stated values. An assessment of behaviours will inform investors on how well the company is managing ESG risks. Analysis should aim to determine if the company has the right intentions. Is it striving to be a good corporate citizen or just going through a box-ticking exercise simply to satisfy investors? Putting whistleblowing procedures in place, understanding health and safety risks, and managing exposure to the risks of bribery and corruption are all now commonplace behaviours.

But behaviours go beyond putting processes in place. For example, whistleblowing processes only work if workers know they can report an incident without harming their own career.

The corporate sector provides real life examples of the need for broad coverage. Banks operate in one of the most highly regulated industries in the world. Yet a series of scandals have led to a loss of trust and ever-increasing fines. In particular, the Libor scandal, in which traders around the world colluded to fix the rate of intra-bank lending, crossed continents and undermined the pricing of over $300 trillion of derivatives contracts. The UK supermarket industry found itself at the heart of a scandal when it was discovered that food advertised as beef contained horsemeat. This highlighted that an understanding of supply chain management issues extended well beyond the direct control of the companies involved, down to their individual suppliers.

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<th>Table 1: ESG factors</th>
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<tr>
<td><strong>Environmental</strong></td>
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<td>Carbon emissions</td>
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<td>Energy efficiency</td>
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<td>Natural resource use</td>
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<td>Hazardous waste management</td>
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<td>Recycled material use</td>
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<td>Clean technology</td>
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<td>Green buildings</td>
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<td>Biodiversity</td>
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<td><strong>Social</strong></td>
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<td>Diversity and discrimination</td>
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<td>Working conditions</td>
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<td>Modern slavery</td>
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<td><strong>Governance</strong></td>
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<td>Corporate governance</td>
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<td>Anti-competitive practices</td>
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<td>Tax and audit practices</td>
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<td>Anti-bribery and corruption</td>
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<td>Anti-money laundering</td>
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<tr>
<td>Remuneration</td>
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<td>Gender diversity</td>
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A brief history of responsible investing

A historical perspective is helpful in understanding the challenges of implementing an ESG investment programme. It illustrates that many of the issues we face today have been on the investment agenda for decades. A historic view of events can also bring a different perspective to what was seen at the time.

As far back as 1602, the first company public offering of shares, from the Dutch East India Company, faced boycotts from religious institutions because of its involvement in the slave trade. But it was the early 1970s when responsible investing was put firmly on the agenda of institutional investment committees. Student protests proved to be the catalyst for change in the US. A quieter awakening to the governance responsibilities of institutional shareholders led to changes in the UK around the same time.

Born out of protest

Burton Malkiel, veteran investor and author of A Random Walk Down Wall Street, was chairman of the economics department at Princeton when he gave a talk at the 1971 Endowment Conference in New York. “I need not recount here the angry demonstrations and even a macing incident that marred annual meetings last year; the picketing, and even bombing of some corporate offices and banks; and the proxy fights, such as those at GM [General Motors] and Gulf this year, demanding a more socially responsible corporate structure.” Nearly two generations later, these events may come as a surprise. The issues behind these protests were the apartheid regime in South Africa and the Vietnam War.

Student groups at Princeton demanded the sale of all companies with operations in South Africa, which represented one-third of the university’s overall portfolio. The investment committee unanimously rejected this proposal despite agreeing with the students about the inhumanity of the regime. Malkiel provided four reasons.

First, it was not clear that the sale would morally cleanse them of the issue. Links with South Africa extended beyond these direct exposures to indirect exposures, such as loans made by the World Bank whose bonds they held. They could even be said to include their cash holdings, backed by South African-mined gold in the era of the gold standard.

Second, a number of these companies were otherwise seen as progressive on social issues. Xerox, for example, was otherwise seen as an exemplary corporate citizen, providing job training to disadvantaged workers. The moral case was not clear-cut.

Third, it was not clear that the sale of investments would be “an effective means for bringing about desirable social goals”. Malkiel made the point that maintaining the ability to vote as a shareholder could be more effective.

Fourth, the sales were seen as costly, in terms of the opportunity cost of exiting companies that “were the leaders in new product development such as International Business Machines, Xerox, Polaroid and others that were little involved with South Africa and did no manufacturing there”. They calculated that the average rate of return would have been 3% lower over 18 years without the excluded companies. It is here that a contemporary view brings a different perspective. These were the glamour stocks of the 1960s and went on to suffer significant de-ratings over the following decade.

