

The Financial Return of **Responsible Investing** 

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# Main takeaways

The growing interest in Responsible Investing (RI) raises the question whether pursuing environmental, social and governance (ESG) goals – limiting the range of potential investment opportunities – requires sacrificing performance. The overall conclusion of our literature study is that RI does not sacrifice financial returns and helps mitigate risk.

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# Main takeaways

Empirical studies demonstrate that taking 'material' ESG issues into account can positively contribute to financial returns.

A portfolio with 70% reduction in carbon footprint is possible with a minimum rise in the tracking error.

Ample evidence shows companies with better ESG practices have stronger financial outperformance and enjoy lower cost of capital. As the economy becomes more sustainable, it is to be expected that companies with an ESG-outperformance, will also gain financially. However, this does not necessarily mean that they will offer an above-market average financial return for investors.

As ESG criteria are increasingly incorporated into the stock price, the expected gains will increasingly already be priced in.

Active ownership, improving companies ESGperformance through engagement, could be a viable strategy to generate positive returns as it creates new positive ESG-developments.

# RI popularity growing...

Responsible investing (RI)<sup>2</sup> has been gaining major traction in recent years. Institutional investors around the world are increasingly integrating environmental, social and governance (ESG) criteria into their investment strategies and operations. In 2016, according to the Forum for Sustainable and Responsible Investment (US SIF), investors consider ESG across \$8.7 trillion of assets professionally managed in the U.S., 33% higher than in 2014. This means that \$1 of every \$4.6 under professional management is now invested in RI strategies. By 2016 the UN-backed principles for Responsible Investment (PRI) has been signed by more than 1500 asset owners and managers over 50 countries, representing US\$60 trillion in assets under management. The uptake has been particularly strong among Dutch pension funds. According to a survey conducted by the Dutch Central Bank (DNB) in 2016, nearly 90% of the more than 200 pension funds surveyed have put in place an RI policy to some extent, while more than 10% – typically the larger schemes – have fully integrated the concept into their investment strategies. Frank Elderson, DNB supervisory director for pension funds, said: "The sector has a number of leaders, both larger and smaller schemes, that stand out internationally."

# ...but what will be the financial effect?

A key question often asked by investors is whether there is a premium associated with RI, which necessarily yield lower financial returns. The opponents of RI argue that imposing non-financial criteria - such as ESG considerations - restricts the investment universe, limits the opportunity set and thus reduces diversification efficiencies and thereby adversely impacts the risk and return.

<sup>2</sup> Many of the terms associated with investment strategies that apply some forms of ESG criteria – socially responsible investment (SRI), sustainable and social responsible investment (also SRI), ESG investing, *extra-financial analysis, corporate social responsibility, non-financial considerations, and ESG integration* – are used interchangeably. We group all of them together under the heading "Responsible Investing". PRI *defines Responsible Investment* as an approach to investing that aims to incorporate environmental, social and governance (ESG) factors into investment decisions, to better manage risk and generate sustainable, long-term returns.

Initially, investors that started looking at ESG to inform their investment decision did so primarily for ethical reasons, often explicitly accepting lower expected financial returns. However, presently the supporters of RI argue that the ESG integration into the investment practice delivers material benefits that more than offset the loss of the portfolio efficiency caused by limiting the investment set. The question whether responsible investing pays off

financially is ultimately an empirical one.

## This report

This report aims to address the question whether responsible investing pays off financially through a comprehensive review of the available academic evidence. It aims to shed light on how academic insight can feed into the investment beliefs and design RI policies for pension funds board members. We start by describing the empirical literature on the impact ESG has on companies' performance and on that of investors. We then discuss which factors (E, S or G) impact financial returns the strongest, followed by the financial effect of different ESG investment strategies before we conclude and formulate recommendations to board members of Dutch pension funds.

# ESG seen as increasingly material

The basic premise of ESG integration suggests that in addition to reviewing the financial performance of companies, we should also include an analysis of how they deal with environmental, social and governance issues. Table 1 shows that ESG investing covers a wide range of factors. Traditional financial analysis has often been distinct from ESG analysis, as the latter was not considered to have material financial impacts. The counterargument however, points to mounting evidence that ESG factors are material to the financial success of a company over time. In other words, firms can "do well while doing good.". A distinction between firm-level and portfoliolevel evidence of the returns of RI is made in the literature. At the portfolio-level, the literature considers either factual portfolios (i.e., actual RI funds) or fictitious ones consisting of firms that satisfy certain ESG criteria.

