

INVESTMENT LEADERS GROUP

THE VALUE OF
RESPONSIBLE INVESTMENT

The moral, financial and economic case for action

About the ILG

The Investment Leaders Group (ILG) is a three-year project to help shift the investment chain towards responsible, long-term value creation, such that economic, social and environmental sustainability are delivered as an outcome of the investment process alongside satisfactory, long-term investment returns. Jointly conceived by the University of Cambridge and Natixis Asset Management, it is championed by the leaders of an influential group of investment managers and asset owners.

The ILG believes that responsibility should be at the heart of the investment process in order to best serve clients and beneficiaries. Not a niche, but a strategic response by investors to social, environmental and demographic trends. The ILG's maxim is to lead by example.

The ILG currently comprises 11 investment institutions: Allianz Global Investors, Aviva Global Investors, First State Investors, Loomis Sayles, Mirova (Natixis Asset Management), Nordea Life & Pensions, PensionDanmark, PIMCO, Standard Life

Investments, TIAA-CREF Asset Management and Zurich Insurance Group. Its secretariat is provided by the University of Cambridge Institute for Sustainability Leadership (CISL).

The ILG is delivering its objectives through a series of workstreams. This report concerns the first of these: the value of responsible investment – the foundation on which future ILG activities are being built. The ILG's work is underpinned by research from the University of Cambridge.



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Disclaimer

The opinions expressed in this report are the authors' own and do not represent an official position of the ILG or of its individual members.

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Foreword

At first glance one might think that nothing could possibly remain to be said on the topic of responsible investment. At any given moment, hundreds of dissertations, books and conferences are being devoted to the subject.

A Google search for 'responsible investment' yields almost 100 million hits. Hard numbers would suggest that responsible investment has triumphed: more than 1,200 organisations have signed the Principles for Responsible Investment, including pension funds, asset managers and financial services companies. Together, they represent more than 34 trillion dollars. So, does this mean that everything is settled? Is it really necessary to keep adding daily to the sum of dissertations, books and conferences? What for? Don't we all agree on the underlying issue?

What is the underlying issue?

No one denies today the reality of climate change, losses to biodiversity and resource depletion, or at least almost no one. We need finance in order to effectively channel capital into helping resolve these issues. The investment required to modify our economic and ecological trajectory is enormous. At the same time, would anyone really suggest that the financial markets function optimally and adequately take into account these externalities? On the contrary: John Kay's report on the state of the British equity markets offers a brilliant illustration of the effects of short-term thinking.

Thus, we agree on the underlying issue: that it is absolutely necessary to reintroduce long-term considerations such as the needs of future generations and the sustainability of our choices into our investment decisions. But why does this call for a new investor group? And why, specifically, a publication on the 'value of responsible investment'?



There are two reasons.

Firstly, because efforts to date have been underwhelming: despite tremendous exertion, despite the thousands of signatories committed to the PRI, market dynamics remain pre-occupied by the short-term, and investment does little to answer the challenges of our time.

Secondly, because of a wish: we are among the leaders of our industries, institutional investment and asset management. We believe this places on us the responsibility of leading by example. We believe that a group that is small in number can climb higher and go further. This publication is a first step towards that aim.

We thought it hasty to decide our future course before establishing a frame of reference. This meant answering the question: what makes responsible investment valuable? Even if our respective answers differ according to the unique characteristics of our businesses, we are fundamentally agreed that there are ethical, economic and financial reasons that can and should push investors to behave more responsibly.

A handwritten signature in black ink, appearing to read 'Philippe Zaouati'.

Philippe Zaouati

Chair, Investment Leaders Group

Executive summary

Background

The world faces a singular challenge. How will we provide for as many as nine billion people by 2050, each one aspiring to the standard of living typical of the affluent European and US middle classes? And how can this be done with finite amounts of land, water and natural resources, already heavily degraded by human activity, whilst adapting to the destabilising effect of a warmer, less predictable climate? The political, economic and business strategies of the 20th century will need to be rethought in order to meet this challenge. No sector of society will be unaffected.

As owners and managers of financial capital, investors have a crucial role to play in supporting economic activity that enhances rather than damages the environment, sustains rather than erodes livelihoods, and contributes to rather than undermines economic stability. Many investors know this and are practising what has become known as responsible investment.

Although promising, the approach is still in its infancy, lacking in both depth and scale; in parallel, a business-as-usual economy continues to draw down on the world's natural capital rather than living off its interest. In order to escape the patterns of short-termism, the concepts, methods, tools and techniques of mainstream investing need to change. A fresh, if critical, appraisal of business as usual is required.

Origins

At its inaugural meeting in 2013, each of the ILG members expressed its own unique understanding of responsible investment, and motivations for supporting it. These ranged from contributing positively to society, to enhancing returns and mitigating long-term risks to economic stability. A common theme was the potential for investors to influence beyond their immediate asset base into the wider economy, environment and society, as a function of their responsibility for, and indeed participation in, those assets.

In order to clarify the various motivations, opportunities and risks associated with responsible investment, the ILG set itself the task of developing an *intellectual model* of how responsible investment creates value in the real economy, with a view to strengthening its adoption by investors. The word 'model' was interpreted broadly: *a framework for thinking about (and acting on) the opportunities and challenges presented by responsible investment.*

The resulting report explores the moral, financial and economic justification for responsible investment, and the academic evidence underpinning future action. As one would expect, it concentrates on how environmental, social and governance (ESG) factors¹ materially impact investment risk and returns, clarifying the agency of investors over non-financial value creation.

As a whole the report offers a tour of the main drivers and debates in responsible investment, with recommendations on future actions and research. While it was inspired by the perspectives of the ILG members, the opinions expressed are the authors' own and do not represent an official position of the ILG or of its individual members.

¹ Good handling of ESG issues is regarded by some investors to be a proxy for good management, sustainability and long-term strategic thinking by the company.

What is inside?

The report spans the following major sections:

- **Section 1: Introduction**

Definitions, motivations and purposes of responsible investment. This section introduces the various motivations driving responsible investment, and the outcomes they seek to achieve. Three broad mutually supporting motivations are identified – service to society, enhanced returns, and economic imperative – serving a common aim to reward sustainable business models in the real economy. In a world that neglects to include the social and environmental costs of business on corporate balance sheets, responsible investment can be seen not only as a smart investment strategy but as an essential response to growing sources of systemic risk.

- **Section 2: The moral case: Why invest responsibly?**

The nature of responsibility in investment, with reference to how it is captured (or not) by markets and legal and policy frameworks. This section explores the moral case for responsible investment in greater depth than is usual in an investment publication, shedding light on the relationship between ESG materiality (the financial case), ESG morality (the ethical case), and complicity (certain legal risks). Framing responsible investment as a moral as well as a methodological and technical challenge for investors raises the question: what does responsibility actually mean?

All areas of business, including investment, inextricably contain ethical judgments and require intermediation between competing interests. There is good reason to believe that the public cares sufficiently about having a well-functioning, fair and secure society to wish that their money is managed consistently with these interests while obtaining satisfactory financial returns. Moreover, financial and non-financial value are mutually dependent. Acting on ESG matters can contribute to the economic conditions necessary to produce satisfactory

financial returns to their beneficiaries.

By virtue of the fact that they collectively control and manage the flow of savings from the public, large asset owners and asset managers have a responsibility to avoid systemic risk in the financial system and economy. Given that markets cannot solve all problems, and market pricing can be far off from real value and real risk, this provides an important rallying point for responsible investors.

- **Section 3: The investment case for responsibility**

The global risks posed by sustainability and the investment strategies that follow. This section reviews the environmental and social factors that underpin the financial case for responsible investment. It then locates the possible investor responses to these issues along a ‘conviction’ scale, describes how value is created through these responses (focusing principally on financial value), and identifies barriers to farther-reaching incorporation of ESG factors into investment decisions. Areas of collective action by investors to address these barriers are proposed.

There is ample evidence for believing that different dimensions of sustainability contribute to corporate value creation and strong reasons to believe that this phenomenon will grow as time progresses. In order to decide what action to take in this situation, investors – principally asset owners in this context – require a clearly articulated high-level ‘value creation framework’ consisting of three things: a set of fundamental beliefs about how the economy and the market work; a view on their ‘sustainability conviction’ (the strength of their belief that sustainability is financially relevant); and clear principles and ground rules concerning their own portfolio and governance.

With this framework in place responsible investors can play a leading role in addressing financial short termism, cited by business leaders as one of the principal barriers to stronger ESG practices. While short-term investment strategies can play an important part in an asset owner’s portfolio, providing

diversification and liquidity, they can also lead to asset mispricing, bubbles and consequent price crashes, undermining long-term economic development and investment.

- **Section 4: Unravelling responsible investment: A literature review**

What financial economics knows about responsible investment, including portfolio- and firm-level evidence, causal mechanisms, market (mis)pricing and long-term risk. This section critically assesses the state of the literature on this topic and identifies crucial gaps in knowledge. Not all studies in this area are robust: a quality filter has therefore been applied, shedding light on the relationship between investment decisions and non-financial value creation.

A distinction is drawn between portfolio-level and firm-level evidence. Studies of portfolio performance based on crude ESG criteria (e.g. “SRI or not SRI”) may lump together firms that are responding to ESG factors in different ways, making it impossible to discern the returns to sustainable practices at the firm level. Hence, before jumping to portfolio-level analyses, it is critical first to investigate the firm-level channels through which ESG factors drive financial performance and only then consider the optimal groupings of such firms to build profitable portfolios.

With some caveats, the evidence can be summarised as follows: environmental and social, rather than governance, factors appear to add value not just through lower firm-level risk but also through lower cost of capital, with roughly similar findings holding for firm value. In addition, three gaps are identified in the literature that, if closed, could explain market mispricing of sustainability risks: market short-termism, varying sensitivity to sustainability issues across asset classes and the role of critical mass in influencing investor behaviour.

- **Section 5: Collective action and research**

Opportunities for collective action and research by responsible investors. This section identifies collective actions that would substantially advance the practice of responsible investment, and research studies that would inform it – in short the stimulus for the ILG’s forward work programme.

The potential actions include:

1. Scale up capital allocation to the ‘green’ economy.
2. Underpin this commitment with research on the economic impact of environmental risks over the next two to three decades (‘unhedgeable risks’).
3. Tactical opportunities to support ESG integration:
 - Develop methods of consistently reporting the environmental, social and economic impacts of investment
 - Promote long-termism in investment mandate design
 - Contribute to a shared understanding of fiduciary duty globally.

Three annexes are included to supplement the analysis. The first classifies the main forms of responsible investment typically practised in the industry to date, and their inter-relationships; the second explores why fiduciary duty should support rather than inhibit investor attention on ESG issues; the third gives examples of how companies are creating value in response to sustainability risks and trends.

The report concludes with a list of references to published work, and a summary of the chief acronyms used in the text.

Introduction

Definitions

What is meant by responsible investment? With over 1,000 organisations now signatories to the Principles of Responsible Investment (PRI), it seems sensible, in terms of sheer numbers, to draw on its definition (PRI 2014a):

Responsible investment is an approach to investment that explicitly acknowledges the relevance to the investor of environmental, social and governance factors, and of the long-term health and stability of the market as a whole. It recognises that the generation of long-term sustainable returns is dependent on stable, well-functioning and well-governed social, environmental and economic systems.

In shorthand, this can be interpreted as *investment that creates long-term social, environmental and economic (sustainable) value; investment that combines financial and non-financial value creation, or investment that correctly prices social, environmental and economic risk.*

“...much of the capital flowing through the economy today is blind to its environmental and social consequences, presenting long-term risks to the foundation stones of our economic success”

The PRI’s definition does not explicitly mention the global goal of sustainable development as enshrined in numerous UN agreements, including the forthcoming Sustainable Development Goals (SDGs), though it may be implied that *responsible investment is the application of the concept of sustainable development to investment.*

These definitions apply to all asset classes and investment strategies universally. They point to long-term, broad-based (i.e. financial plus non-financial) value creation being the key differentiator of responsible investment. They

span practices as diverse as asset screening and themed funds to full integration and impact investing. Responsible investment is far from straightforward to implement. While the relationship between investment practices and financial value creation is well understood, the same cannot be said of its social and environmental impacts where measurement is complex and under-practised. Much of the capital flowing through the economy today is blind to its environmental and social consequences, presenting long-term risks to the foundation stones of our economic success, and all this implies for investors.

To achieve some degree of terminological consistency, the many investment approaches that derive from the core concept of responsible investment are set out in **Annex 1**.

Motivations

One of the barriers to swifter take-up of responsible investment is the range of beliefs about its purpose and value, both to investors and to society more broadly. There is a significant range of viewpoints about this. Three positions – if you like, the corners of a triangle – are characterised here (**see Figure 1**).

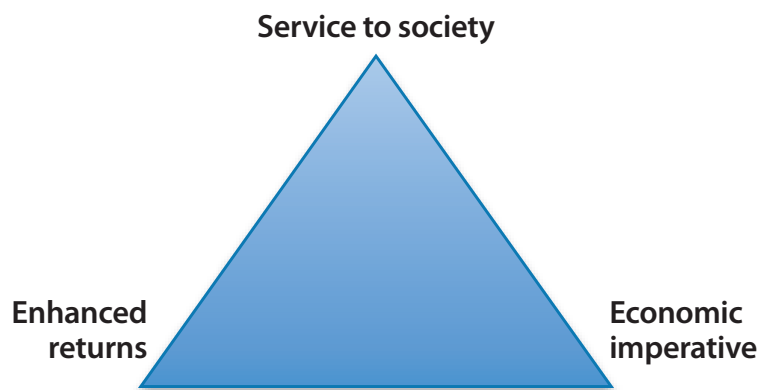
- First is the belief that responsible investment should be a **service to society**: a means of tackling the world’s social and environmental problems through effective deployment of capital. The aim is to put beneficiaries’ money to good use rather than invest it in any activity that could be construed as doing harm – essentially a moral argument. This idea is giving rise to the growing area of impact investment, itself a response to the limits of philanthropy, and a recognition of the potential to align returns with positive impacts.

- Second is the belief that responsible investment is purely smart investment, a means of **enhancing returns** by injecting new and forward-looking insights into the investment process. This idea recognises the implications of the so-called ‘sustainability megatrends’ (climate change, inequality, resource scarcity, etc.) on the economy, and the value of being able to spot winners and losers in a rapidly changing risk landscape. Within limits, harmful investments are only excluded if they are deemed to be wrong by clients, for example if they are perceived to pose a threat to beneficiaries’ interests.

‘service to society’ or ‘economic imperative’ view may wish to know what impact their efforts are having in terms of creating social, environmental and economic value.

The ‘economic imperative’ investor might ask in addition whether these efforts are proving sufficient to deal with the underlying issues. They might ask, “Are we doing enough to mitigate the risks to the economy of resource depletion and, if not, what strategies should we adopt ourselves, and who should we work with to achieve greater impact?” This may lead them to interact with other actors in the investment

Figure 1: A spectrum of motivations for responsible investment



- Third is the belief that responsible investment is an **economic imperative**, that the megatrends will, over time, act as a drag on economic prosperity as the costs of basic inputs such as water, energy and land escalate in response to scarcity, and the prevalence of health and income inequalities breeds unrest both within and between nations. This perspective is rather simple: unless the trends are reversed, the whole economy will be weakened, exposed to sustainability-led bubbles and spikes, with smart ESG investment powerless to protect returns. GMO’s Jeremy Grantham set out this spectacle in his commodity price analysis (2011).

chain, and with policymakers, to find mechanisms to internalise social and environmental costs in the balance sheets of companies.

The ‘enhanced returns’ investor may not be concerned with such questions. Operating over a timeframe of five years or less, their main preoccupation will be to understand emerging risks in their portfolios, and convert these into above-market performance. In doing so they may invest in companies, projects and vehicles with positive environmental and social impacts. They may also invest in assets which on the whole produce a negative impact but which are not at risk of reputational or legal consequences, and which offer good returns over their investment timeframe. Asset managers adopting this strategy may be keen to offer screened, thematic or otherwise responsible products for interested clients.

These perspectives are not mutually exclusive: a single investor may hold all of them concurrently. There are some important differences, however, for example, a responsible investor holding the

Problem definition

Although responsible investors have different starting points and ambitions, there are significant areas of common interest. They understand the value of including ESG factors in investment processes, and see responsible investment as a contribution to the global goal of sustainable development complementary to, but not replacing, the efforts of governments.

With increasing consumption, growing population and a strong appetite for economic growth across the globe, understanding the value of responsible investment, including its potential to forge a sustainable economy, could not be more urgent. Pressure on energy, water and land look set to rise as economic activity continues to test the environment in some cases to depletion without considering the long-term implications.

“...many of the goods and services provided by nature are not appropriately accounted for, nor are the impacts of business operations compensated for, producing inefficiency and over-use”

At the heart of this problem lies the fact that many of the goods and services provided by nature are not appropriately accounted for, nor are the impacts of business operations compensated for, producing inefficiency and over-use. By putting a financial value on the environmental impacts of business (positive and negative), the scale of the problem is revealed, and the ensuing trade-offs better understood. Global business is operating significantly in the red: one estimate puts the

environmental damage caused by the world's 3,000 largest companies in 2008 at USD 2.15 trillion (PRI and UNEP FI 2009).

The idea of infinite resources was seriously questioned during the 20th century as images of deforestation, overfishing and soil erosion entered the public consciousness. In business terms, the over-use of resources may threaten future growth, raises costs and limits options both now and in the future. It can foster dependence on imports from countries that are themselves in or entering resource deficit, adding systemic risks to the global economy: water scarcity in agriculture is an example. Pollution and land degradation also damage business and detract substantially from human health and welfare. The idea that land, rivers, seas and air can act as endless sinks ('dumps') for pollution was entirely disproved in the 20th century, yet the 'polluter pays' principle is not implemented effectively by governments. Uncontrolled emissions of greenhouse gases is another example.

Uncosted (or insufficiently costed) inputs to business, and business impacts, are classed as externalities. They can be positive and negative, environmental or social. CISL (2013) uses the following definition:

Costs (or benefits) resulting from business activities that are not accounted for in market prices or otherwise compensated, borne by parties who did not choose to incur those costs (or benefits).

In 2010, the sports brand Puma valued its environmental externalities at USD 145 million, comprising USD 51 million from land use, air pollution and waste along its value chains, and USD 94 million from greenhouse gas emissions and water. Far higher figures have been assumed for larger firms in sectors such as agriculture, extractives and energy. An example of how a business activity can create an environmental externality is shown in **Figure 2**.

Responsible investors may therefore ask:

1. How do these figures compare amongst industry peers, and what does this say about their competence in navigating sustainability?
2. How would the companies fare if these costs were internalised on balance sheets through taxes or regulation (and how likely is this to occur)?