These issues remain central to the debate today. Ethical questions are always open to debate. The impact of any action is hard to measure. And although there is a theoretical cost to ethical screening, the true impact cannot be known in advance.

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I need not recount here the angry demonstrations and even a macing incident that marred annual meetings last year

Burton Malkiel, Endowment Conference, New York, 1971

1 Socially Responsible Investing, Burton Malkiel from Classics II, Charles Ellis and James Vertin, Association for Investment Management and Research, 1991
“In recent years the question of excessive compensation to management has excited considerable attention, and the public understands fairly well that here is a field where the officers’ views do not necessarily represent the highest wisdom.”

*Benjamin Graham, Securities Analysis, 1934*

**Born out of fiduciary responsibility**

The rise of responsible investing in the US was born out of protest. By contrast, in the UK the rise appeared to reflect a reluctant acceptance of fiduciary responsibility. Kenneth Usherwood, chairman of Prudential Assurance, addressed the role of the institutional investor in his 1970 annual report. “During the last few years a different consensus appears to have emerged that it would be in the best interests of the country if institutional investors were more vigorous in their efforts to maintain efficient management in the companies in which they invest.”

His attitude could not be more different from the aggressive activist investors of today. “We do not regard ourselves, and neither should others, as having any particular expertise in the management of industrial companies. Nevertheless, we are increasing our capacity to undertake and maintain closer relationships with companies in which we invest. In this way we should acquire a better understanding of the problems of company management.” Over the next two years, in conjunction with the Bank of England, they initiated a dialogue between the managers of investment trusts, unit trusts and pension assets on corporate governance.

*Kenneth Usherwood, chairman of Prudential Assurance, 1970 annual report*
Part II: Doing ‘the right thing’

- The tools available to the corporate bond fund manager are credit analysis, screening based on ESG factors and corporate engagement.
- By speaking directly with management, it is possible to encourage them to change their behaviour. Academic studies provide some evidence that engagement can lead to higher investment returns.

In this section, we review the tools available to the corporate bond portfolio manager incorporating ESG analysis into their investment process. We also consider the actions that a portfolio manager can take and what these might achieve. The actions are: credit analysis; negative screening to exclude companies that rank poorly on ESG factors; positive screening to select the companies that score highly on ESG factors; and engaging with companies. In each case, we ask what impact this action has on making the world a better place.

Credit analysis

Credit analysis should incorporate both qualitative and quantitative assessment of ESG factors. For example, an understanding of governance issues has been an integral part of our credit analysis for the last 25 years. In general, we find that companies that score poorly on governance issues represent higher credit risk. A lax attitude towards governance – and indeed environmental and social issues – is a reflection of management quality. It is often associated with lax attitudes to other aspects of business, including accounting practices.

The correct pricing of ESG risks is challenging, particularly when these risks are more qualitative than quantitative. This analysis leaves investors better informed on the risks within their investment universe. However, this is downside risk management rather than an attempt to do ‘the right thing’. The investor is not using their influence to bring about change.

Negative screening – excluding ‘bad’ companies

Portfolio construction can incorporate ESG scoring in two ways: screening out poorly scoring companies or selecting highly scoring companies.

Screening out companies that score poorly is the simplest method of implementing an ESG approach. The scores can incorporate both values and/or behaviours. The availability of ready-made ESG indices means it need not even involve any in-house analysis.

This is the method adopted in the example quoted in the introduction from the Dimson, Marsh Staunton study, whereby screening out ‘sin’ stocks leads to lower returns for ethical investors who are selecting from a constrained universe of bonds. In addition to this drawback, it also rarely achieves anything in terms of positive impact on the world. The rare exceptions are those issues that are sufficiently clear-cut that a broad consensus is formed.

Investment in cluster munitions provides an example, since a number of arms manufacturers have withdrawn from this activity to avoid widespread exclusion from investor portfolios. If enough investors do not provide capital, the cost of capital can rise to the point where a company goes out of business.

Positive screening – selecting ‘good’ companies

Portfolio construction can be tackled from the other end of the spectrum, just buying the “best” companies. This can be done in a number of ways. The approach selected will determine the scope of the portfolio manager to construct a portfolio similar to the overall market or a benchmark.

For those looking for a benchmark-aware approach, it is possible to largely isolate the ESG effect by tilting the portfolio towards the companies that rank highest on ESG factors, while constraining the portfolio to be neutral to the benchmark along multiple risk dimensions, such as yield, maturity, credit quality and sector allocation. A ‘best-in-class’ approach takes a portfolio further from the index but still allows the portfolio manager to define the classes (typically sectors or industries).