# Table 1 Examples of ESG issues

Source: Environmental, social and governance issues in investing: A guide for Investment professionals, CFA institute, 2015.

Environmental issues	Social issues	Governance issues
Climate change and carbon emissions	Customer satisfaction	Board composition
Air and water pollution	Dataprotection and privacy	Audit committee structure
Biodiversity	Gender and diversity	Bribery and corruption
Deforestation	Employee engagement	Executive compensation
Energy efficiency	Community relations	Lobbying
Waste management	Human rights	Political contributions
Water scarcity	Labor standards	Whistleblower schemes

# ESG is associated with better firm financial performance...

Firm-level evidence sheds important light on the mechanisms of how ESG factors matter. A growing body of firm-level studies documents strong positive correlations between ESG practices and various types of firm value. On average firms with higher ESG scores tend to have stronger marketbased (i.e., return, Tobin's Q) and accounting-based (e.g. return on assets, return on equity) financial outperformance.<sup>3</sup> These firms also enjoy lower costs of capital. The lingering question in these studies is whether good ESG performance follows good financial performance in a firm or whether it **7** / 31

precedes it – in other words are firms doing well by acting responsibly or acting responsibly because they are doing well. Using a matched sample of 180 U.S. companies, Eccles et al (2014) find robust evidence that high sustainability companies, i.e. early adopters of sustainability policies by 1993 earn higher abnormal return than a control group of low sustainability companies during the period 1993-2010, amounting to 2.3% to 4.8% per annum.

3 Friede et al (2015) conduct a meta-analysis over 2000 empirical studies since the 1970s, making it the most comprehensive review of academic research on this topic. The find that approximately 90% of studies report a nonnegative relationship between specific ESG factors and corporate financial performance (CFP). In addition, a large majority of studies report positive findings. The positive effects of ESG factors on CFP appear stable over time. Clark et al (2015) reviewed more than 200 of the highest quality academic studies, industry reports, newspaper articles and books. According to their findings, 88 and 80 percent of reviewed sources report that sound ESG practices have a positive influence on operational and stock market performance, respectively. Moreover, 90 percent of the studies show that solid sustainability criteria lower the costs of capital.

4 Renneboog et al (2008) find that investors pay a price in investing in SRI funds. They show that SRI funds in the US, the UK, and in many continental European and Asia-Pacific countries underperform their domestic benchmarks by – 2.2% to – 6.5%.

# ...and not hurting investors.

A large strand of literature considers the performance of RI mutual funds and non-RI mutual funds. Most studies, with a smaller number of exceptions (e.g, Renneboog et al, 2008<sup>4</sup>) find no significant differences in risk-adjusted returns between RI funds and conventional funds/broad market indices in the US (Hamilton et al, 1993; Statman, 2000; Bauer et al, 2005), UK (Mallin et al, 1995; Gregory et al, 1997), Continental Europe (Bauer et al, 2005), Australia (Bauer et al, 2006) and Canada (Bauer et al, 2007). A recent study by Nofsinger and Varma (2014) shows that in contrast to conventional funds, SRI funds underperform during the stable periods but outperform during the crises period.

# **E, S, or G?**

So ESG factors are material to firms' financial performance. And taking these into account does not hurt the financial performance of investors either. What factors then matter most to firms' performance and that of their investors?

# G matters most

Of the three ESG components, governance is the most extensively studied factor and appears to be the most relevant one to create shareholder value. In a much-cited study, Gompers et al (2003) construct a "governance index" to proxy for the level of shareholder rights at more than 1500 large firms during the 1990s. They show that firms with stronger shareholder rights have higher Tobin's O. net profit margin, return on equity and one-year sale growth. They demonstrate that an investment strategy that bought firms with strongest rights and sold firms with weakest rights leads to a riskadjusted annual return of 8.5% during 1990-1999. Bebchuk (2013) argues that the association between good governance and abnormal return during 1990-1999 subsequently disappeared due to market

participants' learning to appreciate the importance of good governance as evident by an increase in the attention to governance by media, institutional investors and academics.

Bauer et al (2004) study the impact of corporate governance in Europe. They show that corporate governance has a positive effect on stock returns and firm value though this effect weakens after adjusting for country differences. They find a stronger relation between good governance and firm value in the EMU than in the UK, consistent with the fact that EMU companies traditionally have lower standard of corporate governance due to civil code. They also find a weaker excess return of a corporate governance strategy<sup>5</sup> in the EMU than in the UK. This evidence may again imply that current governance standards have, to a large extent, already been incorporated in stock prices in the EMU.