While it is difficult (and potentially unhelpful) to price social externalities such as health, trauma, loss of freedom, dignity and childhood, such costs are carried by society as a consequence of certain business activities which, taken in aggregate, can result in serious systemic ills. An example is the cutting of labour costs during recession in order to maintain profit momentum. Corporate executives, faced with the prospect of having their stock dumped to meet quarterly expectations, may solve the

Figure 2: Example of how a business activity can cause an environmental impact (eutrophication) with effects on human welfare



3. What story do the figures tell about the company's potential drag on other sectors and economic progress?
4. What can we do as investors to ensure companies aim high with respect to their sustainability aims, ultimately becoming 'net positive'?

equation defined by growing inventories, falling demand and constrained pricing by losing employees en masse. In the aggregate, this can result in longer-lasting recession as well as considerable human cost. Large investors, particularly those that see themselves as 'universal investors', will be aware of the moral dilemma in this situation. Some may seek to address it by signalling their concerns to analysts, brokers and companies, as well as determining the right investment actions.

2

The moral case: Why invest responsibly?

Markets, morals and values

Responsibility is like friendship. One knows when it is true, one senses when it is false, but it is hard to define. In *his Ethics*, Aristotle sought to explain what friendship is by describing and analysing its various forms. Similarly, practitioners of responsible investment explain their approach by describing how they do it.

The ILG's *State of Practice Review*, for example, identifies six aims and six processes that collectively describe the field (CISL 2014). Notable among these are: align ESG motivations with those of clients; measure the societal impact of responsible investment; develop a deep understanding of the financial materiality of ESG issues; and engage with public policy to achieve sustainable valuations. Outside the ILG, the Dutch investor, PGGM, describes responsible investment as follows:

Responsible investment means that we take account of environmental, social and governance (ESG) factors in all our investment activities. ...We act on the basis of a conviction that financial and social returns can go hand in hand. ...Targeted ESG investments are investments which not only contribute financially to the return on the portfolio but are also intended to generate social added value... Based on appropriate existing ESG measurement frameworks, PGGM defines around five to ten high-level ESG output or outcome metrics that it asks each fund manager to report on (2014).

Interestingly, the Norwegian Government Pension Fund Global, which makes a real effort at transparency, has refrained from a definition (Dimson et al 2013). However, as noted in the introduction, the PRI does offer one as follows (UNPRI 2013):

Responsible investment is an approach to investment that explicitly acknowledges the relevance to the investor of environmental, social and governance factors, and of the long-term health and stability of the market as a whole. It recognizes that the generation of long-term sustainable returns is dependent on stable, well-

functioning and well-governed social, environmental and economic systems.

The mutual dependence of financial and non-financial value lies at the heart of these descriptions and definitions. Through conscious attention to ESG factors, responsible investment is clearly intended to satisfy the financial requirements and expectations of beneficiaries while avoiding, at minimum, causing harm to the financial system, economy, environment and society; and, at best, contributing to their improvement. As such it has the capability to influence positively beyond investors' immediate asset base into the wider economy in which those assets are located, including its social and environmental foundations.

"...large and influential asset owners have a particular interest and, with public policy, a responsibility to conduct their businesses in ways that protect the economy, society and environment from the vagaries of systemic risk"

Large and influential asset owners have a particular interest and, with public policy, a responsibility to conduct their businesses in ways that protect the economy, society and environment from the vagaries of systemic risk. In some circumstances this may even imply withdrawing investment from assets that result

in serious harm to the environment or society, or exercising sufficient influence so as to change their course.²

Why is it necessary to explain responsible investment in this way, or to shed light on the mutual dependencies between financially sound investment, ESG aims and societal good? Because in seeking to do so we will understand the full potential of responsible investment and discover how to improve its practice.

As we saw in the introduction, responsible investment is driven by at least three motivations: service to society (which includes alignment with the interests of beneficiaries), enhanced returns, and an economic imperative. In short, a moral goal, a financial goal and an economic goal, none of which can be neglected, and all of which – to differing extents – overlap. In many cases they support each other, and this defines the universe within which responsible investment can operate freely, but where they do not overlap investors are confronted with tough choices. Which goal should have priority? The responsible investor will want to have explicit and justifiable grounds for such decisions in front of them based on the moral, financial and economic cases. **Given that the moral case is often the least well developed, this section explores it in greater depth than is usual in an investment publication, shedding light on the nature of responsibility itself, and the relationship between ESG materiality (the financial case), ESG morality (the ethical case) and complicity (certain legal risks).**

“...we know markets cannot solve all problems. If they could, we wouldn't need responsible investment”

The deeper we think about responsible investment the more questions are raised, including questions of an ethical nature: What is money for? What does money do? How does money influence what a society becomes? What role does an institutional investor play in

shaping the answers to these questions? To what extent will investors, including members of the ILG and similarly influential groups, be responsible for how this debate unfolds in coming years? Do we have an obligation to address such matters, or is the extent of our role limited to what our current investment tools and techniques and procedures allow? Seeking clarity about these questions is unavoidable when we pause to think about *why* we pursue responsible investment, what motivates us and our constituencies or beneficiaries, and what we want it to accomplish.

For most people, money is a means of achieving a good life. This may range from bare subsistence for a poor client of a microfinance loan to the personal independence of a ‘golden retirement’ for a middle class pension-holder or mutual fund investor. It could also mean providing a basis for social position, philanthropic action or political power. However, making money is not a goal in and of itself, nor an end goal for society, but rather a means by which humanity can sustain and enhance its well-being. Consequently, when we consider the financial interests of savers and investors, of the saving public, we should be careful not to disassociate this from their wider social aims, including the living, working and environmental conditions they aspire to. Measuring the success of responsible investment against this goal may well be too high a standard, but ignoring it altogether misses a key motivation of our ultimate clients.

Morality is the cultural mechanism human beings have for co-operation: it is the basis of society and its functioning, and perhaps humanity's unique and differentiating modality. Laws are the codification of conduct that allow for co-operation and stability in larger groups. Laws usually promote conduct that is socially approved and well-established. Both morality and laws establish *dos* and *don'ts*; both are reinforced by incentives and sanctions. Markets complement laws and laws often organise markets. They are agreed-upon sets of interactions that foster co-operation and exchange through rules, habits, expectations and trust. The first markets defined a place and

² This strategy is adopted by Storebrand Group in Norway and Sweden and other investors concerning coal companies.

time to meet for the exchange of agricultural goods for manufactured goods, and set forth commonly agreed and accepted weights and measures and standards of quality. A market sets the boundaries of what is acceptable – it is the opposite of ‘anything goes’ and ‘caveat emptor’. Thus, morality and markets are by their nature bound together: morality makes markets and markets make morality. The one cannot be conceptually or pragmatically divorced from the other.³

But we know markets cannot solve all problems. If they could, we wouldn’t need responsible investment. The fact that we do follows from the realisation that market pricing and self-regulation are not the only, or even the primary, solution to some of the most pressing challenges we face. Not everything can or should be priced (Sandel 2012). Not everything that can be priced should have its price determined by market forces. Take pollution permits. At best, permits can help allocate emissions more efficiently than by command. But to do so, a permits market requires a ceiling on emissions in order to establish the lowest trading price compatible with meeting a policy goal. In the case of greenhouse gases (GHGs), this goal might be to limit global temperature rise to two degrees above pre-industrialised levels. The emissions ceiling and the lowest price are a matter of political decision informed by scientific analysis, rather than a freely negotiated price between polluters. Otherwise the price of GHG emissions would sink too low to catalyse change to a low carbon economy (which can also result, of course, from lack of political ambition to make the market function).

Framing responsible investment as a moral as well as a methodological and technical challenge for investors raises the question: what does it mean to be responsible? This question can itself only be addressed once the terms of our responsibility have been defined: for what are we responsible, and what boundaries can be asserted? Responsibility implies duties, but it cannot be boundless. Taken lightly, it becomes a sham. Taking on too many duties becomes unmanageable. The right balance will depend on

“...responsibility implies duties, but it cannot be boundless. Taken lightly, it becomes a sham. Taking on too many duties becomes unmanageable”

the nature of each institution and the size and scope of its investments.

Investors often hesitate to treat issues of investment policy as moral issues or, conversely, moral issues as issues of investment policy. Moral judgments (i.e. of values) are presumed to be subjective as distinct from the presumed objectivity of investment decisions based on financial metrics. While this point of view may reflect an understandable hesitancy to engage publicly in time-consuming moral debate, it is a conceptual mistake. For example, corporate valuations can give an impression of objectivity, but anyone who understands how they are performed, the extent to which earnings estimates and balance sheets depend on accounting conventions and choices of discount rate, and the subjectivity of valuing intangibles such as brand, patents, licenses, distribution agreements and conditional liabilities, and the extent to which stock market prices swing with market rumors, unverified news, flimsy forecasts, herd psychology and crystal-ball gazing of central bank intentions, knows they are not. In contrast, the moral judgments arrived at by responsible investors when judging civil rights abuses, labour rights abuses, or unfair hiring and compensation practices by corporations may be appreciably better grounded.

Financial analysts arrive at different conclusions about the value of a firm, the price of a sovereign or corporate bond, or the attractiveness of an asset. This does not mean the principles and conventions on which they base their judgments are subjective in the sense of being arbitrary or idiosyncratic. Similarly, analysts arrive at different judgments about the ESG qualities of a company, and that does not mean the ethical

³ This point of view is drawn from social anthropology and economic history. See Malinowski (1922), Kegan (1944), Mauss (1925), Braudel (1982), Boyer (2002, 2004) and Seabright (2004).

principles, agreements, norms and conventions on which they base their conclusions are any less objective than those being applied by financial analysts. In both cases, the proper determination of value – whether financial or ethical – demands clear principles, sound logic and reliable facts, transparent methods, and dispassionate judgment in deriving conclusions.

Some business decisions are purely financial. Others have an implicit or explicit ethical dimension. Consider executive and board decisions on how to allocate current or future corporate earnings. How much to pay in dividends to capital and how much to pay in wages to labour? And within labour, how much to distribute to lower-level employees, to middle management, and to senior management? Whether to increase borrowings, with potential threat to the firm’s survival if leverage becomes too high, or to issue more equity, with potential dilution effects to current shareholders? These are not simply financial calculations: they involve ethical values and judgments, and require intermediation between competing interests.

When stock analysts push CEOs to deliver quarter after quarter of successive ‘earnings momentum’, even in recessionary economic conditions, labour costs come under pressure. In the short term, jobs are lost, undermining consumption, exacerbating recession – in other words capital benefits at the expense of labour. In the longer term, the ability of people to save for the future is compromised. Connecting the dots, one can see an interplay between moral values, financial valuation, social outcomes and business interests.

“...the collective responsibilities of an investment firm (asset owner or manager) do not exempt individuals within it from being accountable, answerable and responsible for their actions, and vice-versa”

Responsibility

What is responsibility?

Institutions set themselves different goals of collective responsibility, ranging from doing no harm to improving social and environmental conditions. A very useful and workable framework for understanding responsibility is provided by W.D. Ross (1930, 1954), following Immanuel Kant.⁴ Ross identifies five forms of responsibility: *non-maleficence* (doing no harm), *beneficence* (doing good), *fidelity* (acting in the best interests of others), *reparation* (correcting past harms) and *gratitude* (respecting those from which you benefit). This categorisation readily maps on to the various forms of responsible investment (see **Annex 1**). *Non-maleficence* can justify negative screening, some corporate engagement actions, and engagement with regulators on macro-prudential matters; *beneficence* can justify ESG active investment and ESG engagement; *fidelity* can justify attending to the financial as well as social and environmental interests of beneficiaries; *reparation* can justify investors and beneficiaries being compensated by banks for fraud or dishonest selling; and *gratitude* can justify asset managers being fair and transparent towards beneficiaries.

⁴ A good discussion of Ross’ work appears in Stanford Encyclopedia of Philosophy, <http://plato.stanford.edu/entries/william-david-ross/>

Clearly, the collective responsibilities of an investment firm (asset owner or manager) do not exempt individuals within it from being accountable, answerable and responsible for their actions, and vice-versa. As we see below, not taking social and environmental risks into account in investment decisions could lead to certain liabilities.

Responsibility and complicity

In US law, a person may be found guilty of complicity in a misdeed yet need not have directly caused it. 'Going along with, knowingly', 'having an interest in the enterprise' or even 'ought to have realised' can be sufficient for incurring liability. Thus a person need not be solely responsible in order to be held responsible for something, as causation or financial interests and thus responsibility are often shared. A paper mill which is jointly responsible for river contamination with other polluters is no less responsible for pollution, though the degree of compensation to victims might be judged to be commensurate with the degree of pollution. Failure to take precautions is also relevant. An investor who owns shares in a tobacco company might, by extension, be deemed morally co-responsible for public health damages from tobacco, although the law might not find legal liability. That could change over time, as laws often follow emerging beliefs or values with a lag time. Lenders in certain jurisdictions may be held liable for clean-up of ground pollution created by factories they have lent to which may no longer exist or have gone bankrupt.⁵

"...the institutional investor's responsibility to seek a good return in line with its charter does not exempt it from respecting other interests such as the environment and social welfare"

A key question for investors is whether there is a relationship of responsibility between a corporation's actions and its investor, by virtue of the act of shareholding, bondholding, or other forms of ownership or control. What makes the institutional investor responsible in full or part for the behavior of a company? Further, what is the relationship of responsibility between an institutional investor and an asset manager? This established, what then makes for the chain of responsibility tying the asset manager (the institutional investor's agent) to the behaviour of a company?

Many CEOs of listed companies consider that their primary responsibility is to create profits for shareholders. Large institutional investors and in particular those with long-term investment horizons like pension funds see themselves as owners and, through dialogue with corporate officers (and other engagement routes such as the exercise of voting rights), seek to ensure that the business strategies conducted by management are indeed profit-making.⁶ Furthermore, many institutional investors seek to ensure that business is conducted not only for profit but for profit maximization, realising this interest directly and through their agents (asset managers, brokers, etc.). As shareholders they benefit from limited liability, protecting them from any financial claims beyond the extent of the value of their shareholding. Limited liability is granted by society, and thus it can also be argued that institutional investors as shareholders have a reciprocal duty to society in return for this benefit.⁷

In some cases, the measures taken to protect or maximise profits in the short term can entail shedding jobs, reducing employee benefits, or avoiding spending on safety or pollution control, or even influencing legislation that favours the company at the expense of the taxpayer. In other words, there is a risk that satisfying profit interests could violate a company's (and its shareholders') obligation to other stakeholders such as employees, the public or the state. The responsibility of

⁵ This is precisely what is happening in recent iterations of the OECD Guidelines for Multinationals and the UN Guiding Principles on Business and Human Rights. The governing bodies of these frameworks have both recently judged that they do apply to investors, and that they give rise to an obligation to conduct due diligence on their investments. The recent case involving NBIM and APG over Posco is important here.

⁶ This discussion is concerned only with institutional investors, asset managers and funds with long-term investment horizons. Whether short term investors and funds and high speed traders have responsibilities as owners, or to what extent, is out of scope.

⁷ Before the advent of modern capitalism, owners were liable for the losses and debts of a business to the full extent of their personal fortune, possessions, and home, even to the extent of their personal freedom. Debtors who could not meet their obligations were sent to prison. Limited liability is widely seen as the legal instrument that contributed to the rapid development of industrial capitalism in the 19th and 20th centuries.

institutional investors to ensure a good or maximised return on investment for their beneficiaries does not necessarily outweigh the interests of other stakeholders when such conflicts arise (Sorrell and Henry 1994). Thus, the institutional investor's responsibility to seek a good return in line with its charter does not exempt it from respecting other interests such as the environment and social welfare.

By extension, the terms of engagement between an institutional investor as principal and an asset manager as its agent transfers responsibility to the agent, without diminishing it for the principal. In agency law, the consent or authorisation of one party to act or deal through another (the agent) justifies liability for the acts of the other (Kutz 2000). The institutional investor is responsible for setting policy, the asset manager for putting it into practice. If an asset manager fails to monitor financial and non-financial results appropriately and to evaluate them against goals, the responsibility is shared with the institutional investor. If the responsible investment strategy of an asset manager does not deliver the financial and non-financial goals sought by its client, the institutional investor and its beneficiaries, the institutional investor must be regarded as jointly responsible.

What if an institutional investor does not enunciate non-financial goals, such as certain environmental and social duties of care? Is it nevertheless responsible for negative impacts? It could be argued that the answer is yes, by virtue of the protections and authorisations it is granted by the public in its license to operate, by its influential role in the financial system, and by the fact that how money is invested in the economy determines, among other things, whether the economy serves its public and works in a way to preserve the natural capital we depend on. To that end, publication of investment policy with regard to ESG issues is a legal requirement for large institutional funds in an increasing number of jurisdictions. Given

this, the absence of an environmental or social investment policy would not absolve an investor from responsibility for harms – failures of omission rarely count as moral or legal excuse.

US law uses the complicity doctrine to assign liability to parties. Complicity is deemed to occur even without explicit intent, by simple omission to respond to the reasonably inferred consequences of business behaviours. For example, a mail-order drug company was judged complicit with a physician who ordered large quantities of morphine which he resold illegally. The Court reasoned that the company had sought to profit from the success of the doctor's enterprise (Kutz 2000). One can suppose that similar court judgments are possible with pollution or human rights, where an institutional investor could be considered complicit in the violation of applicable laws and treaties where an asset manager has failed to screen out of portfolios companies that grossly violate such treaties. As per Ross' (1954) framework, in principle this could lead to *reparation* payments to beneficiaries ex-post factum; a precautionary application of Ross' *non-maleficence* principle, exercising responsibility ahead of legal frameworks such as now in the case of GHG emissions, could avoid grounds for sanction in the first place.

“...the separation of ethics from fiduciary duty assumes that the overriding interest of savers is to make the most money possible, regardless of the social and environmental consequences – a view that has never been verified through robust empirical research but, rather, imputed without consent”

Responsibility and public interest

In developed economies, it is well-documented that income and wealth inequality have grown since the 1980s alongside declining job and financial security amongst the middle class (Saez 2013a).^{8,9} To the extent that where and how institutional investors place money is partly causative or complicit in these trends, it is reasonable to say that in some way their decisions may not be fully aligned with their beneficiaries' interests. Arguably this may constitute *de facto* a collective failure of fiduciary duty, understood here as the prudent long-term preservation of capital in the best interests of beneficiaries, as originally established in US law by the Prudent Man Standard (see **Annex 2** for a fuller discussion).¹⁰

The separation of ethics from fiduciary duty assumes that the overriding interest of savers is to make the most money possible, regardless of the social and environmental consequences – a view that has never been verified through robust empirical research but, rather, imputed without consent. There is good reason to believe that the public cares sufficiently about having a well-functioning, fair and secure society to wish that their money is managed consistently with these interests while obtaining satisfactory financial returns.

The Norwegian Ministry of Finance's mandate to the Government Pension Fund Global, based on the Norwegian Parliament's considerations, puts it this way (Dimson et al 2013):

Good long-term financial return depends on sustainable development in economic, environmental and social terms, and on well-functioning, efficient and legitimate market.