Alternatively, it is possible to prioritise ESG factors, only investing in the highest-scoring companies. This leads to a very constrained investment universe, which can compromise returns.
In both cases, this is a passive approach that does not attempt to generate alpha through other types of credit analysis. It lets the ESG factor dominate the investment decision.

Once again, positive screening achieves little in terms of positive impact on the world. The companies selected are already "good". In addition, the approach is essentially the flip-side of negative screening and should in theory leave a higher return on the table for those investors without constraints. A best-in-class approach means buying the highest quality companies and these qualities may already be reflected in the price. (In practice this may not be the case, as we saw in the Barclays study quoted in the introduction. We will address why this might be the case in the concluding section.)

Engagement

In our view, the most powerful tool in the portfolio manager’s toolbox that can actually make a difference is engaging with companies. By speaking directly with management, it is possible to encourage them to change their behaviour. The level of influence may be limited (which we address more fully in the next section), but this approach can have some impact on the outcome, changing the impact of the company on the world.

The positive impact of engagement can be seen in equity investing. Dimson, Karakas and Li (2015) studied active engagement, using data from a large, proprietary database from an institutional investor and found it boosted performance. This investor undertook 2,152 engagements with 613 publicly-listed companies between 1999 and 2009. They had a success rate of 18%, on average taking 2-3 engagements over 1-2 years to achieve success. Successful engagements generated cumulative size-adjusted returns of 7.1%, while unsuccessful engagements did not destroy value. This led to an overall boost to cumulative performance of 2.3%. These results offer some encouragement that active engagement can add value, but must be caveated with the fact that they are based on one investor over one period of time.

Credit analysis + screening + engagement + active management

In practice, portfolio managers can add the most value by using a combination of credit analysis, ESG rankings and engagement. Active management provides investors with the greatest scope to profit from these tools.
Achieving ‘the right thing’

- ESG investing is evolving, from ethical screening to ESG integration to impact investing.
- Corporate bond investors do not have a vote, but they do have four levers to influence management behaviour.

We move from the tools of a bond portfolio manager incorporating ESG analysis to their uses. The evolution of the application of ESG analysis in investment management provides lessons in the strengths and weaknesses of the different approaches. The appearance of ethical investment portfolios available for individual investors started in the 1990s. SRI portfolios, with a broader ESG mandate, appeared about ten years ago. Impact investing portfolios are a more recent development.

Ethical investing

Ethical investing employs the simplest tool in the responsible portfolio manager's toolkit, excluding those companies that do not meet a determined value threshold. For a pooled investment product, this requires a process for setting these values. These can be determined by committee, which can be a dedicated ethics committee, or through an annual survey of investors. Our own experience tells us that people's values change over time. The mechanism for capturing and implementing investors' values must also capture this evolution. Environmental issues have become more prominent as the scientific acceptance of global warming has become more established. By contrast, animal testing remains on the agenda but many investors now take a more pragmatic approach to this issue. In particular, some investors choose to invest in pharmaceutical companies that use animal testing since the end results provide a benefit to society.

A number of asset owners are now choosing to disinvest from fossil fuels. This decision must then be translated into a practical approach. Does it only include producers or also users? Is there a threshold in terms of percentage of revenues? As an example, for some investors a threshold has been set at 30% of revenues from thermal coal. The table below illustrates the leading mining companies that exceeded this threshold, according to an Oxford University study.

The largest company on the list, China Shenhua Energy Company Limited, derived 35% of its revenues from thermal coal. This means it would only take a relatively modest fall in the price of coal to take the company below this threshold.

More pertinently, the company has recently announced that it is merging its assets with the coal-fired power assets of China Guodian Group. The final shareholding of the planned joint venture is currently under negotiation. The terms of

<table>
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<tr>
<th>Company</th>
<th>Total 2014 Revenue from Thermal Coal (USD Million)</th>
<th>% Revenue from Thermal Coal</th>
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<tbody>
<tr>
<td>China Shenhua Energy Company Limited</td>
<td>14,006</td>
<td>35</td>
</tr>
<tr>
<td>Sasol Limited</td>
<td>11,050</td>
<td>58</td>
</tr>
<tr>
<td>Coal India Limited</td>
<td>10,251</td>
<td>89</td>
</tr>
<tr>
<td>China Coal Energy Company Limited</td>
<td>5,966</td>
<td>52</td>
</tr>
<tr>
<td>Adan Enterprises Limited</td>
<td>5,068</td>
<td>55</td>
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<tr>
<td>Peabody Energy Limited</td>
<td>4,890</td>
<td>72</td>
</tr>
<tr>
<td>Inner Mongolia Yitai Coal Co, Ltd</td>
<td>3,397</td>
<td>85</td>
</tr>
<tr>
<td>Yanzhou Coal Mining Company Limited</td>
<td>3,045</td>
<td>31</td>
</tr>
<tr>
<td>Pt Adaro Energy Tbk</td>
<td>2,090</td>
<td>91</td>
</tr>
</tbody>
</table>