<sup>5</sup> Note that Bauer et al (2004) deviate form Gompers et al (2003) in their portfolio construction. They construct their portfolios based on relative score of a firm versus the entire sample, instead of using an absolute score. Bauer et al (2004) want to ensure that the portfolios are about equal with respect to total market capitalization.

# But so does E...

The studies on the environmental (E) and social (S) factors have a much shorter history. The recent BP oil spill in the Gulf of Mexico illustrates the tremendous negative impact that environmental incidents can have on the credit rating of firms. Research shows that firms adopting the environmental management systems have superior business performance in terms of profitability and growth (Darnall 2008). Derwall et al (2005) focus on the concept of "eco-efficiency", which can be thought of as the economic value a company creates relative to the waste it generates. They demonstrate that even in the presence of transaction costs. a simple best-in-class investment strategy of selecting high ranked eco-efficient companies historically yielded a higher risk-adjusted return of 6% compared to a worst-in-class approach.

Their findings constitute an example of the market mispricing information on the ecological performance of companies (RBS, 2012)<sup>6</sup> and support the argument that "companies do not have to encounter a trade-off between eco-efficiency and financial performance, and that investors can exploit environmental information for investment decisions (Guenster et al, 2011)". Hong et al (2016) study the efficiency with which the stock prices of food companies respond to information about drought, an important source of climate risk. They show that a portfolio short food stocks of countries in drought and long those of countries not in drought yields a 9.2% annualized return from 1985-2015, confirming the concerns of stock markets inexperienced of pricing climate risk.

<sup>6</sup> Does social responsible investing hurt investment returns? RBS Global Asset Management, 2012.

# ...and S.

The most prominent study on the relationship between S and its effects on financial return is Edmans (2011). He finds that a value-weighted portfolio of "Fortune magazine 100 Best Companies to Work For in America" earned a risk-adjusted return of 3.5% from 1984 to 2009, 2.1% above industry benchmarks. In his follow-up papers, he show that these alphas hold for a more extended period from 1984 to 2011 and for an international sample of 11 out of 14 countries. The employee satisfaction premium implies that the market has not yet fully priced intangibles and RI based on employee welfare may improve investment performance.

# It is the materiality that matters

Although there is increasing evidence on positive ESG premiums, knowing exactly which ESG factor to focus can be difficult as the materiality of ESG dimensions may change significantly across industries. Access to material sustainability information can help investors and asset managers generate alpha. The Sustainability Accounting Standards Board (SASB)'s Materiality Map identifies which ESG issues are likely to be material for more than 50% of the industries in a sector. For example, environmental issues are a dominant theme in the non-renewable resource and transportation sector, social issues are more prominent in the health care sector, and governance is important for the financial sector.

Relying on this materiality classification, Khan et al (2015) presents new evidence that firms with good ratings on material sustainability issues significantly outperform those with poor ratings on these issues. This is not the case for immaterial issues. Thus, firms with high ratings on material issues, and concurrently low ratings on immaterial issues have the best future stock performance, generating an annualized alpha of 4.8%.

# **Relevance of ESG across asset classes**

While traditionally RI has focused on almost exclusively on public equities, all asset classes are impacted by ESG factors. We discuss the relevance of ESG across various asset classes.

#### **Corporate bonds**

In a recent report<sup>7</sup>, Barclays Research analyzes the impact of ESG on the performance of US investment-grade corporate bonds. It shows that the cumulative outperformance of the high-ESG over the low-ESG bond portfolio has been almost 2% over the period August 2009 to April 2016. They also find that G had the strongest link with performance and S the weakest, even slightly associated with negative returns and E is in between. In a sample of 582 U.S. public firms during 1995-2006, Bauer and Hann (2010) show that firms with sound environmental practices have significantly lower credit spread and higher credit ratings. They also show that the environmental management concerns for bond investors has increased over the recent decade.

The research from the Natural Capital Declaration (2015)<sup>8</sup> shows that companies that depend heavily on access to water are heavily exposed to water stress. They have developed tools to integrate water stress factor into credit assessments of bond issuers in the Beverages, Mining and Power Utilities sectors.

#### Sovereign bonds

Sovereign bonds issued by developed countries had long been considered a safe haven for institutional investors. Rather than a reliable and predictable source of income, the euro crisis has reminded us that the debt of highest-rated countries can be volatile. The euro crisis has contributed to a shift in incorporating ESG into sovereign credit rating.

<sup>7</sup> Sustainable investing and bond returns: Research study into the impact of ESG on credit portfolio performance, Barclays Research.

<sup>8</sup> Integrating water stress into corporate bond credit analysis: Benchmarking companies in three sectors, NCD report, 2015.