Whether the fund's investment policy and asset allocation or the practices of its asset manager, Norges Bank Investment Management, are consistent with promoting this premise is the subject of debate.¹¹ A better understanding is needed of how and to what extent sustainability risks such as environmental degradation and unemployment will undermine long-term

investment returns, and how these can be addressed in strategic asset allocation.¹²

The limits of investor responsibility

Clearly, an institutional investor cannot be held responsible for failures of government policy that may lead to unemployment, inequality or environmental degradation. However, as institutions entrusted with a critical role in the economy, institutional investors have a responsibility to make clear to policy makers which policies and regulations impede their ability to act in the best interests of their beneficiaries. At a minimum, institutional investors should distance themselves from bodies that lobby for policies contrary to such interests; rather, they should forcefully engage with those companies that are part of the problem, and support regulators that try to correct the damage.

The amount of time, effort, talent and money that an institutional investor is able to put into promoting policy action will be a function of its size, assets under management and influence in the market. A principle of proportionality makes sense, acknowledging that it is the capacity of an institutional investor and its agents to act in certain ways that determine their responsibilities, and that inaction could constitute a moral or legal fault.

Some institutional investors may feel that their responsibilities should be restricted to the interests of their direct beneficiaries. But, as we have seen, depending on how broadly one defines the interests of beneficiaries, wide areas of environmental and social policy could lie within scope since they will not only have an impact on future financial returns, but enable or inhibit the ability of beneficiaries to live in a decent, stable and secure society.

This is not a question of arbitrage, of compromise or prioritisation, but of determining the public policy necessary to obtain the results that beneficiaries expect. It legitimates the involvement of institutional investors and asset managers in

⁸ See World Economic Forum (2014) where unemployment and under-employment are identified as one of the critical macro risks facing the world economy.

⁹ See Saez et al (2013a, 2014, 2013b).

¹⁰ The Prudent Man Standard had its origin in the Harvard College v. Amory court case of 1830, which generally proscribed the trustees were to manage trust investments as a prudent man would manage his investments with an eye toward the long-term health of those investments rather than investing in speculative ventures and with the best interests of the beneficiaries in mind.

¹¹ See Joly (2008). This critique focuses on important discrepancies between the mandate and the actual investment strategy: 1. too much concentration on volatility risk relative to capitalisation-weighted financial benchmarks prevent investment decisions responsive to fundamental, macro-prudential and systemic risks; and 2. geographic allocations are biased to country capital market size rather than to a combination of macro-economic growth factors and sustainable development trends. These biases undermine long term return potential as well as compromise the ethical objectives of the Fund.

¹² For a description of the major global risks and megatrends and their relevance to portfolio management, see **Section 3**.

favour of sustainable industrial, energy, climate, agriculture, and social welfare policies; and, not least, regulation of the financial system to avoid future bubbles, crises and the bail-outs of banks and insurers by the public.

Responsibility and materiality

A company's desire to achieve a return for shareholders need not override the interests of other stakeholders. Indeed, the reverse has been shown to be true (Eccles et al 2011). Beyond remaining compliant with regulation, the decision by a company to maintain profitability at a reasonable level, increase it, maximise it as quickly as possible, or set it at a level consistent with protecting environmental and social goals, is a matter for its management and owners to determine. An asset manager that interprets its mission as profit maximisation relative to a market index during each and every successive measurement period may inadvertently compromise the ability of companies to create longer term financial value. This is all the more surprising when one considers that the charter of their institutional investor clients may be framed in terms of achieving a return commensurate with liabilities (in the case of defined benefit pensions or guaranteed-return insurance products) or in terms of capital protection for the benefit of future generations, as in the case of a sovereign fund like the Government of Norway's.

Even if one does believe that asset managers should only take into consideration financially

'material' matters, this may not be incompatible with responsible investment. There is a sense, evidenced to a certain degree (see **Section 4**), that the distinction between financial and non-financial materiality is false. If one acknowledges that at least some ESG issues will at some point be internalised as business costs or earnings opportunities, then, even though they may not be material today, they may well be material tomorrow. For the long-term investor this should not be an impediment to investment given the reasonable expectation that certain environmental and social externalities will be integrated in corporate balance sheets in future. The challenge is to form a lucid and well-grounded basis for expectations of when and which ESG factors will become financially material through regulation, client demand or environmental realities.¹³

“...an asset manager that interprets its mission as profit maximisation relative to a market index during each and every successive measurement period may inadvertently compromise the ability of companies to create longer term financial value”

¹³ See UNEP FI materiality series, 2004-2008: www.unepfi.org/work_streams/investment/materiality/

Modern portfolio theory

Modern portfolio theory (MPT) stems from the idea that markets are efficient: that all the information relevant to investors is reflected in the price of an equity or bond in real time. Though efficiency in this context is a technical term, it lends itself to the ordinary language assumption that financial markets' pricing is the correct price for listed equities or bonds, i.e. that all information relevant to a company's financial value, including public and private information, is accounted for in the price of its equities or bonds. Some versions of the efficient market hypothesis (EMH) take 'all relevant information' to be historical data. Other versions take 'all relevant information' to include real-time current data. All versions represent the market price as being 'the right price'.

There is mounting evidence that the efficient market hypothesis is empirically false or at best a truism (i.e. true by definition, not by observation). In the case of ESG information the former appears to be the case as we know this information is insufficiently accounted for by market players. One interpretation is that ESG information is not relevant to price, but this cannot be the case given the relationship between ESG issues and profitability, reputational risk, brand value and so on. Moreover, if efficient pricing is taken to mean right or correct pricing, or pricing that takes reality into account, then the possibility of overvalued and undervalued securities, bubbles and crashes should not exist. But they do exist: ergo, efficient price cannot mean right price. So what is meant by 'all the information' is 'in the price'? The sum of all the information? The average of all opinions? The latest opinion? The Whale's opinion? Or simply the opinion derived from the latest match of bid and offer, i.e. the latest marginal price?

The real-time price is of course simply what a particular buyer is willing to pay for a given amount of shares or bonds. If a lot of money is looking to invest it drives up the price but if no money is available to buy (if buyers are willing but not able as in tight liquidity situations or when their money is already committed

elsewhere) then the price drops. This has little bearing on the strategy of the underlying company, including its ESG risks and opportunities, and its realistic prospects. Buyers and sellers respond to what others do: momentum takes hold and leaves rational expectations by the wayside.

"...there is mounting evidence that the efficient market hypothesis is empirically false or at best a truism (i.e. true by definition, not by observation)"

The efficient market hypothesis leads to the view that the most appropriate investment strategy is to invest in all existing sectors and technologies in the same allocations as defined by the stock market size of sectors and companies, as this represents the 'best' price valuations at any given time – in other words, it leads to passive investing on a capitalisation-weighted basis. This avoids taking a stand on future scenarios for economies, sectors or companies, and subordinates the passive investor to the market's self-referential regard for what others in the market are doing. This exacerbates herd behavior leading to bubbles and crashes. The widespread application of EMH to portfolio management has resulted in market short-termism as index-relative investment is by its nature short term, hugging a real-time index made up of real-time prices reacting to short-term real-time events rather than to reasonable future scenarios. Thus, an idealised way of describing market behaviour based on rational expectations economics has ironically become the instrument by which irrational behaviour becomes institutionalised. Institutional investors and asset managers tell their beneficiaries that they manage their money with attention to 'risk-adjusted returns'. In this context risk often refers solely to volatility risk to an index and not to fundamental corporate risk, economic risk, systemic risk, or environmental or social risk (see **Section 4**). A pure focus on volatility risk results in

products that do not address other types of risk and therefore do not reflect the wider interests of beneficiaries. The Kay Review shares this view (BIS 2012). One of its key recommendations reads as follows:

Reduce the pressures for short-term decision making that arise from excessively frequent reporting of financial and investment performance (including quarterly reporting by companies), and from excessive reliance on particular metrics and models for measuring performance, assessing risk and valuing assets...

...Risk in the equity investment chain is the failure of companies to meet the reasonable expectations of their stakeholders or the failure of investments to meet the reasonable expectations of savers. Risk is not short-term volatility of return, or tracking error relative to an index benchmark, and the use of measures and models which rely on such metrics should be discouraged.

The various kinds of dysfunctionality exhibited by markets have been well documented in recent years. They inevitably impact responsible investment, particularly as regards the valuation of environmental and social assets and risks. Assets and liabilities not recognised on the balance sheet, such as water availability or its shortage, are not valued or are undervalued,¹⁴ as are storm and flood risks, or the effects of income inequality on business conditions (Marois 2014). The increasing frequency and severity of extreme weather events to date has not influenced market prices for companies with significant potential exposure to regions, products and supply and distribution channels at risk from climate change (many investors have been slow in recognising the implications of climate change).

The fact that ESG issues and risks are generally not included in the price of equities or bonds (neither in past prices nor real-time prices) presents risks and opportunities for investors. This is what makes the story of responsible investment so compelling. **Figure 3** (in three parts overleaf) illustrates the dynamics between financial markets, the economy and the environment. It seeks to show how

responsible investment can contribute to a virtuous circle delivering the social and environmental aims of beneficiaries, along with satisfactory financial returns.

Conclusion

There are many good reasons for transitioning from business as usual investment to responsible investment. First and foremost it can be done without sacrifice to financial performance (see **Section 4**), with reduction in real risk (see **Section 3**) and in better alignment with the inclusive goals of beneficiaries. In summary:

1. Financial and non-financial value are mutually dependent. Acting on ESG matters contributes to the economic conditions necessary to produce satisfactory financial returns to their beneficiaries.
2. Morality makes markets and markets make morality. But markets cannot solve all problems, and market pricing can be far off from real value and real risk. Arguably, investment approaches that tie investors to market dysfunctionality are not within the bounds of responsible investment.
3. Business decisions inextricably contain ethical judgments. Consider executive and board decisions about how much to pay in dividends to capital and how much to pay in wages to labour; or how much to pay different strata in the company. Such decisions involve ethical judgments, and require intermediation between competing interests.
4. The collective responsibility of an investment firm (asset owner or manager) does not exempt individuals in a firm from being accountable, answerable and responsible for its actions, and vice-versa. Not taking social and environmental risks into account in investment decisions could create asset owner and manager liabilities.

¹⁴ See Soros, G. (2008), BIS (2012) and Zaouati, P. (2009).

- 5. Fiduciary duty does not require investors to pursue short-term profit maximisation at the expense of ESG performance and outcomes. Indeed, it would not be in the interests of their beneficiaries and society more generally to do so.
- 6. By virtue of the fact that they collectively control and manage the flow of savings from the public, large asset owners and asset managers have a responsibility to avoid systemic risk in the financial system and economy. This is currently under-appreciated by the investment industry and insufficiently addressed by regulators, and should be the subject of future action and research.
- 7. Five forms of responsibility justify different forms of responsible investment: *non-maleficence* justifies negative screening and engagement; *beneficence* justifies pursuing ESG aims as a proactive investment strategy; *fidelity* justifies attending to ESG concerns as a core duty to beneficiaries; *reparation* justifies compensation for dishonest selling or negligent investment; and *gratitude* justifies fairness towards beneficiaries. All five support investment industry engagement with regulators in favour of the long-term interests of their beneficiaries.

Figure 3: The role of responsible investment in attaining ESG goals and financial returns

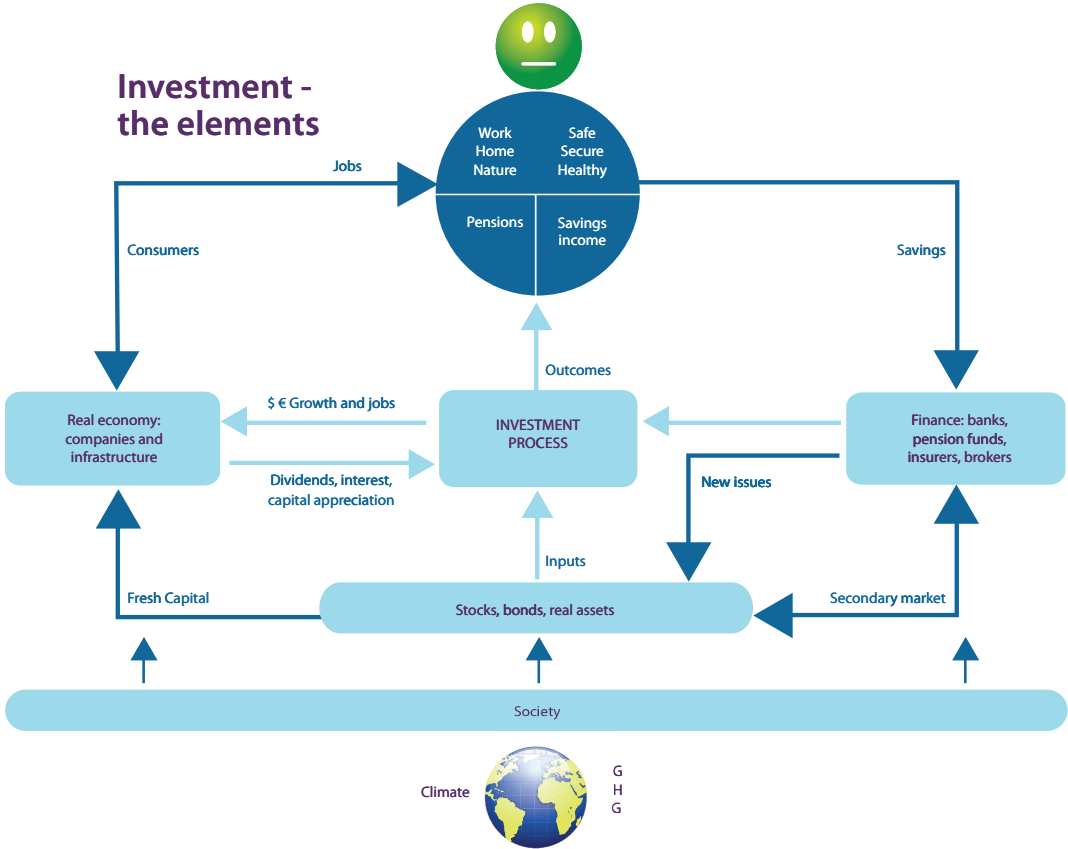
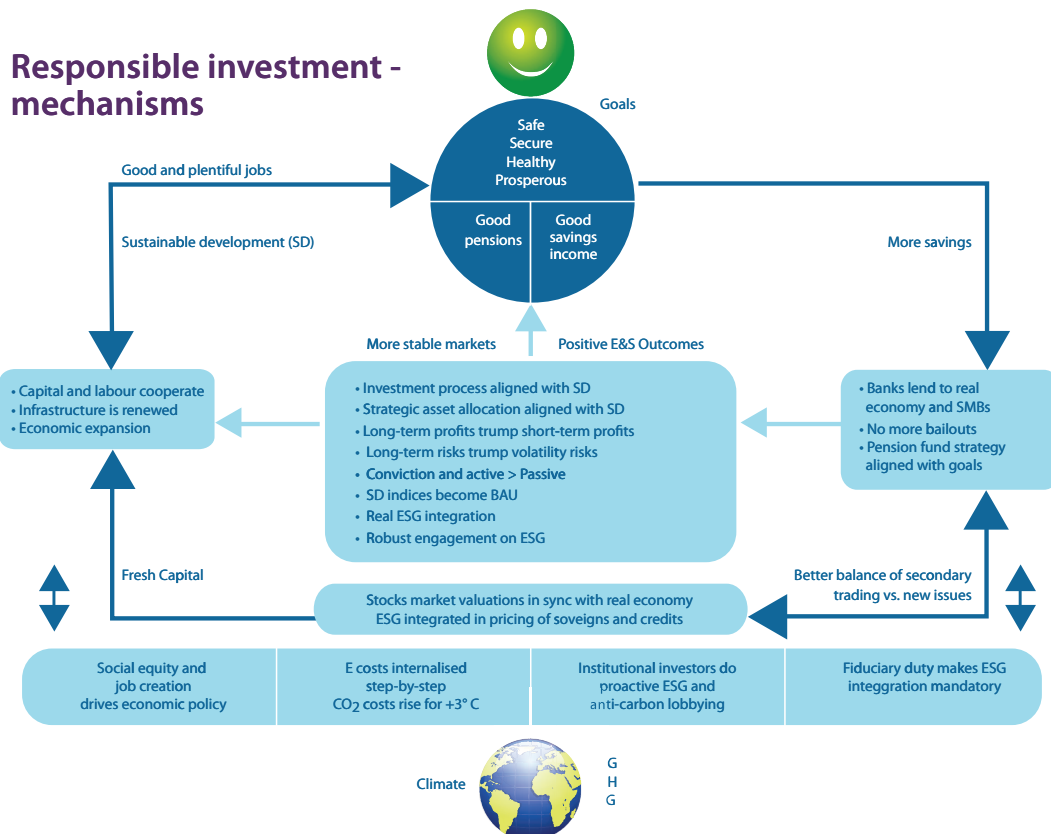
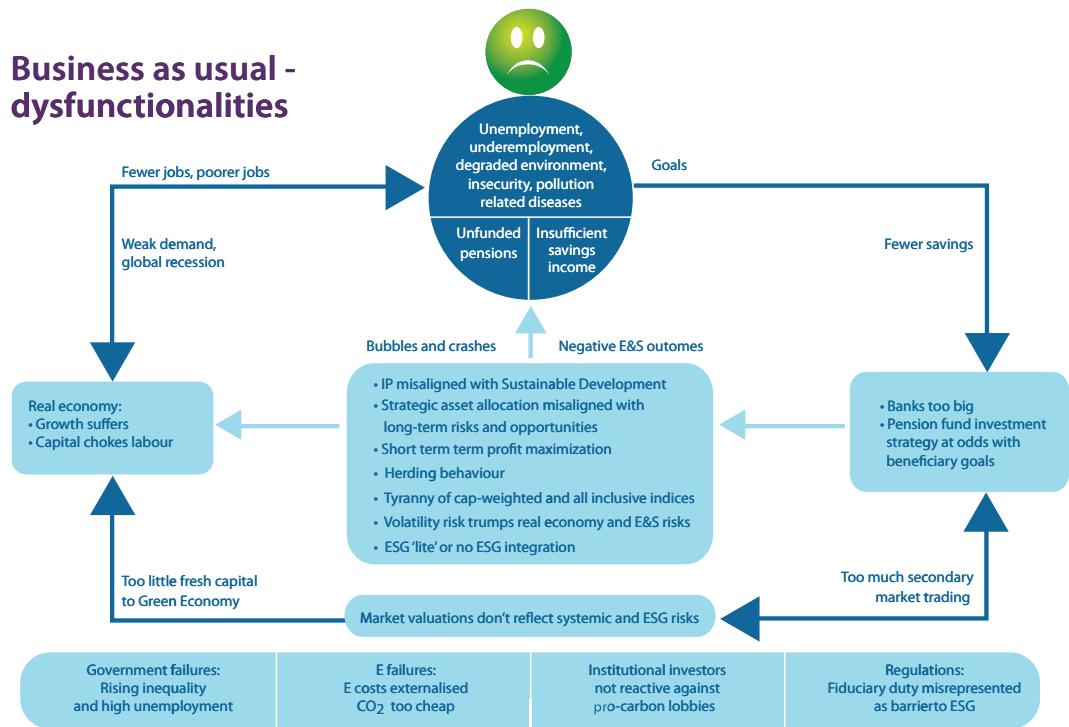


Figure 3 continued:



3

The investment case for responsibility

A changing global macro-context

This section reviews the environmental and social factors that underpin the financial case for responsible investment. It then locates the possible investor responses to these issues along a ‘conviction’ scale, describes how value is created through these responses (focusing principally on financial value), and identifies barriers to farther-reaching incorporation of ESG factors into investment decisions. Two areas of collective action by investors are proposed to address these barriers.