Source: Smith School, Oxford University, Research on Stranded Assets

Top global minders: largest listed thermal coal mining companies that breach 30% revenue threshold
the deal will determine whether the company becomes eligible for investment or not, without any change to its environmental impact.

In addition, the very large, globally diversified miners, such as Glencore and Anglo American, are large miners of coal but remain investable under these rules. These examples highlight some of the complications of negative screening.

**Sustainable and responsible investing**

Sustainable and responsible investing (SRI) uses three tools: exclusions of ESG rating laggards, integration of ESG factors into credit analysis, and targeted engagement. This approach does not look to take a view from an ethical standpoint, but instead focuses on how a company is managing ESG risks within its business. It excludes the very worst scoring companies, those that have breached the principles of the UN Global Compact and companies involved in controversial weapons and tobacco.

A ranking system for ESG ratings can be used to identify companies where engagement is most likely to bring about change. Those companies with very poor governance are typically unwilling to change. Similarly, those companies that are already scoring very highly are likely to continue to do so. Investors should focus their engagement on the companies in the middle, that may have a willingness to change but require more direction on best practice. Investors can also encourage transparency where progress is poorly understood by the market, creating an investment opportunity for active managers. Finally, investors can better manage risk by engaging with companies that have seen a rapid deterioration in their ESG ranking.

**Impact investing**

Impact investing employs fundamental research alongside ethical filters and ESG ratings. Impact investing involves buying the securities of companies that have the intention of generating positive social and environmental impacts alongside financial returns. It has recently moved from the world of altruistic investment into the mainstream.

To date, it is largely an equity investment phenomenon, but the approach can be used in fixed income investing. These are the companies that are creating business opportunities in a world embracing a socially responsible investing agenda, such as those building electric cars and their suppliers.

In Impact Investing: Embracing the UN’s Sustainable Development Goals, we identified three stages of development for companies pursuing an impact agenda: intentionality, a clear strategy by the board to pursue an impact agenda; implementation, putting this strategy into practice; and impact quantification, when the outcomes of the strategy can be measured. The intentions of the company provide the initial threshold. It is not enough for the company to pursue an individual socially responsible project (such as building a solar power plant) if the overall objectives of the company are not consistent with an impact agenda (such as an oil & gas producer).

Fixed income investors can target their investments at specific projects with social or environmental aims, through social bonds or green bonds. By contrast, equity investors gain exposure to all of a company’s activities. However, social bonds and green bonds are no panacea, as we discuss in depth in the next section.

**Effective engagement**

We believe that active engagement with companies is the most powerful tool in the responsible investor’s toolbox. It is often assumed that fixed income investors have little scope for active engagement with companies because they do not have a vote. As portfolio managers, we put great emphasis on the active use of proxy voting, but see it as only one of five potential levers.

First, a constructive dialogue can add value to both the investor and the company. Active engagement with management helps investors learn more about a company’s strategic approach to ESG issues, assess the risks, appraise its management team, and encourage better behaviours and disclosures. Companies benefit by understanding the concerns of its bond investors and gain a perspective on their ranking relative to their peers.

Second, bond investors can clearly set out the information they require to assess ESG risks, both in absolute terms and relative to their peer group. This can help companies to improve the reporting – and through this the management – of their activities.
Third, portfolio managers can harness the power of the media to broadcast their message more widely, putting pressure on company management to make changes.

Fourth, they can buy or sell bonds. This is what ultimately separates active and passive management.

Finally, voting is the one lever that is available only to equity investors. However, fixed income investors who sit alongside equity investors can form a joined-up approach to governance issues.

In conclusion, ethical screening and ‘over-the-counter’ ESG ratings provide the tools necessary for a responsible investor to build a passive portfolio. Active managers can additionally employ fundamental research and active engagement. The scope for bond portfolio managers to actively engage with companies is greater than is generally understood.