While multiple studies have demonstrated the correlations between ESG factors and firm credit risk (i.e. cost of capital), ESG factors have proved to be material to sovereign creditworthiness and investment performance, with a PRI report in 2013<sup>9</sup> showing that sovereign bonds issued by countries with higher ESG scores outperformed over the euro crisis period. Furthermore, the report also shows that G (e.g. corruption) shows the strongest correlation with sovereign bond performance, E the weakest<sup>10</sup> and S (e.g. lower levels of political freedom paired with higher degree of social development) in between.

9 Sovereign bonds: Spotlight on ESG risks, PRI report, 2013.

- 10 For example, the Environmental risk integration in sovereign credit analysis (E-RISC) study, conducted by the United Nations Environmental Program Finance Initiative (UNEP FI) partnered with the Global Footprint Network find no correlation between a country's ecological balance and its credit rating. This result is remarkable considering E is highly material to a country's economic performance in the short- and long-term.
- 11 A new angle on sovereign credit risk, ERISC: Environmental risk integration in sovereign credit analysis, UNEP FI report, 2012.

The E-RISC study<sup>11</sup> conducted by the United Nations Environmental Program Finance Initiative (UNEP FI) partnered with the Global Footprint Network demonstrated that for five countries studied (Brazil, France, India, Japan and Turkey), risks related to natural resource constraints and their broader environmental consequences are material to their economic performance in short-term (0-5 years) and medium-term (5-10 years) although there appear to be no correlation between resource exposure and sovereign credit ratings or credit default swaps.

#### **Private equity**

With its long-term investment horizons and its ability to work directly with portfolio firms to improve performance, private equity is ideally suited for ESG investing. ESG has now become a core strategy for private equity firms to create value, according to Cornelli et al (2015) based on the responses from 42 private equity firms across different industries and countries with collective assets under management of more than \$640bn. This study also shows that commitment to ESG integration originates at the top of the hierarchy, with ESG policy being set and enforced at the board level. ESG integration is likely to take place in different stages of the investment processes, such as the origination, asset ownership and exit stage. Ioannis Ioannou, assistant professor of strategy and entrepreneurship at the London Business School, said: "The private equity industry is increasingly placing greater importance to ESG, moving it from a purely compliance and risk mitigating strategy to a key long-term strategy through which private equity firms pursue value creation."

### Hedge funds

A growing number of hedge funds are increasingly embracing the RI principles. Though the adoption of ESG criteria is still at an early stage in the hedge fund universe, a recent study from Unigestion, the Swiss asset manager, find that the proportion of hedge fund managers incorporating ESG grew from 25 to 40 per cent between 2011 and 2014.<sup>12</sup>

### **Real estate**

Incorporating ESG factors in real estate as an asset class is gaining traction. Research demonstrates substantial returns in rents and value of energyefficient "green" buildings. Based on a sample of 10000 US office buildings which have been evaluated for energy efficiency by one of the two leading agencies (i.e. the Energy Star program or the Leadership in Energy and Environmental Design program), Eichholtz et al (2010) show that controlling for quality and location, buildings with a "green rating" have rental rates that are roughly 3 percent higher per square foot than otherwise identical buildings. The effective rents (that is, rents

<sup>12</sup> The adoption of ESG criteria among hedge funds and private asset managers: a survey, Unigestion.

adjusted for building occupancy levels) and selling prices are about 7 and 16 percent, respectively. In all, the academic evidence suggests not only that RI does no harm to conventional investing,<sup>13</sup> RI might be able to deliver superior returns through exploiting the mispricing of the ESG factors in the market. However, it is less clear whether investors can exploit the abnormal returns in a "sustainable" way as market participants learn and incorporate ESG information over time. As Edmans (2011) argues if the market fully valued intangibles, such as employee satisfaction, then this would dampen the profitability – as measure by the alpha – of RI strategies. While ESG is gaining prevalence in various asset classes, to date, there is limited evidence on how ESG affects asset allocation across different classes

# ESG investment strategies are evolving...

There are several different strategies for integrating ESG in the investment processes. Here we discuss these strategies and the research on the financial impact of these specific strategies.

### From exclusion and inclusion to ESG integration

In the past investors who cared about sustainability mainly applied exclusionary strategies (i.e. negative screening), which restricts the investment universe. The exclusion can take the form of a sector-based screening where the entire sector (e.g. tobacco, alcohol, gambling or pornography) or asset class are excluded or a norm-based screening where companies involving in human right violations and/ or damages to the environment are excluded. For example, ABP excludes Walmart from investment due to poor labour practices (WSJ, 3rd January, 2012). PFZW stops using hedge funds to manage investments, citing excessive costs, poor performance, complexity and society's disapproval of the high wages paid to fund managers.