The fundamental drivers of responsible investment are a series of environmental and social trends and phenomena that are affecting economies and markets now and will continue to do so in the coming years. The economic implications of environmental issues such as climate change, resource scarcity, biodiversity loss and deforestation, and of social challenges such as poverty, income inequality and human rights are increasingly being recognised. To cite just two recent examples, the former mayor of New York has joined forces with the former US Treasury Secretary and Goldman Sachs partner Hank Poulson and the billionaire investor Tom Steyer to establish a high-level group of business leaders to investigate the implications of climate change for the US economy¹⁵, while the head of the IMF, Christine Lagarde, has warned of the threat posed to the world economy by growing income inequality (Giles 2014).

These trends are interacting with factors including the economic rise of Asia and emerging markets (in particular the BRICs and MINTs¹⁶), de-leveraging and continuing economic uncertainties in the aftermath of the financial crisis, ageing populations and rapid technological change to shape the landscape within which investors have to operate.

Understanding the risks posed by ‘externalised’ environmental and social costs in the real economy is central to the practice of responsible investment. As we saw in the introduction, the PRI and UNEP FI (2009) have estimated the cost of environmental damage caused by the world’s 3,000 largest companies in 2008 to be USD 2.15

trillion. At some point in the future, a significant proportion of this cost might be forced into companies’ accounts. Recent developments in the interpretation of the OECD Guidelines for Multinational Enterprises and the UN Guiding Principles for Business and Human Rights – clarifying that these instruments apply to investors and give rise to responsibilities to conduct human rights’ due diligence on investments – in effect pave the way for more possible formal internalisation of social costs in hard law.¹⁷

“...the fundamental drivers of responsible investment are a series of environmental and social trends and phenomena that are affecting economies and markets now and will continue to do so in the coming years”

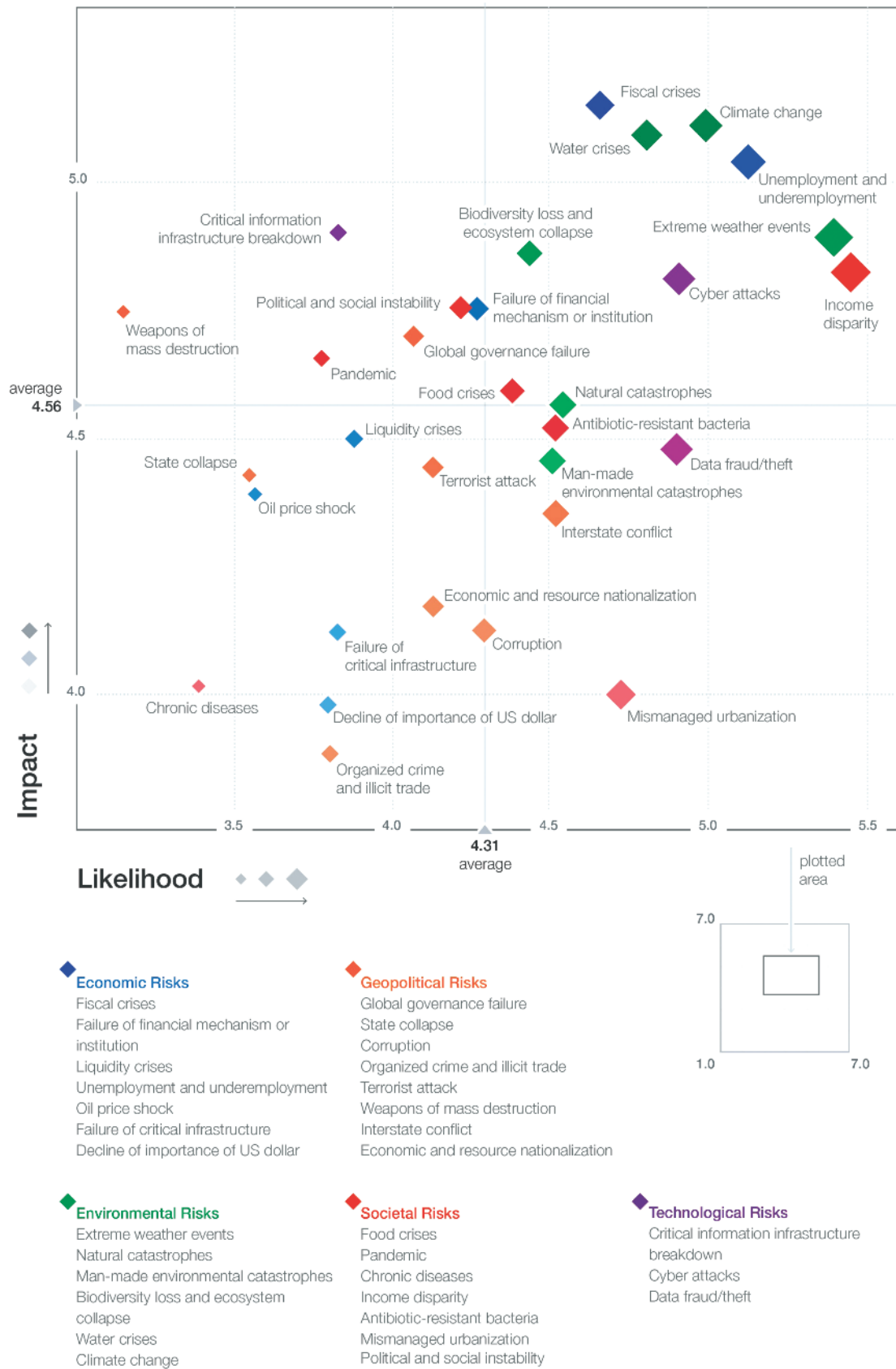
The uncertainty surrounding the timing and extent of internalisation is a critical component of the overall risk landscape facing investors. This complexity, and the centrality of sustainability to the challenges facing investors, is illustrated by the World Economic Forum’s 2014 *Global Risks* report which identifies 31 key risks (see **Figure 4** overleaf). Many of the risks are interconnected and multiply each other’s impact on environmental, social and economic stability.

¹⁵ See <http://riskybusiness.org/>

¹⁶ BRICs: Brazil, Russia, India, China; MINTs: Mexico, Indonesia, Nigeria, Turkey.

¹⁷ See for example www.ohchr.org/Documents/Issues/Business/LetterOECD.pdf and www.responsiblebusiness.no/files/2013/12/nbim_final.pdf

Figure 4: WEF's global risk map¹⁸



¹⁸ Reproduced with kind permission from Global Risks 2014, World Economic Forum, Switzerland.

A 'top ten' filter was applied by WEF in terms of impact and likelihood, revealing a predominance of environmental and economic risks as follows:

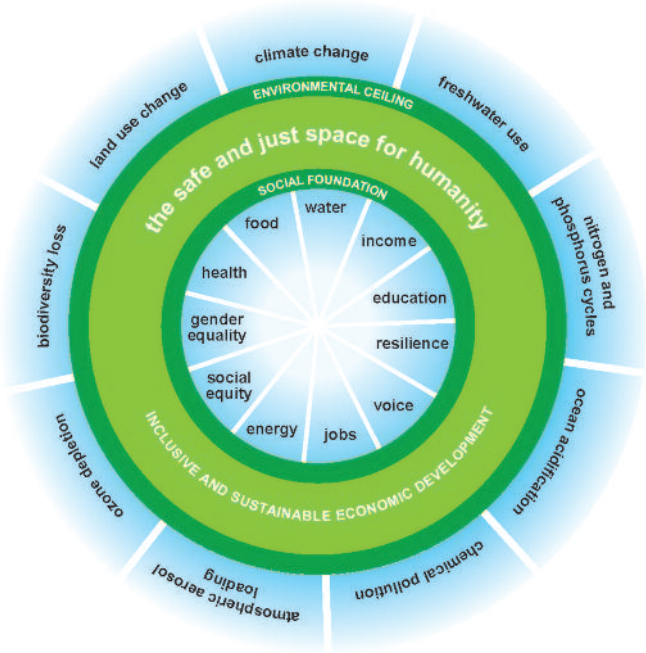
1. Fiscal crises in key economies
2. Structurally high unemployment and/or under-employment
3. Water crises (various)
4. Severe income disparity
5. Failure of climate change mitigation and adaptation
6. Greater incidence of extreme weather events (e.g. floods, storms, fires)
7. Global governance failures
8. Food crises
9. Failure of a major financial mechanism/institution
10. Profound political and social instability.

As WEF notes:

The risks considered high impact and high likelihood are mostly environmental and economic in nature: greater incidence of extreme weather events, failure of climate change mitigation and adaptation, water crises, severe income disparity, structurally high unemployment and under-employment and fiscal crises in key economies.

There is a strong correlation between WEF's risk analysis and the issues covered by the Stockholm Resilience Centre's work on planetary boundaries, which seeks to define the 'safe operating space' for humanity along nine axes (Rockström et al 2009). It notes that a number of these dimensions have already been breached (biodiversity loss, nitrogen cycle effects) and that greenhouse gas emissions are moving in a similar direction. Oxfam later added a social foundation to this work based on the challenges identified by participants at the Rio+20 agenda, resulting in an approach known 'doughnut economics' as shown in **Figure 5** below (Raworth 2012).

Figure 5: Doughnut view of critical sustainability risks



“...many companies are using sustainability as a strategic lens, translating it into product and service opportunities, productivity and innovation potential, bottom-line savings, reputational and market growth, and license to operate”

Universal frameworks of this kind map out what is happening in the world that, if left unchecked, will damage the substance of human society and take the planet to the brink of collapse. In many cases the risks are not amenable to routine measurement by investors; some of them may not be directly influenced by investors at all (for example WEF's *violent inter-state conflict*¹⁹ or *global pandemic*). Other risks are more tractable (for example WEF's *failure of a major financial institution* or *biodiversity loss*), and beg analysis of the relationship between the investor and the required mitigation action.²⁰

The WEF report focuses on high-level risks that will be significant within the next ten years, and on issues that are likely to have broad effects across economies and markets. Some issues captured in the 'doughnut economics' approach have already been identified by the WEF survey respondents as 'global risks'. These include water scarcity, climate change, social equity and jobs. Equally, some of the 'planetary boundaries' issues underlie the identified high-level risks. For example, biodiversity loss and land use change are closely linked to climate change. In other cases an issue may be recognised as material in specific sectors, without necessarily (yet) being seen as a broad global risk – a good example is chemical pollution which has prompted the EU to introduce legislation in the form of the REACH Directive. In still other cases, the economic and market implications of issues related to planetary boundaries may not yet be clear, they may not materialise in economic terms within the ten-year horizon of the global risks survey, or awareness of them may simply be lower. This applies, for example, to the disruption of nitrogen and phosphorus cycles, ocean acidification and chemical pollution.

Table 1 (overleaf, page 27) shows the parallels between the 'global risks' and 'doughnut economics' perspectives, noting the potential implications for investors.

Value creation by companies

To achieve their objectives – to provide retirement income, other savings, insurance payouts, or other benefits to clients and beneficiaries – investors depend on the ability of the companies and countries they invest in to create financial value. These investments are of course subject to the sustainability trends that WEF and others have highlighted. Just focusing on companies, a spectrum of responses can be seen to these trends. At one end, many companies are using sustainability as a strategic lens, translating it into product and service opportunities, productivity and innovation potential, bottom-line savings, reputational and market growth, and license to operate. At the other, many companies appear to have given scant consideration to sustainability, whilst others are playing a waiting game.

If sustainability trends – or as investors describe them, ESG issues – are material to current and future business performance, this spectrum warrants close examination by investors. A recent survey by Accenture and the UN Global Compact provided some reassurance that the whole spectrum is shifting. As many as 63 per cent of CEOs reported that they expect sustainability to transform their industry within five years, with 76 per cent believing that embedding sustainability into core business will drive revenue growth and new opportunities (UN Global Compact and Accenture 2013). Examples of links between sustainability and company value creation are provided in **Annex 3**.

“...ESG issues linked to value drivers such as earnings, costs and cash-flows will be relevant to fundamental analysis in both equity (listed and private) and fixed income”

¹⁹ Even here external capital could be argued to be complicit if, for example, the financing of a controversial dam that disrupts water supplies to a downstream state contributes to an increased likelihood of conflict.

²⁰ For example, can the investor influence the risk directly through asset allocation, portfolio construction and engagement, indirectly via the influence it can bring at sectoral or value chain level, or only via engagement with governments, regulators and international processes (for example to tackle systemic problems and externalities)?

It should be noted that these value drivers apply in principle to all companies, whether investors' access to them is via listed equity, private equity or corporate bonds. ESG issues linked to value drivers such as earnings, costs and cash-flows will be relevant to fundamental analysis in both equity (listed and private) and fixed income. Equity investors use this information to forecast earnings and set target prices, while fixed income investors use it to assess

creditworthiness and default risk. In corporate credit too investors are starting to explore the relevance of ESG, for example by adjusting credit scores on the basis of ESG ratings. Although there has been very little academic research on ESG in corporate fixed income, investors report that ESG information on companies can provide a valuable additional input to fundamental credit analysis (PRI 2013b).

Table 1: Global risks, 'doughnut economics' and key implications for investors

WEF global risk	Doughnut issue	Implications for investors
Fiscal crises	Social equity Income Jobs Education Health	Increased sovereign risk in affected countries Slower growth Cuts in government expenditure - e.g. support for renewables
High unemployment	Jobs	Increased sovereign risk in affected countries Slower growth
Water stress	Freshwater use	Increased cost in water-sensitive sectors Increased sovereign risk in heavily agriculture-dependent economies Higher commodity prices
Income disparity	Income, social equity	Increased sovereign risk in affected countries (cf recent protests in Brazil) Slower growth
Climate change: failure of mitigation and adaption/extreme weather	Climate change Land use change Biodiversity loss	Short-term: soft commodity price spikes caused by extreme weather; costs to replace/strengthen damaged/at risk infrastructure (e.g. power grids) Long term: slower growth, inflation, general economic and market instability
Global governance failure	Voice	Increased sovereign risk General market uncertainty and instability
Food crises	Food Water Land use change Social equity	Increased sovereign risk in affected countries Higher soft commodity prices
Failure of a major financial institution	Income Resilience Jobs Social equity	Financial system instability, market crash Slower growth
Political and social instability	Voice Resilience	Increased sovereign risk

Countries, economies and sustainability

Assessment of the implications of ESG issues for the factors that determine sovereign creditworthiness is at a relatively early stage. Nonetheless, investors report clear correlations between levels of corruption and countries' foreign currency credit ratings, while some investors have found that bonds issued by countries with high ESG ratings have outperformed those from 'low-ESG' countries (PRI 2013b).

It is not clear whether there is a causal link between ESG factors and the performance that has been seen. However, investors are finding that applying an 'ESG lens' to both sovereign and corporate credit analysis gives them new information and a broader perspective on potentially significant factors.

UNEP FI's E-RISC project has developed a framework for assessing the implications for sovereign credit risk of environmental degradation, natural resource scarcity and climate change. The project found that India's trade balance could decline by around 0.6 per cent of GDP in response to a 10 per cent increase in natural resource prices; while Turkey's net exports could drop by four per cent if the productive capacity of its ecological assets were to fall by 10 per cent (UNEP FI & GFN 2012). The PRI has an active workstream on both sovereign and corporate fixed income (PRI 2014b).

"...investors are finding that applying an 'ESG lens' to both sovereign and corporate credit analysis gives them new information and a broader perspective on potentially significant factors"

How do investors create value in the face of sustainability risks and opportunities?

Investment beliefs for asset owners

Many asset owners now formulate 'investment beliefs' – statements that express their views on how markets work, the fundamental principles of their own investment strategy, and guidelines for their portfolio and organisation. Investment beliefs provide a foundation for in-house and external investment management, and therefore play a crucial part in shaping investors' influence on companies and markets. Asset owners that have already incorporated sustainability into their investment beliefs include CalPERS in the US, PFZW in the Netherlands and the New Zealand Government Superannuation Fund.

There is ample evidence that different dimensions of sustainability contribute to corporate value creation – and destruction – and strong reasons to believe that this phenomenon will grow as time progresses. Investors need to decide how they believe this is reflected in financial markets. **Box 1** suggests some questions asset owners should consider when determining how to reflect sustainability in their investment beliefs.

Box 1: Investment beliefs and sustainability: questions for asset owners to consider

- o Do we believe that sustainability issues are increasingly relevant to our returns and that companies that are favourably positioned with respect to sustainability trends will outperform over time?
- o How long is our investment horizon, and how does this relate to sustainability issues?
- o Do we believe the market is efficient?
- o Do we believe active management can exploit market inefficiencies and add value after costs?
- o Do we have the ability to select outperforming managers (or build outperforming in-house teams)?
- o How much risk are we prepared to take (i.e. what level of volatility are we prepared to accept)?
- o How diversified do we want our portfolio to be?
- o Is our performance reporting cycle aligned with our investment horizon?

In the sections below we explore the implications of two fundamentally different beliefs about how the market works: that it is efficient (i.e. that prices reflect all relevant information), or that it is not.

Belief 1: the market is efficient in general and in sustainability terms.

If the investor believes that the market has correctly assessed the impact of sustainability factors on an asset's future financial performance, and assuming that the investor is concerned purely with financial performance,

passive investment will be the appropriate strategy.²¹ From a sustainability perspective, however, it is clear that this leaves a huge shortfall between current corporate practice and what is required to mitigate climate change, address water scarcity, reduce biodiversity loss, and so on. In short, this belief does not address the unfortunate reality that our present economy is deeply unsustainable.

Belief 2: the market is not efficient in general or in sustainability terms

If, on the other hand, the investor believes that factors relevant to future financial performance are not reflected in current market prices – i.e. the market is not efficient – then investment strategies that incorporate those factors into capital allocation decisions may yield higher returns than the market as a whole (i.e. generate alpha).

There are various ways that ESG factors can crystallise materially, both suddenly and over a period:

- Regulation might internalise previously externalised costs, for example substantial emission pricing or taxation to address climate change or the introduction of emission standards for vehicles.
- Poor operational management or internal controls might lead to events that destroy value. Examples include Lonmin (Marikana mine massacre in 2012, linked to poor labour relations); BP (Deepwater Horizon in 2010, Texas City refinery in 2005); Massey Energy (Upper Big Branch Mine accident, 2010); GSK (announcement of lower sales forecasts for China in October 2013 because of a bribery scandal (Hirschler 2013)).

²¹ An investor may of course have other reasons for choosing passive investment, such as costs or a belief that even if market inefficiency exists, it does not have the ability to select managers who can exploit the inefficiency.

- Changing consumer preferences might cause ‘low-sustainability’ products (such as foods that are high in salt/fat/sugar or heavy, low-efficiency vehicles) to lose market share.