### Tools of effective engagement for equity and bond investors

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<tr>
<th></th>
<th>Equity</th>
<th>Bond</th>
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<tbody>
<tr>
<td>1</td>
<td>Dialogue</td>
<td>✓</td>
</tr>
<tr>
<td>2</td>
<td>Request for increased transparency</td>
<td>✓</td>
</tr>
<tr>
<td>3</td>
<td>Media</td>
<td>✓</td>
</tr>
<tr>
<td>4</td>
<td>Buy and sell holdings</td>
<td>✓</td>
</tr>
<tr>
<td>5</td>
<td>Voting</td>
<td>✓</td>
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Green bonds

- There is no single definition of a green bond. Most green bonds are project based. Investors need to take a holistic view of a company’s values and behaviours. And it’s credit fundamentals.
- The nature of the projects that are financed by green bonds means that they are more, not less, exposed to environmentally-related credit risks.

Portfolio managers who equate responsible bond investing with green bonds are both unnecessarily restricting their investment universe and potentially misleading their investors about the green credentials of their approach. The principles behind green bonds are admirable, but the realities will not always match investor expectations.

The August 2017 announcement by Tianjin SDIC Jinneng Electric Power Co Ltd that it has issued ‘green bonds’ worth 1 billion yuan (US$150 million) to finance a 2,000 megawatt coal-fired power plant neatly encapsulates the conundrum of green bonds. The United Nations’ “Clean Development Mechanism” aims to fund carbon-cutting projects. Clean coal falls into the list of sectors eligible for green financing. But, as Greenpeace campaigner Huang Wei rightly points out, the ‘clean’ in clean coal is a relative term. Technology such as ultra-low emissions, albeit producing fewer air pollutants, is not a solution to lowering the carbon emissions that endanger our climate.

What are green bonds?

Green bonds are a source of funding for projects that address the challenge of climate change. They were originally issued by multinational development banks. The European Investment Bank brought the first green bond to market in 2007 and issuance has increased rapidly since then, in line with the wider growth seen in SRI investing. The global green bond market has grown from below US$10 billion in 2012 to aggregate issuance over $100 billion in 2016 and $60 billion in the first half of 2017. Up until 2013, supranationals (such as the European Investment Bank) dominated issuance. Issuers from Europe and the United States dominated in 2014 and 2015, while issuers from emerging market economies represented a significant portion of issuance in 2016.

Green bonds tend to have a high credit rating. In most cases, the credit risk of a bond is not linked to the cash flows of a particular project. This means credit risk is a function of the risks of the entire company. The average maturity is between seven and eight years. They are issued in many different currencies. While there is no single definition of the term, they are generally considered to be bond instruments that will be exclusively used to finance (or refinance) a new or existing project that tackles environmental issues. The International Capital Markets Association is a body with over 500 members across the buy and sell-side of the industry. It publishes Green Bond Principles, covering the use of proceeds, project evaluation and assessment, management of proceeds, and reporting. This provides a recognised, but voluntary, set of guidelines.
Many jurisdictions have developed their own definitions of what constitutes a green bond. In particular, China's Green Bond Finance Committee has issued a Green Bond Endorsed Project Catalogue.

There are two widely used databases of green bonds. Climate Bonds Initiative (CBI) list 1,092 individual issues while Bloomberg list 779. Only 624 individual issues appear on both. Inclusion in these databases does not represent a quality guarantee. Inclusion in the CBI database does not constitute an opinion by CBI as to the correctness of the label.

Green bond indices exist that provide passive investors with a ready-made definition. Or definitions, since each of the providers use their own methodology. Green bond indices are available from Bank of America Merrill Lynch, Barclays MSCI, Standard & Poor’s and Solactive.

‘Greenwashing’

‘Greenwashing’ is to SRI financing as ‘whitewashing’ is to politics. Embarking on a green project is not enough to make a company socially responsible. Investors need to take a holistic view of a company’s values and behaviours. There are four issues we highlight.

**Embarking on a green project is not enough to make a company socially responsible.**

The first is that ‘green’ has more than one dimension, as made obvious in the coal project example above. There are both absolute and relative measures. Investors need to decide what matters to them. In addition, the decision on how green a bond is need not be binary. CICERO is a climate change research institute that is a leading provider of second opinions. It provides three different scores on bonds, or three shades of green.

Second, green bonds can be issued at a project level. They tell us nothing about the overall operations of a company, which may or may not be consistent with the investors’ targeted values and behaviours. Nor do they tell us about the overall financial health of the company, which credit investors must also take into account.