<sup>13</sup> Note that there is a difference between the performance of an actual portfolio, i.e. existing RI funds and performance of a fictitious portfolio of stocks chosen on basis of ESG criteria. The realized performance in portfolios depends on the overlapping effects of systematic and idiosyncratic risks, on construction constraints and on costs for portfolio implementation which may distorts pure ESG performance (Friede, et al., 2016).

What are the financial impacts of exclusion? The main disadvantage of this approach is that exclusionary criteria led investors to see their options as binary (either "love" or "hate"). Growing evidence (e.g. Hong and Kacperczyk, 2009) reveals that "sin" stocks - public companies involved in producing alcohol, tobacco, and gaming - are neglected by stock market participants due to social norms, regulatory scrutiny, and litigation risk. Consequently, these stocks experience lower institutional ownership, less analyst coverage and higher expected returns. Their findings suggest that investors potentially forego return, but also risk, when exercising non-financial rather than financial criteria in their investment decisions.

In reality, the overwhelming majority of investors that exclude companies on ESG grounds do this for only a small number of companies (e.g., 20-30 that infringe on the UN Global Compact), which does not restrict the investment universe in a substantial way and therefore, does not affect the efficiency of their stock portfolios in a material way. The intensity of ESG screening used by SRI funds may also affect their financial performance. Barnett and Salomon (2006) find for a sample of US SRI funds that financial returns first decline as the screening intensity increases, reaching a minimum at 7 screens, then begin to increase till it reaches the maximum of 12 screens. They argue that the lack of diversification benefits might be (at least partially) offset by a better stock picking when the screening processes become very selective. Although they note that even at the maximum of 12 screens, performance does not recover to reach the levels achieved by those funds with 1 screen, suggesting that screening may come with costs. Blancard and Monjon (2014) report similar findings using the French data. The presence of a non-linear relationship is also consistent with two hypotheses, namely "shunned-stock hypothesis" and the "errors-in-expectations hypothesis" put forward by Derwall et al (2011). The "shunned-stock hypothesis" predicts that a value-driven strategy may hurt financial performance because socially controversial stocks have superior returns as they

are shunned by value-driven investors who push their prices below those of responsible ones. The "errors-in-expectations hypothesis" predicts that SRI can deliver superior performance as the market is prone to undervalue the impact of the corporate social responsibility (CSR) on future cash flows.

While negative screens are widely adopted in the US as well as in Anglo-Saxon countries (Blancard and Monjon, 2014), the best-in-class approach and/or an integrated approach is the norm in Continental Europe. Alternatively, investors use inclusionary strategies (i.e. positive screening). They invest in companies that are ESG frontrunners. A widely used approach is the best-in-class approach, where investors choose companies according to a predefined benchmark showing how well companies have met particular

14 The materiality of ESG factors for equity investment decisions: academic evidence, NN Investment Partners and ECCE report, 2016. ESG criteria. Consequently companies are ranked within each industry and the investors select those that pass certain thresholds. More recently we also see investors selecting companies that have positive ESG momentum, i.e., companies that are improving how they score on ESG factors.

A recent study<sup>14</sup>, performed by the European Centre for Corporate Engagement (ECCE) at Maastricht University in cooperation with NN Investment Partners provides a comprehensive assessment of the performance of international equity portfolios that are formed on the basis of various ESG level and momentum from January 2010 through September 2014. They prove that ESG momentum, mainly revolved around G, could be a more fruitful selection criterion. Furthermore, return differences between stocks with strong ESG momentum and those with weak momentum were largest among stocks that scored medium in terms of ESG levels, suggesting that stock selection benefits from joint consideration of levels and changes in ESG scores.

# Robeco integrates ESG performance in equity valuation

Asset manager Robeco has integrated the valuation of the ESG performance of companies in its valuation of equities. Since January 2014, its financial analysts are required to explicitly quantify the impact of the most material ESG issues in their analysis. Analysis of the first results show that 'environmental management' and BNC factors such as 'climate strategy' and 'product stewardship' are especially material in the resources sectors (energy, materials, industrials and utilities). ESG was decisive in 9% of 178 portfolio changes made and in 28% it played an important role. The effect of ESG factors on the valuation (the so called 'target price') is 5% overall, and 10% for those equities where a change was made on the basis of ESG-factors. Target price changes ranged from -23% to +71%. The very preliminary findings of the impact on the financial performance are also positive. As the ESG-driven portfolio decisions outperformed their relative sector indices on average by over 5% annualised (Schramade 2016).