Investment strategies if the market is not efficient

If an investor believes that the market is not efficient at pricing sustainability, they might consider various investment strategies. The principal broad types of strategy are set out below: tilting a passive portfolio; ESG active management; and thematic investment.

- **Tilting a passive portfolio.** Tilting can be undertaken to underweight companies considered to be negatively exposed to sustainability risks and overweight those with positive exposure. Conventional benchmarks are by definition backward-looking (their composition is determined by companies’ past performance) and short-termist (they respond to and amplify short-term price movements). They do not take account of companies’ likely performance in the face of long-term sustainability trends. By definition, the largest constituents of current market cap-weighted equity indices are the companies that are the largest and most successful in today’s economy – and that includes oil and gas companies. The investor might judge that factoring companies’ sustainability exposure into their index weighting, rather than basing it purely on their current market capitalisation, is likely to deliver better returns. The stronger the investor’s belief in the financial significance of sustainability, the greater the tilt that could be given to the portfolio. This might be referred to as ‘ESG smart beta’.²²
- **ESG active management.** If the investor believes that ESG factors are mis-priced and that active management adds value after

costs, active management can be considered. Various combinations of benchmarks, tracking error, turnover and portfolio concentration are possible in principle:

- o A ‘low ESG conviction’ strategy might take a ‘conventional’ approach to all these aspects of mandate design but ask an asset manager to take particular account of ESG factors in picking stocks and constructing the portfolio.
- o A ‘medium ESG conviction’ strategy might allow higher tracking error (permitting bigger ESG bets) and specify lower turnover (to increase holding periods and promote long-termism).
- o A ‘strong conviction ESG strategy’ might involve a concentrated portfolio (a small number of stocks), specify low turnover, and perhaps use an ESG-adjusted benchmark in order to steer the portfolio from the outset towards companies with positive sustainability exposure.

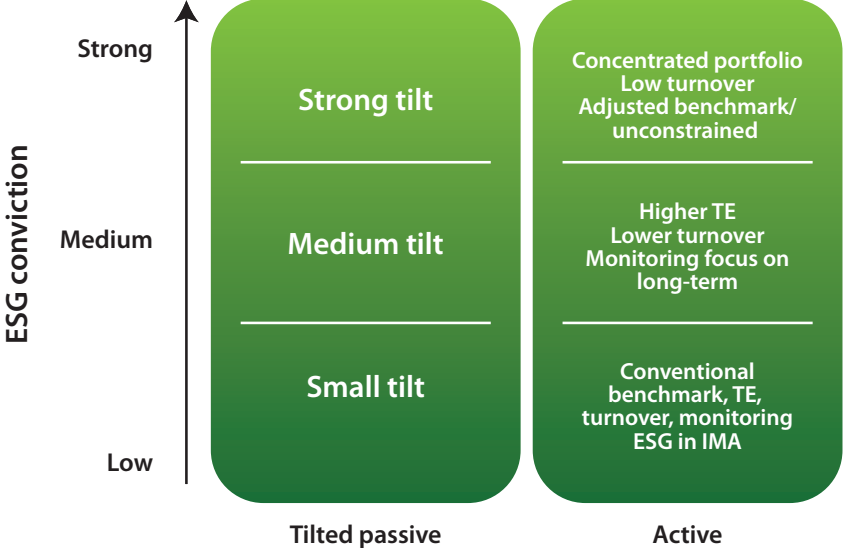
Many ESG active strategies today probably have ‘low’ or ‘low–medium’ ESG conviction if we follow this categorisation. Some – notably specialist SRI funds and strategies – are ‘medium’, and very few are ‘strong’. The reasons for this relate in many cases to asset owners’ requirement to limit risk (i.e. short-term volatility), and to the advice of their consultants.

“...the investor might judge that factoring companies’ sustainability exposure into their index weighting, rather than basing it purely on their current market capitalisation, is likely to deliver better returns”

²² Other factors will of course be taken into consideration in determining how far to tilt the portfolio, most notably implications for risk and performance.

Figure 6 below illustrates how the strength of an ESG conviction can be reflected in tilted passive and active investment strategies.

Figure 6: ESG conviction in tilted passive and active investment strategies



Box 2 below reviews some of the techniques investors are now using to integrate ESG factors into fundamental analysis.

Box 2: Tools and techniques to integrate ESG into fundamental analysis

A variety of techniques are developing to link the corporate value drivers highlighted earlier in this section to investment analysis and decisions. Examples cited by PRI (2013a) include:

- o Using variations in rainfall to adjust earnings forecasts for hydropower generators
- o Incorporating staff turnover costs into cost and earnings projections
- o Adjusting company beta on the basis of a sustainability view
- o Adjusting discount rates to reflect the sustainability dimension of company risk
- o Using overall sustainability ratings to adjust ROIC and WACC.

PRI concludes that integrated analysis of this kind is ‘mainstream ready’ and that ‘there can be no doubt that the high-quality integrated analysis that has been demanded by investors for so many years is now being delivered. ...ESG issues may present new risks and opportunities but they are assessed through standard models of business performance and valuation.’

- **Thematic investment.** If an investor has a strong belief that providing solutions to sustainability challenges offers attractive investment opportunities, and if it believes it has the capability to select appropriate asset managers, it can implement strategies that explicitly target these themes and

sectors. Opportunities are available in most asset classes: clean tech listed equity, private equity and venture capital; low carbon infrastructure; green bonds; green real estate, sustainable forestry and agriculture.

Exercising influence

Investors have significant potential to utilise their position as shareholders, bondholders, or limited or general partners in an unlisted fund, to exercise influence over the companies and assets in which they invest. Their engagement can seek to improve sustainability performance in the belief that this will be recognised and rewarded by the market (i.e. the price will rise). Research has identified outperformance by companies that respond positively to investor engagement on climate change and corporate governance (Dimson et al 2013). Engagement can be conducted in conjunction with any of the investment strategies outlined above and, indeed, in conjunction with other investors.

“...many investors take the view that it is in their interest to engage with policymakers and regulators to promote market frameworks that encourage sustainability”

Very large and highly diversified investors are particularly exposed to the risk that certain companies within their portfolio act in ways that harm the interests of others. It may therefore be in their interests to encourage companies to internalise their externalities where this could lead to enhanced returns, and engage with policymakers where internalisation would be detrimental to individual companies but beneficial to the market and the investor's portfolio as a whole.

As the Strategy Council to the Norwegian Government Pension Fund argues (see Dimson et al 2013):

...undesirable, but possibly profitable, conduct may provide a gain to one company at the expense of others, thereby harming overall portfolio returns. For example, some companies might benefit by externalising environmental costs through pollution, but this could raise costs for others. Such adverse effects could be greater than the gains to the polluters, resulting in the portfolio as a whole earning lower returns. Business practices that impose social or environmental costs on others may lower future economic performance, and it can therefore be in the interest of the investor to modify such behaviour. Externalities can lead investors to engage with investee companies or to work with policymakers to internalise costs.

Many investors take the view that it is in their interest to engage with policymakers and regulators to promote market frameworks that encourage sustainability. Regulation to require full disclosure by companies of their exposure to sustainability risks (e.g. “stranded assets”) is one example. The large amount of work by investors on climate change policy reflects a view that policy uncertainty creates investment risk (note Mercer's 2011 research on climate change and strategic asset allocation).

“...very large and highly diversified investors are particularly exposed to the risk that certain companies within their portfolio act in ways that harm the interests of others”

What value does responsible investment create?

Three forms of value creation are identified below: financial value from both capital allocation and engagement; and non-financial value.

Financial value: ESG-driven capital allocation

The direct financial value for **investors and their beneficiaries/clients** created by active ESG strategies may take the form of:

- returns in excess of a benchmark (alpha) – derived in part from the more favourable sustainability exposure of the assets in which the strategy invests
- reduced short-term risk – measured as volatility against a benchmark - as a result of 'high-ESG' companies being insulated from earnings shocks and market reactions linked to the internalisation of sustainability costs
- reduced long-term risk - protection against the long-term risk of absolute loss of value – as a result of 'high-ESG' companies being strategically better positioned than others.

The value created for **companies** may take the form of:

- reduced cost of capital for 'high-ESG' companies: this will occur if the volume of 'responsible investment', over and above 'conventional investment' (i.e. investment by investors who are not explicitly focused on ESG) is sufficient to make this difference
- lower share price volatility
- a more stable, long-term shareholder base.

All the above result in 'high-ESG' companies being better able to develop their businesses. This may generate tangible sustainability benefits if it can be demonstrated, for example, that emissions from these companies and their value chains (including customers) fall, resource productivity increases, and so on. Conversely, reduced capital allocation to 'low-ESG' companies might act as a penalty to those companies and a signal to the broader market of investors' views on sustainability.²³

If responsible investment were to reach a sufficient 'critical mass', the benefit of lower volatility could be felt across the market as a whole, to the advantage of investors themselves, their clients and beneficiaries, companies and broader society. The process of reaching critical mass is explored further in **Section 4**.

Financial value: engagement

The financial value created by engagement may take the form of:

- increased returns or reduced risk as a result of improved sustainability performance by the companies concerned
- improved returns to the market as a whole as a result of internalising externalities.

Non-financial value

The non-financial value created by responsible investment might take the form of:

- improved ESG performance by individual companies such as reduced emissions, fewer human rights breaches, increased job creation, and so on
- improved ESG performance across the market as a whole as a result of policy engagement, for example better corporate disclosure
- more stable markets provided that responsible investment achieves sufficient critical mass.

“...if responsible investment were to reach a sufficient 'critical mass', the benefit of lower volatility could be felt across the market as a whole, to the advantage of investors themselves, their clients and beneficiaries, companies and broader society”

²³ It is important to note that simply overweighting the 'highest-ESG' companies will not necessarily deliver the greatest sustainability benefits – or investment returns. Overweighting laggards with potential to improve, and then conducting engagement, could be said to add greater value in sustainability terms, and might be effective in financial terms if companies' returns improve along with their ESG performance.

Accelerating progress

There have been many attempts to understand the barriers to integration of sustainability risks within investment processes, and of how investors can contribute more effectively to social and environmental outcomes.²⁴ The recommendations made in these exercises are broadly similar and cover:

- **Disclosure:** companies should disclose all material sustainability information to investors (including under stock market listing rules or other regulation).
- **Materiality:** investors and companies should work together to determine what information should be disclosed (including Key performance indicators).
- **Investment management agreements (i.e. contracts):** these should formally incorporate ESG performance.
- **Investment timeframes:** these should be lengthened and mandates structurally redesigned to take account of ESG issues.
- **Fiduciary duty/investors' legal obligations:** these should be amended to ensure ESG issues are properly considered.
- **Investment vehicles:** these should be developed to enable investors to commit larger volumes of capital to 'sustainability solutions' such as the transition to a low-carbon economy.
- **Research:** notably on the long-term financial implications for investors of sustainability risks and trends.
- **Behaviour:** key actors in the investment chain (such as investment consultants and brokers) should ensure the moral and financial relevance of ESG factors are incorporated in their services.

The phrase 'short-termism' is often used to describe an investment chain that appears wedded to short-term profit maximisation at the expense of longer-term value creation. While it would be unfair to attach this description to the investment industry in general, a culture of short-termism does operate in many quarters – and of course definitions of

'long-term' vary among stakeholders.

Clearly, a critical factor in an investor's response to ESG information is the timeframe over which a given strategy is expected to deliver enhanced returns. Passive and momentum-driven strategies (by definition) exclusively follow short-term price movements and pay no regard to long-term company fundamentals. Strategies that purport to be active but in practice track a benchmark very closely, with low tracking error, short holding periods and high portfolio turnover, also focus on short-term corporate performance (share prices and valuation multiples) in order to achieve their own performance targets – i.e. specified outperformance against a benchmark. Sustainability factors that are unlikely to crystallise within the investor's time horizon will be of little interest.

It is important to note that short-term investment strategies can play an important part in an asset owner's portfolio, providing diversification and liquidity. However, the damaging effects of excessive short-termism are well-rehearsed, and the main issues do not need to be repeated at length here: short-termism leads to asset mispricing, bubbles and consequent price crashes, undermining long-term economic development and investment.²⁵

Financial short-termism is widely cited by business leaders as one of the principal barriers to stronger ESG practices by companies.²⁶ Academic research has also found that companies forego investment opportunities with positive long-term net present value in order to satisfy the market's short-term performance expectations (Graham, Harvey and Rajgopal 2004). Research by the Bank of England concludes that market short-termism worsened from 1985–1994 to 1995–2004. The Bank finds that markets over-discount future cash flows in

²⁴ See for example Aviva Investors and Forum for the Future (2011) and PRI (2013c).

²⁵ See for example BIS (2012) and Woolley (2010).

²⁶ See for example GlobeScan and Sustainability, The Sustainability Survey 2011 www.unep.org/NEWSCENTRE/default.aspx?DocumentId=2666&ArticleId=9011

a “rising tide of myopia” and concludes that, “this is a market failure. It would tend to result in investment being too low and in long-duration projects suffering disproportionately” (Haldane and Davies 2011).

Some of the changes in corporate practices required to achieve greater sustainability require investments that may currently be considered unacceptable because of the excessive discounting of cash flows by the market and companies’ focus on hitting short-term performance targets to satisfy investors’ expectations. For example, it seems reasonable to assume that if lower IRRs and longer payback times were ‘permissible’, companies would invest more in energy and resource efficiency improvements.

The PRI’s work on current practices for integrating ESG into fundamental investment analysis also concludes that, “the reliance on traditional valuation tools can create a tension between their relatively short timeframes and

the longer timeframes needed for many ESG issues to impact companies” and that whether certain ESG issues are judged to be material depends on “individual investors’ processes, investment horizons, risk budgets and performance targets” (PRI 2013a). The short timeframe of these valuation tools is itself driven by short-term investment horizons, short-term measurements of volatility (risk) and short-term performance targets. Some of the most significant factors leading to investor short-termism are highlighted in **Box 3**.

“...short-term investment strategies can play an important part in an asset owner’s portfolio, providing diversification and liquidity”

Box 3: Causes of investor short-termism

- o Behavioural biases and a human tendency to prefer rewards sooner rather than later.
- o The tendency of asset-owning clients to award short-term mandates and to focus on short-term relative performance (Mercer/IIRC Institute 2010). This can be driven by regulation requiring quarterly monitoring of investment managers²⁷ or by pressures on companies to close funding shortfalls in their pension funds in order to improve their own financial performance.
- o Short-term incentive systems for asset managers which may be rational in the context of short-term mandates and performance monitoring (CFA Institute 2006; Mercer/IIRC Institute 2010).
- o Obligations on asset owners to report their own performance on a short-term basis, despite their long-term investment horizon.

²⁷ UK regulations require local government pension funds to monitor their managers’ performance at least quarterly.

4

Unravelling responsible investment: A literature review

Overview

The two previous sections explored the moral and investment cases for responsible investment. This section critically assesses the state of the literature on responsible investment, including portfolio- and firm-level evidence on its performance, causal mechanisms, market (mis)pricing and long-term risk. Not all studies in this area are robust: a quality filter has therefore been applied, shedding light on the relationship between investment decisions and non-financial value creation.

A distinction is drawn between portfolio-level and firm-level evidence. Studies of portfolio performance based on crude ESG criteria (e.g. “SRI or not SRI”) may lump together firms that are responding to ESG factors in different ways, making it impossible to discern the returns to sustainable practices at the firm level. Hence, before jumping to portfolio-level analyses, firm-level channels through which ESG factors drive financial performance are first investigated. Only then is the question of how to optimally group such firms to build profitable portfolios considered.

The review focuses on studies addressing the question of how ESG practices translate into financial and other performance measures at the firm level. The degree to which studies tackle endogeneity issues (dependency of variables) is shown to be a first-order concern in assessing the validity of their conclusions. The review looks at many examples from the literature and identifies several that deliver robust causal evidence in favour of the case for responsible investment.

“...the review focuses on studies addressing the question of how ESG practices translate into financial and other performance measures at the firm level”

“...the evidence can be summarised as follows: environmental and social, rather than governance, factors appear to add value not just through lower firm-level risk but also through lower cost of capital, with roughly similar findings holding for firm value”

The evidence can be summarised as follows: environmental and social, rather than governance, factors appear to add value not just through lower firm-level risk but also through lower cost of capital, with roughly similar findings holding for firm value. In this relationship, however, the literature has identified managerial agency problems that may attenuate the effect. Finally, while improvements in governance do not seem to directly influence firm value, at least not as much as environmental and social factors, they may still do so through their positive impact of environmental performance.

Three gaps are identified in the literature that, if closed, could explain the mispricing of sustainability risks. These are: market short-termism, varying sensitivity to sustainability issues across asset classes, and the role of critical mass in influencing investor behaviour.

Literature review

This review is structured in two parts. Firstly, the existing literature is categorised into portfolio-level and firm-level evidence of returns to responsible investment, with an argument made to prioritise the latter. Secondly, the literature looking at the valuation of firms as a function of their ESG practice is explored, with common empirical problems and challenges in the literature discussed. Based on the most common types of empirical issues encountered, a sample of papers that may be considered 'best practice' is constructed – one that delivers the relatively most robust evidence on the case for responsible investment.

The methodology for picking papers for this review has two steps. First, the literature was screened based on overview reports from both practitioners (such as Deutsche Bank 2012) and academics (Dimson et al 2013). Second, based on the author's academic experience, the database was complemented by papers discussed at the top conferences in financial economics. Further additions came from the CalPERS Sustainable Investment Research Initiative (housed at UC Davis) database of academic studies and hand-picked conference programs such as the Sustainability & Finance Symposium at UC Davis and UC Berkeley's well-known Moskowitz Prize for Socially Responsible Investing. In this manner, papers were considered irrespective of their position in the publication process. This has naturally led to the inclusion of very recent working papers in the review.

When exploring topics that can naturally be the subject matter of multiple papers, or overarching empirical pitfalls, papers were selected on the basis of their representativeness of the issues.

Portfolio-level vs. firm-level evidence

There is a distinction in the literature between portfolio-level and firm-level evidence of the returns to responsible investment. At the portfolio level, the literature considers either factual portfolios, i.e. actual responsible investment funds,

or theoretical ones consisting of firms that fulfil certain ESG criteria. The traditional view of responsible investment funds is that they should underperform due to constrained optimisation and reduced choice sets. This view implies there is an actual trade-off between financial performance and acting responsibly²⁸. In particular, it is argued that responsible investment funds dispense with benefits of diversification (i.e. minimisation of portfolio risk) and/or exclude potentially higher-performing assets. The counterargument points to the mounting evidence that ESG factors are correlated with firm characteristics that govern superior financial performance. In addition, firms that proactively tackle ESG issues can hedge their future risk exposure.

These are good reasons to assume that responsible investment funds should perform well financially, but the translation from firm-level to portfolio-level returns is not straightforward. Firms capitalise on ESG factors in different ways, and grouping them together crudely based on ESG factors can lead to portfolio-level effects that potentially nullify any returns to sustainable practices at the firm level.

The Deutsche Bank (2012) survey²⁹ demonstrates that the empirical evidence on the financial performance of responsible investment funds is mixed: two individual academic studies report a *positive relationship* between market-based or accounting-based performance and responsible investment (at the factual fund or theoretical portfolio level), seven studies report a *neutral relationship* and three studies report *mixed evidence*.