Third, most green bonds only consider the environmental impact of an investment. While minimum levels on social and governance issues have started to be introduced, most take no account of the social consequences. For example, a hydroelectric dam may well be eligible for green-bond financing. However, the social impact of a dam can be extremely negative and will not be assessed when determining the green credentials of the project.

Fourth, bonds that are green at issue may not remain so. CICERO reviews bonds at issue but will not provide ongoing monitoring of the bond unless the issuer specifically requests it.

**Credit spreads, investment performance and credit risk**

*Green bond finance and certification* (T. Ehlers, F. Packer, BIS Quarterly Review, September 2017) studied the pricing, performance and environmental risk of green bonds.

The study found that issuers of green bonds were able to borrow at lower spreads than if they had issued conventional bonds, with interest rates 18 basis points lower. The study covered 21 green bonds, with most issuers also issuing conventional bonds, allowing a direct comparison of borrowing costs. There was significant variation in the results, with some green bonds proving to be more expensive than conventional borrowing.

They used the performance of green bond indices to draw conclusions on the performance of green bonds relative to conventional bonds. They found that green bond indices produced similar returns to global bond indices (after hedging currency exposures and using like-for-like credit rating compositions).
Perhaps the most counterintuitive finding was on credit risk. They found that green bonds are more, not less, exposed to environmentally-related credit risks (see chart opposite). This reflects two facts. First, most green bonds are exposed to the credit risk of the overall company, not the green project itself. And second, the issuers of green bonds typically operate in high environmental-risk sectors. That is almost by definition the nature of the companies that issue green bonds.

**Green bonds are more, not less, exposed to environmentally-related credit risks.**

They also cite a number of academic studies that found a tendency for investors to inadequately price environmental risks. “This is despite already strong evidence of severe financial impacts of both physical risks, due to climate-related events such as droughts and floods, and transition risks, such as the risk of a material change in environmental regulations.”

**Green enough?**

Green bonds can bring benefits to borrowers, investors and the environment. But the label is not an industry standard. It can mean different things to different people. Investors need to take a holistic view of both the ESG impact and credit risk of a company before investing. In providing finance to green projects, they may inadvertently be increasing the environmentally-related risks in their portfolio.

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**Environmental credit risk composition of all rated bonds versus green bonds only**

[Chart showing the distribution of credit risks between all rated bonds and green bonds, with percentages and categories for Low risk, Emerging, Moderate Risk, Emerging, Elevated Risk, and Immediate, Elevated Risk.]
Part III:

Doing ‘the right thing’ and making money
Academic theory versus practical reality

- Academic studies of past performance of ESG funds in general find that performance and risk are similar to conventional funds.
- Studies that isolated the ESG effect found that it boosted investment returns.
- There is evidence that a focus on sustainability can be a source of competitive advantage for a company in the long-run.

Academic studies of the applications of responsible investing in fixed income are few in number, but provide empirical evidence of what an investor can expect. There are also lessons that can be drawn from the broader and deeper academic research into responsible investing in equities. As a combined body of work, they tell us there is little evidence that a responsible investing approach hampers – or boosts – performance. Incorporating ESG analysis need not lead to a significant loss of diversification. Nor has it meant paying significantly more in management fees. This is consistent with our view that ESG analysis is an integral part of the process, not an add-on. There is evidence of a link between good management of ESG risk and good management of financial risk.

In practice, analysis of governance factors has been integral to credit analysis for many years. The experience of bond holders in BP in the aftermath of the Deepwater Horizon oil spill, and holders of VW’s bonds after it was found to have manipulated environmental tests provide recent examples of when governance issues become material.

Academic research on ESG in fixed income
Sustainable investing and bond returns by A. Desclee, L. Dynkin, J. Hyman & S. Polennikov (Barclays, 2016) studied the impact of incorporating ESG analysis on credit portfolio performance. They arrive at five conclusions that are relevant to this study.

First, (as included in the introduction) bonds with high ESG scores offer lower credit spreads. ESG analysis is one form of evaluation of long-term risk. It is therefore a form of credit analysis. Barclays took the Bloomberg Barclays US Corporate Investment-Grade index and studied those bonds with ESG ratings from both MSCI and Sustainalytics, the two main providers of ESG ratings, which included about 90% of the bonds in the index. They found that bonds with high ESG ratings also had higher credit ratings and therefore offered lower average spreads (see table below). They also attributed the difference in spread between E, S and G. They found there was little difference in spread between high-G and low-G bonds, perhaps reflecting that an understanding of governance is already embedded in credit analysis. The difference was better explained by environmental and social factors.