However, they note that portfolios comprising stocks with high ESG score levels underperform their lowerscoring counterparts in the majority of cases.<sup>15</sup>

A more sophisticated approach of selecting companies refers to ESG integration. This approach considers ESG in all aspects of the investment process, from security valuation, the risk-return analysis and portfolio construction. Full integration means ESG information are systematically fed

<sup>15</sup> This may appear in contradiction with other studies, which could be partially explained by the differences in the methodology used. This report applies a methodology that adjusted for size and industry bias in the equity selection.

into valuation models and investment decisions of analysts and portfolio managers. The ESG integration process is reflected not only in decisions to buy/sell, but overweight/underweight a certain security or asset. With full ESG integration, investors not only minimize potential negative ESG exposure but can benefit a fuller evaluation of material information, as well as the true injection of key global values into their portfolios.

As an illustration of the returns of different RI strategies, BlackRock has conducted research on integrating ESG in a detailed and structured way when they construct RI portfolios using ESG data from a third-party vendor MSCI during November 2010 till June 2016. Table 1 in the appendix displays various approaches to increase exposure to positive ESG factors in a portfolio, each meeting a different objective. Giving growing environmental concerns, Panel A provides index options for investors who particularly are looking to reduce carbon exposure, whereas Panel B focuses on the increase exposure to overall ESG factors. Since long-term returns and volatility for different RI portfolio are indistinguishable from the broad MSCI index, tracking error may matter most to institutional investors. Although all the RI portfolios display tracking errors compared to the MSCI index, there are significant variations across portfolios. For example, Low carbon optimisation portfolio achieves greater current carbon emissions reductions than all other portfolios and 70% potential carbon emissions reductions (second only to ex-Fossil Fuels), with a low realised tracking error of 0.4%. ESG optimization portfolio achieves greater improvement in ESG ratings (e.g. from BBB to A) with a tracking error of 0.8%.

Are these tracking errors reasonable or excessive? According to a survey of large U.S. pension funds, the average expected tracking error for institutional active management is 5%, which means that investors already bear comparatively significant tracking error with their active managers. By comparison, the incremental absolute portfolio risk remains quite small. In all, although RI drives tracking error, RI can achieve comparable performance with a broad market index over a longer term without incurring additional risk, despite using a smaller universe of securities meeting ESG criteria.

#### Active ownership

The past two decades have witnessed a rapid increase in institutional ownership. For example, in the UK institutional investors hold 90% of all public equity (Çelik and Isaksson, 2013). Institutional investors are considered to be the most powerful group who can bring about changes to corporations through active ownership, a set of tools that can be used by shareholders to influence corporate behavior. In this context, pension funds can actively exert influence on corporations' sustainability issues. By addressing the ESG shortcomings, corporate engagement can encourage better business practice and enhance performance of companies. It allows the investors to reap the financial benefit that can be expected, as the added value hasn't been priced in yet. Proxy voting at the annual general meetings (AGMs)

is the basic instrument of shareholder engagement. As most investor's ownership stake in public listed corporations generally is very small the power of proxy voting is limited.

Filing of shareholder resolutions is a more powerful instrument. In that case, institutional investors file their own resolutions in order to have a vote on a particular issue that they consider to be important and influence the outcome of AGM more effectively. The number of filed shareholder resolutions is steadily increasing from 50 to 300 annually during 1997-2009 among all S&P 1500 companies. A number – with just 300 resolutions in 2009 – is still relative low given the underlying sample comprises all 1500 companies (Viehs et al, 2013).

According to a report of VBDO<sup>16</sup>, 98% of the surveyed pension funds in the Netherlands vote at Annual General Meetings. 44% of the pension funds vote with explicit attention towards ESG-issues and another 38% of the pension funds publicly supports or initiates shareholder resolutions. The filed shareholder resolution may not always be put to a vote. Bauer et al (2015) find that almost 20% of all filed shareholder resolutions – by both institutional and non-institutional investors – are withdrawn before the AGMs take place. They show that the proposals sponsored by influential shareholders (i.e. institutional investors or labour unions) are more likely to be withdrawn than proposals filed by private shareholders. Their findings imply that firms are more likely to honor the engagements of improving the corporate ESG standards by reaching a settlement before the proposals are put to vote during the annual general meeting (AGM). Engagement constitutes another important strategy for institutional investors. Private engagements can take the form of sending letter, making phone calls, company visits and attending management meetings. In this way, institutional investors exercise their rights as a shareowner. 82% of the Dutch pension funds use engagement as an instrument. 78% of all pension funds under study engage all three ESG components.