“...these are good reasons to assume that responsible investment funds should perform well financially, but the translation from firm-level to portfolio-level returns is not straightforward”

²⁸ Whether for moral and ethical reasons or in response to future opportunities and challenges (or both).

²⁹ Note that the categorisation of findings in this survey is inherently biased due to the fact that non-findings rarely receive attention from journal editors and referees alike (publication bias). Thus the numbers for positive and negative findings may be biased if the publication bias differentially affects them. Conversely, if the publication bias holds similarly for both types of findings, then the distribution of positive vs. negative findings indicated in the Deutsche Bank (2012) survey should be unaffected.

The portfolio-level evidence is less prone to empirical pitfalls than the literature on firm-level performance in that a standard methodology is used to estimate *abnormal returns* (cf. Fama 1998), that is returns which cannot be explained by a market model (where the impact of the market premium on an individual stock's return is called 'beta') and other factors. On the flip side, without further decomposing portfolios, virtually nothing can be said about the mechanism underlying the portfolio returns. To achieve that it would be necessary to know how the companies to be invested in are chosen. Simply composing portfolios based on a crude measure of ESG performance may lead to the lumping together of companies that work quite differently along different ESG dimensions but just so happen to score similarly on a scale such as the Kinder, Lydenberg and Domini (KLD) firm-level index of social performance, which is widely used in the studies under scrutiny in this review.

For example, using data from 1992 to 2004, Kempf and Osthoff (2007) find that a trading strategy that buys stocks with high KLD ratings and sells stocks with low KLD ratings leads to abnormal returns of up to 8.7 per cent per year. This is due to stocks with low KLD ratings yielding significantly negative abnormal returns – stocks with high KLD ratings do not yield any abnormal returns. While this finding suggests that stocks with low KLD ratings yield significantly worse returns than stocks with high KLD ratings, it does not imply that investing in stocks with high KLD ratings is profitable per se (i.e. it does not suggest that stocks with high KLD ratings are associated with superior financial performance). At the same time there are multiple studies, most notably Hong and Kacperczyk (2009), that defend the opposite view: that 'sin' or 'vice' stocks outperform the market.³⁰

What is the underlying mechanism behind the performance of sin stocks? It is not clear at all. Hong and Kacperczyk (2009) find that these stocks are less held by norm-constrained institutions such as pension funds (as opposed to mutual or hedge funds) and that they receive less analyst coverage than other comparable stocks. These investor and

analyst characteristics may be correlated with underlying firm fundamentals that govern the financial performance of these stocks. Thus, one cannot necessarily infer from Hong and Kacperczyk (2009) that poor ESG performance (sin stocks being the nemesis of sustainable practice) actually causes the observed stock return variation.

An overview of this literature is provided by Derwall, Koedijk and Horst (2011) who report mostly neutral results regarding the performance of responsible investment funds.³¹ As noted previously, there is a difference between the performance of existing responsible investment funds and the performance of a fictitious portfolio of stocks chosen on the basis of ESG considerations. Literature based on the latter, such as Kempf and Osthoff (2007), may be more informative in that the researchers do not look at the performance of pre-determined funds but consider the possibility of chasing alpha by setting up new portfolios on the basis of ESG performance. The results are similarly mixed, or neutral, however.

“...the portfolio-level evidence is less prone to empirical pitfalls than the literature on firm-level performance in that a standard methodology is used to estimate abnormal returns (cf. Fama 1998), that is returns which cannot be explained by a market model (where the impact of the market premium on an individual stock's return is called 'beta') and other factors. On the flip side, without further decomposing portfolios, virtually nothing can be said about the mechanism underlying the portfolio returns”

³⁰ Sin stocks differ conceptually from high-ESG stocks in that they fall within specific sectors such as tobacco, alcohol, gambling and arms, whereas ESG ratings can be applied across sector and judgments are often made relative to peers.

³¹ They report six out of seven studies with neutral results, namely Bauer et al. (2005, 2006, 2007), Barnett and Salomon (2006), Gregory and Whittaker (2006) and Renneboog, Horst and Zhang (2008).

The studies described are altogether insufficient to pin down a firm-level mechanism driving returns to responsible investment. So what is the relationship between ESG practices and financial performance at firm level? One paper that received notable public attention and strikes a balance between portfolio-level and firm-level analysis is Edmans' (2011) study of the relationship between employee satisfaction and long-run stock returns. Edmans (2011) presents strong evidence that a portfolio of the "100 Best Companies to Work For in America" earned an abnormal risk-adjusted return (a four-factor alpha) of 0.29 per cent per month (or 3.5 per cent per year) from 1984 to 2009. The results are robust to controls for firm characteristics, ruling out some alternative explanations for the portfolio outperformance.

"...the studies described are altogether insufficient to pin down a firm-level mechanism driving returns to responsible investment"

While these insights may be useful by themselves from a professional investor's perspective, it is not clear whether the study can be interpreted as causal evidence. Is employee satisfaction, one of the basket of social factors making up the S in ESG, causal? Consider alternative stories: if reverse causality is at play, this would imply that it is not employee satisfaction causing superior returns but, for instance, higher demand by responsible investors due to the inclusion of firms in the employee-satisfaction list. The paper rules out such alternative explanations by showing that their implications do not hold up in the data. It shows that, while 'employment funds' (i.e. SRI funds that invest in domestic equity and use labour or employment screens) indeed overweight the respective companies on the employee satisfaction list, the effect is not large enough to explain the observed outperformance of 3.5 per cent per year. That said, while the paper sets an extremely high standard to hold empirical work against, it does

not succeed entirely at establishing causality simply because it is very hard to exclude all possible alternative explanations. By moving from the portfolio level to the firm level, it becomes simpler to rule out alternative explanations by seeking natural experiments that exogenously (i.e. externally) vary, or constrain, a firm's ESG performance. Such variation can then be used to establish a causal effect on financial performance.

Overall, the literature on abnormal returns (i.e. alpha) to responsible investment is based on the premise of mispricing in the stock market. As Edmans (2011) argues, if the market fully valued intangibles such as employee satisfaction, then this would dampen the profitability – as measured by alpha – of responsible investment strategies.

"...overall, the literature on abnormal returns (i.e. alpha) to responsible investment is based on the premise of mispricing in the stock market"

In virtually all of the papers reviewed, 'ESG practices' refer to 'doing good' at the firm level and not to proactive innovation in response to sustainability risks and megatrends. An important reason for this may be the prevailing use of ESG ratings as measures of sustainable practice. This may in turn reflect the lack of availability of measures of the extent to which corporations work to prepare themselves for future risks and uncertainties. While some of the evidence (e.g. Edmans 2011) attests to mispricing, it does not appear to be universally true that the market does not price aggregate risks such as those implied by sustainability megatrends. For instance, Bansal and Ochoa (2011) present a theoretical model where temperature risks (which are exacerbated by climate change) are priced and contribute to the equity risk premium. Their model is motivated by evidence on the covariance between country equity returns and temperature, i.e. temperature betas that reflect

the country's exposure to aggregate growth rate risk. They show that the country-level temperature risk premium decreases with distance from the Equator. This suggests that temperature risk is priced to some degree as the distance to the Equator is inversely related to a country's exposure to temperature risk.

“...in virtually all of the papers reviewed, ‘ESG practices’ refer to ‘doing good’ at the firm level and not to proactive innovation in response to sustainability risks and megatrends”

The issue of mispricing – or perhaps appropriate pricing – in capital markets suggests the need for further studies of the value of responsible investment at firm-level. This would be useful for two reasons: firstly, one can control for firm-level variation in the strength of ESG practice (i.e. the observed variation in the quality of sustainability leadership, governance, environmental performance and so on); and secondly, even if capital markets are not appropriately pricing the reduced risk from sound ESG performance, it is useful to know whether it improves firm-level performance by looking at measures that are not market-based. In addition, one could test whether the externalities associated with (un)sustainable business practices affect a firm's profitability. If they did this would provide investors with an empirically justified business case for sustainability at the firm level.

In seeking to identify causal mechanisms between firm-level ESG practices and financial performance, care should be given to method by which firms are identified. In particular it is important to exclude the possibility that ESG factors capture an omitted variable (i.e. a variable that was omitted as a potential explanatory factor in the empirical analysis). While there exist a myriad of papers

documenting correlations between ESG factors and sound corporate practices (operational performance, employee satisfaction and so on), these do not establish the direction of the relationship, and therefore the underlying causal mechanisms. Only by understanding the latter can one determine the channels through which ESG factors affect firm-level outcomes and hence distinguish companies that do well financially because of ESG factors vs. other firm-level practices ('covariates').

On this basis, a filter function could be constructed to identify firms with superior ESG performance. The fact that this has not been modelled to date in the existing literature could explain the mixed nature of the current empirical evidence. The filter would allow groups of firms to be assembled into profitable responsible investment funds

“...while there exist a myriad of papers documenting correlations between ESG factors and sound corporate practices (operational performance, employee satisfaction and so on), these do not establish the direction of the relationship, and therefore the underlying causal mechanisms”

Causality between firm-level practices and financial performance

A number of pitfalls exist in the empirical literature attempting to unravel the relationship at firm-level between ESG practices and financial performance. The discussion below looks at some of the best papers on this topic in order to overcome such difficulties and highlight gaps in our knowledge that if filled would shed further light on the value-generating potential of responsible investment.

“...within the literature looking at ESG issues, there is considerably less research on environmental and social factors than on governance. Indeed, there is an entire strand of literature on corporate governance that appears to have developed independently of studies on the environmental or social dimensions of corporate practice”

Papers are selected on the basis of their representativeness of the issues under review. Other reviews such as Hoepner and McMillan (2009) or Deutsche Bank (2012) offer more complete listings, albeit without the discussion added in this review. The studies use a variety of labels to describe the topic area, including ‘ESG’, ‘CSR’ and ‘sustainable’, sometimes loosely. No attempt is made here to distinguish between them, the assumption being that the papers converge methodologically even if they study different outcomes. Within the literature looking at ESG issues, there is considerably less research on environmental and social factors than on governance.³² Indeed, there is an entire strand of literature on corporate governance that appears to have developed independently of studies on the environmental or social dimensions of corporate practice.

As pointed out in Deutsche Bank (2012), the two most common outcome variables under scrutiny are *corporate cost of capital* and *corporate financial performance*, with greater discretion in the choice of outcome variables for the latter than for the former. Only one paper came to light during this review on the relationship between ESG practices and firm risk, namely Albuquerque, Durnev and Koskinen (2013). Given the singularity of this type of study, this paper is reviewed first.

Using scores from MSCI’s ESG database (formerly KLD), Albuquerque, Durnev and Koskinen (2013) show that companies that do well along ESG dimensions exhibit significantly lower market risk

(beta). While the effect is starkest for human rights, other social (community) and environmental factors rank second and third (out of seven) in terms of contributing to lower market risk, whereas the authors find no effect for governance. The challenge as ever is to establish the causality of the observed relationship. For example, it is quite likely that companies that respect human rights will have greater compliance overall, thereby avoiding legal problems such as lawsuits, and contributing to lower risk. In that example, human rights could not be interpreted as being causal in driving market risk.

While a host of studies discuss such correlations, it should be borne in mind that correlations, in the absence of causality, are a dangerous means of informing investment decisions. Assume a robust positive correlation exists between a measurable factor X and returns on equity traded for some firms. This may either mean that firms with high returns exhibit higher values of X or that firms with higher values of X earn higher returns. Trading based on such a correlation is equivalent to hoping for and betting that the latter is the case. If, conversely, firms with high returns generally exhibit higher values of X, then it may well be that many firms with high values of X yield poor returns. These problems of measurement and endogeneity (dependency of variables) can be exacerbated if there are other sample selection issues such as non-availability of data on the measure X for all firms.

Albuquerque, Durnev and Koskinen (2013) make use of so-called instrumental variables estimation, which acknowledges the potential endogeneity of their ESG variable by instrumenting for it. One of the two instruments they comes from a correlation identified by Di Giuli and Kostovetsky (2014) that firms headquartered in Democrat-party-leaning states in the USA are likely to spend more resources on ESG activities. This is a plausible instrument as long as the political inclination of a state is unrelated to market risk, i.e. being headquartered in a Democrat-party-leaning state influences risk only through ESG expenditures. This is a debatable assumption because firms that exhibit low market risk may still self-sort into such states. Therefore, to demonstrate robustness of their results, the authors also employ a second set of instruments that is

³² This may reflect Starks’ (2009) conjecture that investors seem to care more about corporate governance than any other ESG consideration.

based on a sample of product recalls and environmental and engineering disasters. The results for lower market risk hold up well when using either instrument. Against this background, this paper should be considered as good causal evidence in favour of sustainable practices reducing firm-level risk.

While Albuquerque, Durnev and Koskinen (2013) also give results on firm valuation, this is not their focus. In contrast, corporate financial performance and cost of capital lie at the heart of many other studies. Sharfman and Fernando (2008), for example, argue that better risk management can lead to a reduction in cost of capital through lower firm-level volatility, for which they provide cross-sectional evidence from a relatively small sample of 267 firms. While the authors find that poor environmental performance is negatively correlated with cost of equity (but not cost of debt), Bauer and Hann (2010) find that concerns with a company's environmental track record are associated with higher cost of debt and lower credit ratings. Furthermore, El Ghoul et al. (2011) find that firms with higher ESG scores exhibit lower cost of equity via an ex-ante measure that utilises analysts' estimates.

“...while a robust correlation with cost of capital is demonstrated in all of these studies, they make no attempt to establish causality. As a result the insights they provide cannot simply be taken at face value”

While a robust correlation with cost of capital is demonstrated in all of these studies, they make no attempt to establish causality. As a result the insights they provide cannot simply be taken at face value. However, as noted by Sharfman and Fernando (2008), the negative relationship between environmental performance and cost of equity (i.e. strong environmental performance is associated with lower cost of equity) also holds for

market risk, which is an important driver of firm-level volatility. By drawing on the causal evidence from Albuquerque, Durnev and Koskinen (2013) in this context, it is possible to infer that there may indeed exist a causal relationship between cost of capital and ESG performance. This is a good example of how insights from pure correlation papers gain importance when complemented by causal evidence from related work.

Turning to the empirical relationship between ESG practices and corporate financial performance (such as firm value or shareholder wealth), Margolis, Elfenbein and Walsh (2007) come to the conclusion that the average impact appears to be positive but small based on a review of 167 studies from 1972 to 2007. However, as noted above, this plain correlation neither implies causality nor can it give any guidance as to the mechanism through which ESG practices influence firm value. Answering this question is crucial for portfolio selection based on ESG criteria.

Galema, Plantinga and Scholtens (2008) provide evidence that firms with strong sustainable practices have lower book-to-market ratios and are, thus, potentially overvalued. Using a fairly similar outcome variable, namely Tobin's Q, Albuquerque, Durnev and Koskinen (2013) confirm this relationship and, as noted above, make sound progress towards establishing causality. Interestingly, Humphrey and Lee (2012) provide evidence that this link is confined to environmental factors.

A large number of other studies document some correlation between ESG practices and firm value, the vast majority suggesting a positive link (for example see Hassel and Semenova 2008 and Barnett and Salomon 2012). However, in the absence of an empirical mechanism that explains causality, positive correlations of this kind may simply consist of poorly understood associations contingent on omitted variables. For instance, Servaes and Tamayo (2013) show that ESG performance and firm value are positively related, but only for firms with high customer awareness, which the authors proxy through advertising budgets.

“...the lingering question in these studies is whether good ESG performance follows good financial performance in a firm, or whether it precedes it – in other words are firms doing well by acting responsibly, or acting responsibly because they are doing well”

The lingering question in these studies is whether good ESG performance follows good financial performance in a firm, or whether it precedes it – in other words are firms doing well by acting responsibly, or acting responsibly because they are doing well. In order to establish causality, one requires plausibly exogenous treatment of some firms with high ESG performance, leaving a ‘control group’ that is not treated but similar in all other aspects. Such a control group can be built in different ways, the most crude being through matching procedures: one seeks to match a group of firms with good performance in certain areas of ESG with firms that, in reality, should also have done well (based on the prediction of explanatory variables shared by all of the firms in the sample) but did not. In this manner, Eccles, Ioannou and Serafeim (forthcoming) present evidence that early adopters of sustainability policies earned higher abnormal returns in the period from 1993 leading up to 2010 compared with a sample of 180 firms that were matched based on industry, size, capital structure, operating performance and growth opportunities in 1993.³³

Similarly, looking at over 2,000 shareholder engagements on ESG issues by one institutional investor, Dimson, Karakas and Li (2013) show that even the unsuccessful engagements (i.e. campaigns that did not achieve their milestones) did not significantly underperform a matched sample of firms and the successful engagements outperformed their matched counterparts. In this example, as well as in Eccles, Ioannou and Serafeim (forthcoming), there is a risk that the selection

criteria chosen for the matching procedure omit variables that are crucial in driving outperformance. For example, interventions by active owners may be the result of the owners timing the market, so that interventions are correlated with market valuations that may, in turn, be differentially correlated with firm valuations (if equally correlated this would not be a problem). One way of overcoming such problems in Dimson, Karakas and Li (2013) would be to focus on very long-run interventions and their returns.

These arguments render matching procedures an imperfect substitute for identifying naturally occurring (exogenous) variation in the variable of interest, in this case firm-level ESG performance. The following three papers address this concern and may be considered best practice in terms of employing an identification strategy to determine the effect of ESG factors on firm value.

The main identification challenge is to disentangle the finding that ESG factors lead firms to improve their financial performance from alternative explanations suggesting this relationship operates in reverse. One scenario that can be examined concerns the manager who, in good times, satisfies their own desire to drive ESG performance. In other words, they treat sustainability as a ‘pet project’ to take care of only when they are not financially responsible for its implementation (own wealth not at risk).

Cheng, Hong and Shue (2013) use a natural experiment that varies managerial ownership, namely the 2003 Dividend Tax Cut that increased after-tax insider ownership. If pet projects are unhelpful to financial performance, an increase in a manager’s ownership stake may encourage them to invest less in pet projects and concentrate on shareholder return. Indeed, the authors find that corporate ‘goodness’, as measured by KLD scores, decreased after the dividend tax cut, but only for firms with moderate levels of insider ownership. The reason is as follows: for managers at firms with low levels of insider ownership, the tax cut did not matter as much. Conversely, when managers hold high stakes in the firm, they always do what is best for shareholders (i.e. themselves) and thus do not have excess resources to take care of pet projects. The empirical evidence provided by Cheng, Hong

³³ While the authors do find a lower alpha for matched “low sustainability firms” compared to “high sustainability firms”, both alphas are significant in their regressions and they do not test whether they are statistically significantly different from each other by building a long-short portfolio.

and Shue (2013) allows a causal interpretation and implies that corporate goodness is partly a side project of managers that does not contribute to higher firm valuation.