Second, they find that the ESG scores of MSCI and Sustainalytics often disagree with each other. The two firms use different methodologies on a number of levels: factor weightings, the choice of peer group for comparison purposes, and deciding when to employ subjective judgement and when to use a formula-driven approach. They find low correlation across all three dimensions (E, S and G) as well as for the composite rating.

Third, when they isolated the ESG effect, they found a strategy of high-ESG minus low-ESG delivered a positive return between August 2009 and April 2016. They constructed model portfolios in order to isolate the ESG factor. They applied constraints to make these models neutral to the benchmark along the traditional dimensions of credit risk: yield, maturity, credit quality and sector allocation. What explains this outperformance? “Bonds with low governance scores experienced a consistently higher rate of subsequent downgrades than those with high scores throughout our study period.”

### How ESG scores relate to credit ratings and credit spreads

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<tr>
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<th>Bonds with low ESG scores</th>
<th>Bonds with high ESG scores</th>
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<tbody>
<tr>
<td>Average ESG score</td>
<td>2.6</td>
<td>7.7</td>
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<tr>
<td>(from 0 to 10)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average spread (bp)</td>
<td>172</td>
<td>134</td>
</tr>
<tr>
<td>Average credit quality</td>
<td>A3</td>
<td>A2</td>
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Fourth, the governance score had the strongest link with positive performance and the social score the weakest.

A fifth finding is that companies with a high ESG rating have more than an 80% probability of remaining highly rated a year later. The researchers argue ‘there is little reason to fear that the adoption of ESG criteria would become a cause of excessive portfolio turnover’.

However, the point we would emphasise is that the turnover of any ESG-based index must be higher. The constituents of an ESG-based index are determined by normal fundamental factors plus ESG factors, both of which change. In addition, the ESG scores include subjective judgments, which potentially make them more likely to change due to fluctuating attitudes or different people making the judgements. ESG scores will also be affected by changes in methodology, which has happened in the past.

Two other studies support the idea that responsible investing does not have to produce lower returns or less diversification.

Socially Responsible Fixed-Income Funds (2008) by J. Derwall and K. Koedijk studied bond funds over the period 1987-2003. It found the average socially responsible (SRI) bond fund performed similarly to conventional funds. The charges on these funds were also similar.

Sovereign Bonds and Socially Responsible Investing (2009) by B. Drut investigated the impact on the efficient frontier of incorporating socially responsible indicators into the construction of portfolios across 20 developed countries. It found that SRI portfolios can be built without a significant loss of diversification. This is consistent with findings of similar studies of equity portfolios. We have not come across a comparable study for corporate bond portfolios but we are confident that the same principles apply and the same conclusion would be reached.

The academic literature on ESG investing in equities is broader and deeper than the studies in fixed income. A study of the impact of whether good ESG practices can increase the long-term viability and profitability of companies is particularly relevant to corporate bond investors. The Impact of Corporate Sustainability on Organizational Processes and Performance by R. Eccles, I. Iouannou & G. Serafeim (Management Science, 2014) found that high sustainability companies significantly outperform their counterparts over the long term, both in terms of stock market returns and accounting performance. They ranked a universe of 675 US companies on a comprehensive set of corporate policies related to the environment, employees, community, product and customers. They rated 90 as high sustainability companies, 90 as low sustainability companies and compared the performance of the two groups between 1993 and 2010. They found that “high sustainability firms generate significantly higher stock returns, suggesting that indeed the integration of such issues into a company’s business model and strategy may be a source of competitive advantage for a company in the long-run. A more engaged workforce, a more secure licence to operate, a more loyal and satisfied customer base, better relationships with stakeholders, greater transparency, a more collaborative community, and a better ability to innovate may all be contributing factors to this potentially persistent superior performance in the long-term”.

In October 2015, Standard & Poor’s (S&P) studied all of its global corporate rating actions and published surveillance reports since November 2013. Over this 24-month period, S&P identified 299 cases in which environmental risks (including climate change) had contributed to its credit rating analysis. In 19 cases, the credit score was downgraded and in a further 23 cases, the outlook was revised to negative.