Recent research shows that engagements pay off in terms of improved stock market return of targeted firms. Dimson et al (2015) document positive market reactions to RI engagements at 613 US public firms over 1999–2009. They estimate a one-year average cumulative abnormal return of 4.4% for successful engagements, and zero for unsuccessful ones. They also find after successful engagements, engaged companies experience improvements in their operating performance, profitability, efficiency, shareholding, and governance.

<sup>16</sup> Engagement: box ticking or catalyzing sustainability? VBDO report, 2014.

While engagements are sought after by individual efforts or delegated to larger intermediaries, a collaborative effort by a group of institutional investors can be more effective in pushing forward the ESG agenda (Dimson et al, 2015). This type of coordination is facilitated via the global networks such as the PRI, International Corporate Governance Network (ICGN) or Eumedion in the Netherlands (Viehs et al, 2013). The coordination among pension funds may constitute a viable engagement strategy for smaller funds to pursue (van Tilburg et al, 2016).

An example of successful collaborative engagement is GRESB (The Global Real Estate Sustainability Benchmark), an investor-led initiative that assess the ESG performances of nearly 1000 property companies and funds globally. To date, more than 250 members, of which more than 60 are pension funds use the GRESB data in their investment and engagement strategies.

# RI can pay off financially

In all, the academic evidence suggests that not only that RI does no harm to conventional investing, RI might be able to deliver superior returns through exploiting the mispricing of the ESG factors in the market. Portfolios of assets with high ESG ratings have been found to outperform their benchmark in various contexts. This is especially true for corporative governance, eco-efficiency and employee relation.

The integration of ESG into investment processes can mitigate risk, has potential to increase longterm performance and can provide additional diversification opportunities. Neglecting these criteria results in an incomplete assessment of risks and opportunities of the potential investments, and consequently suboptimal investment decisions. Integrating ESG can be done through both active and passive investment strategies. Large gains, for instance like halving the carbon footprint of the portfolio, can be made with a minimal increase in the tracking error. However, it is less clear whether investors can exploit the abnormal returns in a "sustainable" way as market participants learn and incorporate ESG information over time. As Edmans (2011) argues, if the market fully valued intangibles, such as employee satisfaction, then this would dampen the profitability – as measure by the alpha – of RI strategies. Some ESG aspects, in particular governance may have been already priced in the market.

# Proactive approach and innovative collaboration are necessary

Reaping the financial benefits of RI requires institutional investors to continuously adjust their strategies. The danger is that ESG might end up overpriced in some segments of the market. Investors need to be aware of the market development and adapt their strategies accordingly.

As institutional investors are increasingly using more sophisticated RI strategies, active ownership, which has not yet been fully embraced by institutional investors, may constitute an opportunity for pension funds to enhance their financial performances. In particular, cooperation amongst institutional investors on engagement seems to be an effective and low cost strategy for pension funds of all sizes.

Different pension funds may have a different set of priorities as to what constitutes RI strategies. It is the board's responsibility to set up well-defined RI strategies and to select asset managers/intermediaries. Without having a clear strategy, it will be difficult to respond efficiently and effectively to all impulses. Without transparent reporting on the actions, it will be difficult to learn from implementation.

Looking forward, as institutional investors increasingly demand for RI, RI is likely to become mainstream. As a result, RI might become a new baseline threshold of investing generally. Firms that are successful in differentiating themselves on ESG and offering new value propositions will continue to gain financially. Investors that are at the RI forefront in embracing new and sophisticated strategies will stand strong in the long term.

# Appendix

# ESG in practice: An illustrative example

Does RI require sacrificing performance or increasing risk, compared to a broad market index? BlackRock has conducted research on integrating ESG in a detailed and structured way when they construct RI portfolios using ESG data from a thirdparty vendor MSCI. Table 1 illustrates the outcomes of performance, carbon and ESG matrices and concentration between different RI portfolios and MSCI World index. Giving growing environmental concerns, Panel A provides index options for investors who particularly are looking to reduce carbon exposure, whereas Panel B focuses on the increase exposure to overall ESG factors.

When comparing returns, column (1) shows that the long-term returns for different RI portfolios are similar to the broad MSCI index. Volatility measures (i.e. standard deviations) in column (2) appear also to be similar to that of the MSCI index.