Natural experiments have the advantage of being able to define exactly what kind of channel is being tested. According to Cheng, Hong and Shue (2013), the dividend tax cut is used to vary managerial ownership and financial responsibility, thereby testing agency theories at the managerial level (i.e. the alignment of managerial behaviour and corporate objectives through providing suitable incentives). However, the evidence does not preclude other firm-level drivers of corporate goodness (which we are equating here, perhaps unhelpfully, with sustainable practice) leading to increased firm value.

To this end, Flammer (2013) considers the impact of ESG-related shareholder proposals on firm valuation. The exogenous (external) factor in the experiment is introduced by comparing proposals that were only marginally accepted vs. those that were only marginally rejected (e.g. acceptance by 50.1 per cent vs. 49.9 per cent). The implicit assumption is that firms at this margin are very similar, making acceptance/rejection of the proposal quasi-random. Flammer (2013) finds that adopting the proposal leads to an increase in ROA by 0.7 to 0.8 per cent and an increase in the firms' net profit margin by 1.1 to 1.2 per cent in the two fiscal years following the vote. While these are purely accounting measures (i.e. book values), the author also shows that stock markets react equally positively: in the two-day event window following the announcement of the vote, an ESG proposal that passes yields a positive cumulative abnormal return of 1.9 per cent compared to a proposal that fails.

There are various difficulties with this study. Besides a small sample size (102 close-call proposals), the author picked two book-value outcome variables, so it is not clear whether the results extend to other measures of book-level profitability. Finally, 67.6 per cent of the proposals in Flammer (2013) are about employee well-being/satisfaction rather than, say, environmental issues (9.8 per cent), so not much is learned about the mechanism underlying these valuation effects above and beyond what is already

known from Edmans (2011). Taken together, these results may suggest that any positive causal link from ESG factors to firm valuation is likely to rely more on environmental and social, rather than governance, factors – a finding that mirrors the tenor in Albuquerque, Durnev and Koskinen (2013), discussed previously.

“...taken together, these results may suggest that any positive causal link from ESG factors”

Lastly, while there is more evidence that environmental and social, rather than governance, factors drive firm value, it may be that governance has a reverse effect on the other two factors. Using the passage of business combination laws in U.S. states during the second half of the 1980s³⁴, Amore and Bennedsen (2013) find that worse corporate governance reduces firms' environmental innovation in the form of patents related to environmental technologies. This could imply that good governance boosts firm value through its positive impact on corporate environmental performance rather than its own effect per se.

In summary, while the literature on firm-level ESG practices and financial performance is deep, it falls prey to many empirical pitfalls. These include issues with variable definitions making them subject to mismeasurement; severe endogeneity (and thus empirical identification) issues; and a lack of clean natural experiments to generate exogenous variation in explanatory variables.

Despite many limitations it has been possible to collect several studies that show robust causal evidence in favour of the case for responsible investment. Most notably, environmental and social, rather than governance, factors appear to add value, not just through lower firm-level risk but also through lower cost of capital, with roughly similar findings holding for firm value. In this relationship, however, the literature has identified managerial agency problems that

³⁴ These laws had a negative effect on the quality of corporate governance because firms incorporated in the legislating states became more able to defend against uninvited takeovers, which in turn increased managerial slack.

may attenuate the effect. Finally, while improvements in governance do not seem to directly influence firm value, at least not as much as environmental and social factors, they may still do so through their positive impact on environmental performance.

Future research needs

Firm-level evidence of a causal impact of ESG practices on financial performance is crucial for understanding where any portfolio-level outperformance based on ESG criteria is derived from. Evidence that there are abnormal returns (i.e. non-zero alpha) to responsible investment is synonymous with evidence that markets do not appropriately price ESG practices – if they did there would be no abnormal returns. This is an example of the much broader and more significant challenge by governments on a global scale to internalise environmental and social externalities in financial markets through policy and regulation.

“...firm-level evidence of a causal impact of ESG practices on financial performance is crucial for understanding where any portfolio-level outperformance based on ESG criteria is derived from”

It is precisely because markets do not account for the benefits³⁵ of ESG practices appropriately in stock prices that there may be profits to be made by investing in these companies. While some sustainability issues are already recognised by markets as relevant to financial performance, others are not and it is not clear why. Determining the reasons for inappropriate pricing is crucial for all parties involved, for investors and corporations alike.

Long-run sustainability risks are potential disaster events for firms' financial performance, and

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investors may wish to consider how their strategies should be adapted to incorporate these risks over the timeframes to which markets currently operate. Similarly, companies will need to start transforming from business as usual practices to adaptive production and management processes that take into account long-run risks alongside potential shifts in the pricing of sustainability risks in capital markets, which in turn may affect corporate financing.

There is great uncertainty at present with regard to the scope of mispricing of sustainability risks which naturally spills over to the issue of measuring risk-adjusted returns using conventional measures of financial volatility. The judgment as to how sustainability issues are incorporated into prices relies on market data for returns and volatility. However, what is referred to as volatility risk tends to be financial in nature (cash flow volatility). It is therefore not clear to what degree social or environmental risks are captured by standard volatility measures because the extent to which sources of uncertainty such as environmental risks impact financial performance in the long run remains an open question. Sustainability risks may have severe financial consequences in future but are not necessarily incorporated into measures of financial volatility today because their likelihood of materiality is either deemed to be low or the materiality itself is only poorly understood. Overlooking sustainability risks when modelling

³⁵ For example the ability to reduce firms' exposure to sustainability risks or improve their upside potential.

(financial) volatility could have far-reaching consequences, most notably a failure to identify bursting bubbles and market crashes as sustainability risks become reality, and their lack of incorporation into market prices is abruptly revealed to all market participants.

What are potential reasons for market mispricing? Three are highlighted here:

- 1 **Extreme market short-termism.** This may prevent generally long-run sustainability risks³⁶ from being correctly priced. That is, some sustainability issues which are only weakly relevant today may become more relevant progressively over time. An important, but not unique, source of variation in investment horizons is the incentive and compensation structure of portfolio managers – a factor at the discretion of investors.
- 2 **Varying sensitivity to sustainability issues across asset classes.** Virtually all academic studies in finance (not just those examined in this review) rely on stock market data. However, while finding abnormal returns to ‘high-ESG stocks’ may be a sign that ESG practices are not sufficiently priced in the market, this finding may vary for different asset classes since, for example, equities and fixed income products vary greatly in the flow of information and extent of their so-called ‘market discovery’. What matters in financial terms also differs across asset classes. By definition, fixed income investors are exposed to less risk than equity investors which will, in turn, shape perceptions of materiality. In short, the markets for some asset classes may misprice sustainability issues more than others.
3. **Critical mass.** Some ESG factors may remain unpriced, or insufficiently priced, even within longer investment horizons and across asset classes because investors care less about firm-level practices than their collective impact at aggregate level. That is, in order to have a significant and positive impact on both the economy (as well as the environment and society) and on investment (and, thus, on prices), firm-level ESG practices must reach a critical mass where enough companies are taking enough sustainability action to warrant a

response from investors. A potential reason for the mispricing of sustainability issues may be that this critical mass is not met and market participants therefore do not incorporate such issues into their decision making, even though investors may be aware of the concerns.

“...overlooking sustainability risks when modelling (financial) volatility could have far-reaching consequences, most notably a failure to identify bursting bubbles and market crashes as sustainability risks become reality, and their lack of incorporation into market prices is abruptly revealed to all market participants”

Investors may wish to pay close attention to the implications of such mispricing for their own financial performance. In the wake of the 2007 financial crisis there has been much discussion of the merits of long-term investing for society and potentially for investors themselves. Long-horizon investors such as sovereign wealth funds, pension funds and insurance companies have been a particular focus of this debate, which has centred on the overall portfolio level, looking across asset classes rather than within them. As we know from **Section 3**, WEF has argued that the potential benefits to long-horizon investors over general investors, which might enable them to achieve superior long-term performance, include their ability to:

- access structural risk premia (i.e. market risk premium), most notably: the equity risk premium; liquidity premium – being compensated for holding illiquid assets such as private equity, venture capital or infrastructure; and the complexity premium – the resources and sophistication of large long-term investors allow them to assess and access investments that are opaque to other investors

³⁶ Sustainability risks tend to be viewed as long term. However, reputation crises, climate-related damage (e.g. droughts, wildfires, storms and floods), political a policy shifts, impact over much shorter timeframes.

- take advantage of secular themes/macro trends that are likely to materialise but whose precise timing is uncertain, such as resource scarcity, mispricing of carbon emissions, ageing populations and the rise of China
- impact corporate decision-making by virtue of their long-term commitment to companies, accentuated by their size
- avoid buying high and selling low; a focus on long time horizons and extended holding periods, supported by disciplined governance processes, makes it easier for these investors to avoid reacting to short-term market information
- minimise transaction and market disturbance costs: all trading incurs costs, so high levels of trading increase costs and depress overall returns; the large minimum investment sizes that are material for very large investors may cause prices to move in ways that undermine the investor's own interests (World Economic Forum 2011).

Despite the existence of a large volume of research into the practices and performance of investors of this kind, WEF notes that clear conclusions have yet to emerge. However, there is some evidence that, on average, equity funds with lower turnover and longer holding periods have outperformed funds with a shorter-term orientation. The outperformance appears to have grown stronger in more recent periods: ca. 175 basis points (bp) per year outperformance by lowest quintile turnover funds relative to highest over the last *three* years, 90 bp annual difference over *five* years and 50 bp annually over the last *decade*, according to one study (Didas Research 2013; Janus Capital Group 2012). Other research on the performance of different equity strategies finds that funds with the most active stock-picking (the highest tracking error against the benchmark) performed best after all costs, but that these funds had higher turnover (89 per cent) than 'closet indexers' (69 per cent) (Petajisto 2013).

5

Collective action and research

Overview

This section identifies collective actions that would substantially advance the practice of responsible investment, and research studies that would inform it – in short the stimulus for the ILG’s forward work programme.

The landscape of opportunities for (and barriers to) progress with responsible investment is large and complex, with leaders in the field only too aware of the need to focus precious time and resources efficiently to catalyse change. Initiatives are underway in numerous areas, not least disclosure and materiality,³⁷ and it makes little sense for the ILG or other groups to duplicate these efforts.

That said there is a need for strong and collective leadership from the investment industry on the opportunities and risks presented by sustainability trends. The ILG’s attention to this area carries considerable weight as a consequence of its total assets under management (> USD 5 trillion), its asset manager and owner balance, including a number of very large institutions, its focus on sustainability, and its capacity to influence others through its own example.

The following three-way action plan is proposed:

- 1 Scale up capital allocation to the ‘green’ economy
- 2 Underpin this commitment with research on the economic impact of environmental risks
- 3 Tactical opportunities to support ESG integration.

1. Scale up capital allocation to the ‘green’ economy

The surest indication that responsible investors are committed to action is through scaling up capital allocation into the technologies, infrastructure and

business models of a future low carbon, sustainable (‘green’) economy. Opportunities range from increasing allocations to existing products such as green bonds, to engagement of asset owners and public policy makers, and in new product concepts across asset classes. Large-scale commitments have been held back to date by uncertain policy conditions and the low volume of investment grade assets available. Collective action by responsible investors could potentially address these constraints.

A key investment area is low carbon economic transition where, according to a report from the Green Growth Action Alliance (2013), “business-as-usual investment will not lead to a stable future unless it achieves environmental and sustainability goals”. The report notes that:

...the challenge will be to enable an unprecedented shift in long-term investment from conventional to green alternatives to avoid ‘lock-in’. This can be achieved by re-evaluating investment priorities, shifting incentives, building capacity, investment-grade policies and improving governance.

“...the surest indication that responsible investors are committed to action is through scaling up capital allocation into the technologies, infrastructure and business models of a future low carbon, sustainable (‘green’) economy”

³⁷ For example the Corporate Sustainability Reporting Coalition convened by Aviva Investors - www.aviva.com/media/news/item/the-eu-in-2013-embedding-corporate-sustainability-reporting-15615/; the Sustainable Stock Exchanges Initiative, bringing together PRI, UNEP-FI, UNCTAD and the UN Global Compact - www.sseinitiative.org/; Project Delphi, convened by CSR Europe, the Academy of Business in Society and State Street Global Advisors - www.dvfa.de/fileadmin/downloads/Verband/Kommissionen/Project_Delphi/Project_Delphi_Overview_Feb_2012.pdf

It goes on to emphasise the pivotal role of private finance:

...reliance on public-sector investment must be minimised, and more attention paid to attracting private finance, which is at the core of the green growth transition. Assets being managed in the OECD amount to US\$ 71 trillion; but deploying these assets toward green infrastructure is limited by policy distortions and uncertainties, market and technology risks, and reinforced by the reluctance of investors to take a longer-term view.

As we saw in **Section 3**, a host of barriers to this exist, including policy uncertainty, short-termism, challenges with risk modelling, perverse regulation, and a lack of investable assets. This presents an opportunity for the ILG and likeminded groups to break the logjam with bold, far-reaching commitments based on two things: solid investment principles and clear enabling actions from policy makers. Various estimates put the climate finance gap – the incremental amount of financing needed to support global economic growth and development on a path limiting global warming to 2 °C – at multi-trillion dollar figures for the next decades.³⁸ This is too large to be borne by the public sector alone, while the conventional financiers of infrastructure – the banks – will struggle to raise this capital under new regulatory requirements.

As a consequence some institutional investors have started investing in infrastructure directly, including renewable energy and other forms of sustainable infrastructure, while asset managers are building infrastructure debt teams. Private equity funds are raising equity for project finance. One area that has

received less investor attention to date is investment in low-income, rapidly growing developing nations where scale will only be achieved if ways are found to lever public capital with increased institutional investor risk-taking. Structured in the right way, financial market instruments could potentially offer institutional investors such as pension funds, insurance companies and family offices investment opportunities that match their balance sheet requirements and risk-appetite by focusing on the provision of debt, or debt-like capital.

Efforts to develop such instruments have not succeeded in the past for a number of reasons: a lack of structured analysis based on hard data; failure to frame solutions in a language investors can understand, namely risk and return; involvement by an unwieldy number of groups with different interests, such as project developers, DFIs, policy makers, commercial banks, climate specialists, and so on; and most importantly of all, a lack of institutional investor involvement.

The ILG is well placed to tackle these issues by exploring options that would enable institutional investors to scale up their allocation to green infrastructure, including the development of mechanisms for targeting opportunities in emerging markets. It intends to explore the design of an appropriate structure, with fully established risk-return characteristics and terms, as well as a set of standards required to provide scalable deal flow in the future, with the twin objectives of attracting capital and making specific ‘asks’ to policy makers and other actors to support those standards.

³⁸ To have an 80 per cent chance of maintaining this 2 °C limit, the IEA estimates an additional US\$ 36 trillion in clean energy investment is needed through 2050. The World Economic Forum’s Infrastructure Initiative has estimated that US\$ 18.7 trillion of cumulative investment in infrastructure within developing economies is required by 2030.

2. Underpinning research on environmental risks

To support the case for shifting capital into the low carbon, sustainable economy, targeted research is needed on the exposure of investment assets to environmental risks in order to determine which risks can be addressed through investment strategies, and which require policy action to protect returns. Current knowledge in this area is limited, and the feasibility of modelling economic impacts based on credible underlying risk models is under-researched.

A source of uncertainty for investors is the extent to which the risks generated by social and environmental megatrends are placing a 'drag' on economic performance (i.e. reduced growth potential), and how this will develop over the next two to three decades. While it may be feasible for investors to mitigate some of the financial impacts resulting from these risks (for example by varying asset allocations from business as usual), other impacts may be felt at the level of entire economic systems, imposing a material constraint on investors' ability to generate required returns. Targeted research on these risks (deriving from areas like climate change, resource scarcity and environmental degradation) would help investors to determine which ones are **hedgeable** through strategic asset allocation and portfolio construction and which are **unhedgeable** (systemic) and require policy action to enable investors to meet their financial goals.

Investors are beginning to ask how global trends such as increased pressure on land for food production, soil degradation, localised water stress and extremes of weather, will affect the macroeconomic performance of countries, and how this will play out at the industry and firm level. In order to address such questions both the trends themselves and their resulting economic impacts need to be modelled in order to quantify their aggregated effects. Correlated trends and international trade dependencies mean that impacts arising in one market could go on to affect others, creating instabilities in the global financial system. Uncontrollable risks in portfolios might be termed unhedgeable and their economic

implications may mean that government intervention is in investors' long-term financial interests.

Studies in economics and finance address the effects of 'aggregate shocks' on economic performance, but not necessarily from the perspective of social and environmental risk. The issue has general relevance to investors across all asset classes, to financiers looking at the long-term outlook for different markets and insurers seeking to understand the changing correlations between underwriting and investment risks.

"... a source of uncertainty for investors is the extent to which the risks generated by social and environmental megatrends are placing a 'drag' on economic performance (i.e. reduced growth potential), and how this will develop over the next two to three decades"

Some efforts have been made in this area. Research by Mercer has estimated that climate change could represent as much as 10 per cent of overall portfolio risk³⁹ for institutional investors over the next 20 years (Mercer 2011). The majority of this takes the form of an increased equity risk premium driven by uncertainty about climate change policy and the associated adjustment costs. The research proposed ways of protecting portfolios against climate change risk, for example by allocating to 'climate-sensitive' real assets and 'climate solutions'. It highlighted that government action to tackle climate change is in investors' own long-term financial interest in order to reduce risk and, in effect, to make it easier for them to achieve their financial objectives.

³⁹ The focus of this research was a multi-asset class portfolio of an institutional investor such as a pension fund.

While the long-term economic implications of global risks and megatrends were explored by McKinsey and Company (2011), to date there has been little or no examination of whether this could lead to unhedgeable risks across whole economic systems, particularly over the long term when the trends can be expected to have larger, more catastrophic economic effects. Such analysis could support various kinds of action by investors and policy makers alike:

- Policy proposals designed to mitigate short- and longer-term economic shocks resulting from unhedgeable sustainability risks.
- Strategic asset allocation by asset owners, should it be found that different asset classes, and countries, are exposed to the economic impacts of the risks in different ways.
- New investment strategies within asset classes, either in-house by large asset owners, or as new product offerings by asset managers.
- New forms of company-level engagement to internalise externalities.

3. Tactical opportunities to support ESG integration

Alongside the activities highlighted above a number of more tactical actions would help responsible investors to integrate ESG considerations in their investment processes, and communicate progress effectively to stakeholders. Three such areas are presented below.

A. Develop methods of consistently reporting the environmental, social and economic impacts of investment

The central claim on which responsible investors will be judged is whether they generate benefits for society beyond the immediate financial value obtained for their own businesses and beneficiaries. Unfortunately this claim can be hard to evidence, particularly for large, diverse or

otherwise complex investment products. All investment has non-financial consequences, some beneficial, some not. Different forms of responsible investment (see **Annex 1**) seek to optimise the benefits, and reduce or eliminate the costs, producing what might be described as an 'ESG dividend'. Generally this is not measured with any degree of consistency, standardisation or depth.

The challenge for investors is to bring simplicity to the reporting process such that asset owners and beneficiaries can determine whether their interests in non-financial outcomes are being realised. In other words the degree to which their money is doing good and, if so, how. Using both narrative and meaningful (and actionable) metrics an impact report would enable investors to explain:

- How and why non-financial risks, trends and issues have influenced their investment practices
- How such practices can potentially lead to positive gains for society
- How those gains are being delivered (intentionally) over time, through metrics and case studies.