Two examples from recent history stand out in the minds of both bond and equity investors. In 2010, 11 platform workers were killed by the effects of an explosion on BP’s Deepwater Horizon oil rig. This event led to a significant fall in BP’s corporate bond prices due to the impact of the loss of revenue, clean-up costs, compensation claims and ongoing uncertainty over the eventual sums involved.

In 2015, VW was accused of adding a ‘defeat device’ to diesel cars undergoing environmental tests, to lower emissions. S&P downgraded the company’s debt rating and kept the company on negative watch due to “material deficiencies in management and governance”.

High Sustainability firms generate significantly higher stock returns, suggesting that indeed the integration of such issues into a company’s business model and strategy may be a source of competitive advantage for a company in the long-run.
Both examples bring to life the need to extend credit analysis beyond traditional risk metrics. In both cases, the cause of the crisis was weak governance. ESG analysis might have highlighted this risk. Yet they also highlight the difference between equity and bond investing. In the recovery from these episodes, credit analysis mattered more than ESG analysis. In both cases, bond investors saw the value of their investments fully recover. Both companies started with strong balance sheets. Both have acted to strengthen their credit rating and, in addition, improve their corporate governance. By contrast, shareholders suffered a significant loss of value, with both share prices remaining below the levels they stood at prior to their respective crises.

**BP & Volkswagen bond price and share prices**

**Volkswagen total return (EUR)**

![Graph showing Volkswagen total return (EUR)](image1)

**BP total return (EUR)**

![Graph showing BP total return (EUR)](image2)

**Volkswagen 2.125% 2022 EUR total return**

![Graph showing Volkswagen 2.125% 2022 EUR total return](image3)

**BP 4.2% 2019 EUR total return**

![Graph showing BP 4.2% 2019 EUR total return](image4)

Source: Bloomberg
Doing ‘the right thing’ and making money

- The market is largely pricing corporate bonds based on sector, quality and duration, with little evidence of pricing of ESG factors. These factors should not be a permanent source of returns. But as long as ESG factors are not fully priced into security prices, they can provide a persistent source of returns.

- Active engagement is necessary to fully understand ESG factors. It allows portfolio managers to identify companies where ratings are expected to change, up or down, and act accordingly.

- Combining active engagement and active management provides the scope for corporate bond investors to do ‘the right thing’ and make money.

It could be that ESG risks are still not fully factored into prices. This is consistent with some of the academic evidence presented above. Since this does not obviously fall into any of the categories above, this could be considered alpha – an information advantage. However, as believers in active management and active engagement, we would not classify the benefits of passively following a rules-based approach as alpha.

The market is largely pricing corporate bonds based on sector, quality and duration, with little evidence of pricing of ESG factors.

There is a correlation between high ESG scores and high quality on other measures, so it is possible that this quality factor is what has been captured. This is consistent with the findings of Sin Stocks Revisited: Resolving the Sin Stock Anomaly by David Blitz and Frank Fabozzi (Journal of Portfolio Management, August 2017). They find that the abnormal returns from sin stocks can be fully explained by the two new quality factors in the recently introduced Fama-French 5-Factor model, profitability and investment. “In short, there is no evidence that sin stocks provide a premium for reputation risk after controlling for their exposure to factors in today’s asset pricing models.”

Negative screening should have an economic consequence. It should raise the cost of capital for those companies whose debt has been screened out. But this has not happened in practice. Indeed, the Barclays study found that there has been no systematic richening of high-scoring ESG bonds. The market is largely pricing corporate bonds based on sector, quality and duration, with little evidence of pricing of ESG factors. By contrast, popularity of the low-volatility factor in equity markets became very apparent in rising relative valuations before the strategy’s recent setback.
In conclusion, we do not think you can expect to outperform your benchmark simply by following an ESG strategy in fixed income. But we do see ESG analysis as fundamental to understanding the investment risk, irrespective of whether the investor decides to adopt an ethical approach to investment. Adopting an ESG approach does not mean sacrificing performance. Nor does it mean sacrificing diversification.

Active engagement with companies is necessary to understand their values and behaviours. The insights gained will assist analysis. Fixed income investors cannot vote, but have other means of influencing behaviours. Active engagement can directly influence corporate behaviour, positively influencing both investment returns and a company’s environmental and social impact on the world.

Active management allows investors to profit from changes to ESG ratings. The ESG analysis that feeds passive products only provides a backwards-looking view of ESG factors. Active engagement allows portfolio managers to identify companies where ratings are expected to change, up or down, and act accordingly. Combining active engagement and active management provides the scope for corporate bond investors to do ‘the right thing’ and make money.
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