Since long-term RI index performance is relatively indistinguishable from the broad market, tracking error<sup>17</sup> may matter most to institutional investors

<sup>17</sup> Tracking error is the annualized standard deviation of a portfolio's excess return, which is the absolute difference between a portfolio's return and that of its benchmark.

subject to specific limits over shorter horizons. Tracking error is sometimes referred to as active risk as it captures active decisions taken by the portfolio manager to deviate from the benchmark's holdings and weights. It captures how consistently a portfolio outperforms, or underperforms, its benchmark. It has the advantage of being measured and predicted in advance more reliably than returns as the latter is influenced by market conditions. The lower the tracking error, the more closely the portfolio mimics the performance of a benchmark. Thus, instead of asking "what is the performance penalty of RI?", the question becomes "what is the risk penalty of RI?". Column (3) shows that all the RI portfolios displayed tracking errors compared to the MSCI index. There are significant variations across portfolios. Constructing a portfolio that excludes fossil fuel companies or selects the top 25% high-ranked ESG companies will generate the highest tracking error of 1 and 1.5%, respectively. Therefore, as expected, using ESG criteria in stock selection, which limits the investment universe in column (6) and (7), introduces portfolio biases and causes performance to deviate from the main benchmark.

Is a tracking error of 1% reasonable or excessive? According to a survey of large U.S. pension funds, the average expected tracking error for institutional active management is 5%, which means that investors already bear comparatively significant tracking error with their active managers. By comparison, the incremental absolute portfolio risk remains quite small.<sup>18</sup>

It is worth noting that Low carbon optimisation portfolio achieves greater current carbon emissions reductions than all other portfolios and 70% potential carbon emissions reductions (second only

<sup>18</sup> For example, if the standard deviation of a market index is 13% (variance=1.69%), a 1% tracking error (variance=0.01%), combined portfolio risk is 13.038%, the incremental risk is merely 0.038%.

# Table 1 Comparison of performance, carbon/ESG metrics and concentration of different RI portfolios

Data source: MSCI, compiled by BlackRock. Data as of: 30 Jun 2016, Performance data	1	2	3	4	5	6	7
rrom 30 Nov 2010 – 30 Jun 2016.	Return (%)	Volatility (%)	Tracking error (%)	Carbon intensity (t CO2e/ \$M sales)	ESG Score	Number of stocks	Market cap coverage (%)
MSCI World Index	8.9	13	-	224	5.3 (BBB)	1627	100
RI Low Carbon Portfolios							
Ex-Coal	9,2	12,9	0,3	215	5.3 (BBB)	1614	98.7
Ex-Fossil fuels	9,9	12,7	1,1	194	5.4 (BBB)	1543	90,8
Low carbon leaders *	9,3	13,2	0,6	111	5.3 (BBB)	1278	82,6
Deforestation	9,2	13	0,4	64	5.4 (BBB)	1253	88,3
Low carbon optimization (Figure 1a)	-	-	_	_	_	_	-
RI Best-in-Class Portfolios							
Sustainability **	8,8	12,7	1	169	6,4 (A)	799	48,5
SRI ***	8,3	12,6	1,5	129	7,4 (A)	412	24,1
ESG optimization (Figure 1b)	8,9	13,1	0,8	156	6,9 (A)	451	57,6

\* Exc. top 20% by current emissions per sector and top 50% by reserves across universe

- \*\* Top 50% of market capitalisation per sector, ranked by ESG rating, excludes companies with involved in alcohol, gambling, tobacco, conventional and controversial weapons, civilian firearms and nuclear power, Minimum MSCI ESG Controversies Score of 3 for new constituents
- \*\*\* Top 25% of market capitalisation per sector, ranked by ESG rating, excludes companies with involved in alcohol, gambling, tobacco, military weapons, civilian firearms, nuclear power, adult entertainment and genetically modified organisms, minimum MSCI ESG Controversies Score of 4 for new constituents

# Figure 1 Comparison of Low carbon optimization and ESG optimization



ESG optimization



to ex-Fossil Fuels), with a low realised tracking error of 0.4%. ESG optimization portfolio achieves greater improvement in ESG ratings with less tracking error than the ESG index methodology. Figure (1a) and (1b) reveal similar findings.

In all, there are various approaches to increase exposure to positive ESG factors in a portfolio, each meeting a different objective. Although RI drives tracking error, RI can achieve comparable performance with a broad market index over a longer term without incurring additional risk, despite using a smaller universe of securities meeting ESG criteria. Investors and asset managers should carefully consider specific RI index construction, the ESG evaluation process, and the underlying market benchmark when selecting a strategy.

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