The majority of mainstream investors do not actively seek environmental and social impact at all, either because they do not see it as their role or because they do not understand the mechanisms through which it is created. Still less have access to the management tools and datasets necessary to measure it. Work is needed to help investors navigate the hundreds of potential metrics that can be used to track non-financial impact in the context of their own business strategies, markets, values and beliefs.

B. Promote long-termism through investment mandate design

Investment mandates and the terms set out in investment management agreements (IMAs) are at the heart of the challenge of promoting long-termism. The terms of the mandate establish the framework that shapes the

investment manager's timeframe and approach to sustainability. The benchmark prescribed, performance monitoring and reporting metrics and frequency, permitted tracking error, holding periods/portfolio turnover limits and fee structures all play a part. The role of investment consultants in advising clients in all these areas is crucial.

How could investment mandates (and reporting models) be redesigned to deliver the same or improved levels of financial performance compared with current approaches, while at the same time building long-term considerations into portfolios? What needs to change in relation to turnover/holding periods, benchmarks, tracking error, and so on? Companies regularly assert that market short-termism is a significant obstacle to stronger corporate sustainability efforts. Lengthening investors' time horizons can be expected to lead to higher levels of investor engagement and stewardship in support of corporate sustainability.

While there is no simple relationship between the time horizon of a mandate and financial performance, strong arguments can be made for investment strategies and mandates to take a longer-term perspective, particularly in listed equities. There are some indications that low-turnover strategies outperform, and there does not seem to be evidence that they consistently underperform. A notable advantage of such strategies for asset owners may be reduced costs given the reduced trading volumes involved. This will in itself contribute positively to performance.

A number of investor initiatives are under way to explore solutions to the challenge of short-termism – including the Tomorrow's Capital Markets project⁴⁰ and activities by the PRI.⁴¹ However, this is a vital area, and there is scope for multiple solutions.

C. Contribute to shared understanding of fiduciary duty globally

Fiduciary duty is the obligation (or set of obligations) a person or entity has by virtue of

managing money or assets for another. A person or entity can be a principal or agent, depending on its position. For instance, a pension fund is principal as regards an asset manager, but agent as regards its beneficiaries. Any and all agents have a general duty to protect the money or assets they are entrusted with, and to do so for the benefit of their principals. The interests of and benefits to the principal unarguably prevail over the interests of and benefits to the agent.

For many years there has been a debate over whether fiduciary duty, as routinely interpreted by investment professionals, helps or hinders the advancement of responsible investment practices. The debate may be summarised as follows:

- whether protecting the interests of beneficiaries means maximising financial return
- whether doing so takes priority over any and all ESG considerations
- whether interpreting the law as requiring such priority is right
- if the law may be interpreted to imply such priority, whether the law is right.

Responsible investors can contribute to this debate by examining what the law says and whether what it says is right and, if what it says is unclear or wrong, how it might be modernised so as to avoid misinterpretation or error. There is an opportunity for responsible investors to clarify these issues and, potentially, to take a position with respect to the findings in key markets such as the United States.

“...the terms of the mandate establish the framework that shapes the investment manager's timeframe and approach to sustainability”

⁴⁰ See <http://tomorrowcompany.com/tomorrows-capital-markets>

⁴¹ See www.unpri.org/areas-of-work/policy-and-research/

Annex 1: Forms of responsible investment

The numerous responses of investors to complex, real-world issues often grouped together under the heading of 'ESG' are known as responsible investment. A great many other terms are also used to emphasise differences of approach, the most common ones being ethical investment, socially responsible investment, green investment, best in class ESG, ESG integration, thematic investment, impact investment, sustainable investment, and shareholder engagement.

With the exception of shareholder engagement, all forms of responsible investment are, ultimately, to do with portfolio composition: that is, what securities a fund holds. *Shareholder* engagement (and by extension *bondholder* engagement) concerns what a fund says to executives or board members of companies in its portfolio or how it acts when it places a representative on a board or how it votes in shareholder assemblies or at bondholder meetings.

A description of the main forms of responsible investment is provided below, followed by a short conclusion.

- *Ethical investment* usually refers to negative or exclusionary screening of companies engaged in activities deemed unethical by the investor or that are contrary to certain international declarations, conventions and voluntary agreements. Typical exclusions are alcohol, tobacco, pornography, certain weapons, nuclear power, and gross violations of human rights, or companies doing business in or with a particular country. Exclusions can be based on religion, such as exclusion of companies manufacturing contraceptives or hospitals practicing abortions, or of companies engaged in activities contrary to sharia

precepts; or on agreements such as the Universal Declaration of Human Rights, ILO's Declaration on Fundamental Principles and Rights at Work, Rio Declaration on Environment and Development, and good-practice guidelines from these and numerous other sources.

While a categorical exclusion seems simple, in practice its application may be highly nuanced, as most companies are multi-product manufacturers or distributors. What is the acceptable boundary for an excluded category: up to 10/20/35 per cent of sales, or of earnings? What about components? Is a cement company that supplies cement to build a nuclear reactor to be excluded? Should a conglomerate owning a retail chain that sells pornography among its other product lines be excluded? Exclusionary screens need to be implemented judiciously. Historically, the first categorical exclusion to generate a significant following was of companies doing business with apartheid South Africa. Later it was tobacco companies, on public-health grounds. A recent exclusion by PGGM is of the five Israeli banks that finance construction of settlements in occupied Palestinian territories, on the grounds such activity violates UN resolutions (Boschman 2014). Ethical investment is the solution for people who do not want their investments to be at odds with their moral values, regardless whether it may result in diminished investment returns. (This does not mean it necessarily implies diminished investment returns. This depends on the nature and extent of the exclusions, and whether the financial performance of the exclusions happen to turn out better or worse than the market.)

- *Socially responsible investment (SRI)* refers to approaches that apply social criteria and environmental criteria in evaluating companies. Social criteria cover things such as occupational health and safety performance, discriminatory hiring and promotion practices with respect to race or gender, community welfare, labour disputes, and so forth. Environmental criteria cover areas such as quality of environmental management, GHG emissions, energy and resource efficiency, sourcing of raw materials, impacts on natural resources, land and ecosystems, waste and recycling, and are often standardised to company sales. Generally, SRI investors score companies along their chosen criteria, either for their investment universe as a whole or sector by sector; some apply differential sector-specific weightings, and all establish a hurdle for qualification or disqualification within their investment universe. They use this information as a first screen to create a list of ESG-qualified companies which are at the next stage screened and prioritised according to financial information. The resulting list of companies then becomes the universe for composing portfolios. SRI ranking is often combined with best in class active or conviction-based investment strategies, but can also be applied to near-passive investment strategies.

Whether competitive investment returns are achievable with SRI best in class funds is debatable. Some studies show they are not, others show they are. Most studies fail to determine how much of the over- or under-performance has to do with sector weighting, geographic weighting, currency fluctuations, timing of purchases and sales, etc., as distinct

from the attribution of SRI quality. In other words, the SRI nature of the fund might contribute less towards its performance than sector, geography, currency and timing. Furthermore, there is no generally agreed-upon standard of attribution of SRI quality, so the different SRI funds studied have very different analytics and hurdles for investability. Clustering them together as if they were a homogeneous group relative to non-SRI funds is methodologically wrong.

One way to determine whether SRI thinking helps or hinders investment returns is to compare the performance of SRI and non-SRI funds that have nearly identical sector, geographic and currency weightings. With some limitations, this has been done (see Section 4). The historical period in which such comparisons are made is critical, as the significance of ESG factors to economic development and stability is an emerging, dynamic discussion. To the extent that the market will only come to realise over time that companies with strong ESG performance are undervalued in purely financial terms, then comparisons during the early part of this trend will be less informative than ones conducted once the trend becomes more mainstream. In other words, SRI funds can be considered for now to provide an option on emerging ESG trends. If an SRI fund's financial performance is more or less equivalent to that of non-SRI funds in the same universe, this option can be viewed as a relatively free option. If it is temporarily worse, this may be explained by the fact the market is slow to value ESG appropriately, and that in the longer term the patient SRI investor will be vindicated.

- *Green investment* refers to approaches that seek to invest capital in 'green' assets, whether these are funds, companies, infrastructure, projects and so on. Typically this might include low carbon power generation and vehicles, smart grids, energy efficiency, pollution control, recycling, waste management and waste of energy, process innovation, and other technologies and processes that contribute to solving particular environmental problems. Green investment can thus be subsumed within *thematic investing* (see below). From a performance point of view, such funds are subject to similar over- and under-performance characteristics as sector funds generally – they may do extremely well for a period, then not, often determined by the vagaries of politics, subsidies, or regulations in different countries. Witness the rollercoaster ride of solar and wind turbine manufacturers during the past ten years.
- *Best in class (ESG) investment* refers to the composition of portfolios by the active selection of only those companies that meet a defined ranking hurdle established by environmental, social and governance criteria. Typically, companies are scored on a variety of criteria. The score received will depend on how the criteria are weighted, and that can vary sector by sector. Qualified companies will be those that achieve a defined hurdle, for example top 30 per cent, top 50 per cent or another threshold within each sector. A best in class ESG portfolio consists of companies that meet both an ESG screen and a financial screen, generally undertaken by different teams of analysts using their own information and tools. The portfolio manager then composes the portfolio from the list of names that survives the ESG and the financial screens. Best in class portfolios have become quite standard in SRI product offerings because the procedure adapts well to near-passive investment approaches that require low tracking error to one of the traditional broad market indexes. This approach, however, has the drawback of resulting in SRI portfolios that are not much different from business as usual portfolios. In answer to this, some responsible investors are exploring the construction of passive or near-passive portfolios based on custom-designed ESG or sustainability-designed indexes. If such portfolios meet the objectives of their investors at a lower cost than best in class ESG active portfolios, this could become a suitable and perhaps favorable alternative.
- *ESG integration* differs from best in class in that the environmental, social and governance qualities of a company are analysed at a more fundamental level. Ideally, the business model, product strategy, distribution system, R&D, and human resources policies of a company are analysed, attending to those issues the institutional investor and asset manager deem most relevant. Of course, how well-informed, thoroughgoing and trustworthy the ESG analysis is will depend on the background, experience, information sources and values of the analysts. Similarly, the portfolio manager's values will be revealed by arbitration between short-term positive or negative stock price momentum and longer term positive or negative qualities. How seriously the ESG specialist is taken by the financial analyst and the portfolio manager will also make a difference to a fund's financial and ESG performance.
- *Thematic investment* refers to the investment strategy of selecting companies that can be classified as falling under a particular investment theme. Examples of themes are water distribution, agriculture, low carbon energy, pollution-control technology, health care, climate change and information technology. Though similar to sector investing, thematic funds tend to cover a variety of sectors and pick companies within these sectors that are relevant to the theme. Thus a health care fund might invest in pharmaceutical companies, hospital companies, health insurance companies, nursing homes, surgical equipment manufacturers and hi-tech and infotech companies that support any of the former. The degree to which a thematic fund would

qualify as an SRI fund would depend not only on the theme but also the environmental and social attributes and impacts of companies in the fund. From a performance point of view, the greater sector diversification of thematic funds makes them less subject to over- and under-performance than green investment funds.

- *Impact investing* refers to investments seeking a particular social or environmental objective, such as to provide employment in a community, promote access to low carbon energy, or support minority-owned businesses or businesses that employ people recovering from drug addiction or with disabilities. Making sure that the investment achieves its defined impact, and measuring and tracking its progress lie at the heart of the investment proposition. Impact investment should not be confused with philanthropy, its purpose still being to meet the financial objectives of the investor. Impact investment usually takes the form of investing in non-listed companies and is not determined by sector or theme. It is an increasingly popular model for socially conscious high net worth individuals.
- *Sustainable investment* refers to portfolio composition based on the selection of assets that can be defined in some way as being sustainable or possible to continue into the long-term future. If the criteria used are typical ESG issues, then sustainable investment is no different from best in class or integration funds. But if the criteria are defined in terms such as 'industries of the future' or 'net positive business operations'⁴² the investment strategy may be thought of as an advanced mix of thematic and integration approaches. Sustainable investment can also be interpreted as an uncompromising strategy that screens out assets considered to be inimical to long-term environmental and social sustainability. Examples include the majority of fossil energy based industries including tar sands and coal, too-big-to-fail financial institutions, and major investment banks. Examples of social goals such a fund

might look for in companies could be those directed at reducing inequalities, providing job security and opportunities for advancement by employees.

- *SRI private equity* refers to private equity funds that adopt ESG criteria in the selection and management of their investments due to the conviction of their managers or mandates from their clients. As a real and active owner, a private equity fund is in an ideal position to exercise responsible investment. It typically has a large and controlling interest in a company, has at the very least negative control, often places a representative on the board, and has direct influence on the executives responsible for the business. Thus, there is no dilution of ownership interest and no chain of intermediaries to dilute corporate strategy. Most importantly, its investment horizon is long and this lessens the need to worry about market volatility and market prices. What counts for a PE fund is absolute financial returns over the horizon of the fund and, in addition, what counts for an SRI PE fund is being able to demonstrate how its intervention has improved the environmental and social performance of the companies in which it invests.
- *Shareholder engagement* refers to the influence brought about by shareholders in a corporation's decisions on matters of ESG either through dialogue with corporate officers, the submission of questions or proposals for action at shareholder assemblies, and the consequent way in which they vote. Its justification as an alternative to all the above-mentioned approaches to responsible investment is the fact that what counts on the ground is getting companies to act more responsibly. The efficacy of engagement relates closely to the scale of ownership of the investor in the target company, and its perceived market power. It is one thing for a niche green mutual fund to push for change, quite another when a major 'universal owner' conveys an interest, particularly if the ultimate sanction, divestment, is known to be at its disposal.

⁴² Net positive implies a strategy of enhancement rather than 'less harm'. Examples include sequestering more CO₂ than is emitted, creating habitat for biodiversity, creating more skills in a community than are required to run the company, and so on.

It is clear that the generic term, responsible investment, has been interpreted in a wide variety of ways by the investment industry, producing a spectrum of approaches from simple exclusions, which produce portfolios similar to business as usual in almost every respect bar the absence of selected assets, to strong forms of impact and sustainable investment which seek to drive new forms of value creation. A range of factors must be considered by institutional investors when determining which approach to adopt: the issues and criteria that serve to qualify assets as investable; the extent to which the resulting portfolio differs from business as usual approaches; the extent to which the assets in the fund behave with respect to the financial and non-financial interests of the fund's beneficiaries; and the extent to which the fund seeks to document how its investments drive

economic, environmental and social outcomes for society.

Similarly, the pursuit of responsibility through engagement, and its efficacy, can be judged along the following axes: the types of issues raised; the amount of pressure exerted; the outcomes achieved; and the degree to which the nature of the engagements and their outcomes are made transparent. Engagement processes can be highly creative. Nordea, for instance, sometimes sends a film crew along with its SRI analysts to document breaches and abusive conditions among companies (or their suppliers) in its investment universe. The videos are then published on Nordea's webpages and in web-based customer communications. This has received a very favourable response and has served to enhance Nordea's public profile.

Annex 2: Fiduciary duty

Does the duty to seek profitability mean simply maintaining it at a reasonable level, increasing it, maximising it as quickly as possible, or maintaining it at a level consistent with protecting environmental and social goals? Should achieving profitability for shareholders be allowed to override the interests of others? To answer these questions, it is useful to make a quick review of fiduciary duty and how it is reflected in law.⁴³

The nature of fiduciary duty was first clearly established in the Prudent Man Standard, which had its origin in the *Harvard College v. Amory* case in the year 1830. It generally directed trustees to manage trust investments as a prudent man would manage his investments with an eye toward the long-term health of those investments rather than investing in speculative ventures; and with the best interests of the beneficiaries in mind. This standard prevailed until the US Employee Retirement Income Security Act (ERISA) reformulated it through regulations promulgated under the Reagan administration in the 1980s. In fact, instead of acting like a prudent man, the asset manager was directed to act as professional investment managers act. This provided the legal impetus for asset managers to adopt index-tracking investment strategies and encouraged them to avoid approaches departing from the mainstream. Since ERISA regulation governs most pension money in the US, this became the market standard. For a portfolio manager, it is safer career-wise to lose money when everybody else does than to risk doing the right thing alone, even if it is worse for beneficiaries.⁴⁴

One of the ERISA regulations has been widely interpreted (perhaps too eagerly misinterpreted) to prevent the asset manager from taking into consideration ethical, environmental or social issues, and to focus solely on financially material matters. Once in place, established practices are hard to change. Given the prevalence and weight in the market of index-hugging

strategies, it is not strange that the exclusion of ESG in price formation results in ESG not being material in the short term. It is a vicious circle. As others have also argued, market changes have created a lemming-like fiduciary standard, requiring a modern interpretation of fiduciary duty that recognises the symbiotic relationship between sustainable success of both corporations and pension funds (Johnson and de Graaf 2009).

Is it right to construe the interests of beneficiaries as limited exclusively to their financial interests? Can their financial interests be so clearly delimited from their environmental and social interests, particularly when it is recognised that how their financial interest is realised may conflict with their environmental and social interests? And particularly when we acknowledge that their so called 'non-financial' interests can in time have material economic and financial impact and significantly increase or decrease their patrimony?

The Freshfields Brukhaus Derringer (2005) legal study of responds to these questions. Key points are summarised by UKSIF as follows:

- Jurisdictions: Common law jurisdictions (UK, US, Canada and Australia): rules are articulated in statute and in decisions of the courts; rules are more flexible and open to reinterpretation. Civil law (Spain, France, Italy): rules are code- or statute-based; rules are more rigid. Civil law does not recognise fiduciary duties.
- The most important fiduciary duties are the duties to act prudently and the duty of loyalty (to act in accordance with the purpose for which investment powers are granted).
- A decision-maker may incorporate ESG criteria into decision-making so as to include the beneficiaries' interests. The link between ESG factor and financial performance is increasingly recognised in the sense that integrating ESG considerations contributes to better predict financial performance. In addition, integrating ESG factors to include beneficiaries' views and to decide between

⁴³ Relies on Joly, C. (1993) and the landmark Freshfields Druckner Derringer (2005) legal opinion for UNEP FI commissioned by Joly, C. (when Chair of UNEP FI Asset Management Working Group). Also see: The fiduciary fight, IPE Magazine, www.ipe.com/analysis/analysis/the-fiduciary-fight/10000498.article; The UK fiduciary duty straitjacket, IPE Magazine, www.ipe.com/analysis/analysis/the-uk-fiduciary-duty-straitjacket/10000506.article

⁴⁴ In his Quarterly Letter to investors, Jeremy Grantham often remarks on the ills of herding behaviour. See, for instance, GMO Quarterly Letter, November 2013, p 9.

investments of the same value is also accepted.

- One of the barriers to incorporating ESG factors is the misunderstanding of the law that fiduciary duties are synonymous with profit maximisation.
- The UK law assesses the propriety of investment decision-making against the correct process (e.g. whether all relevant considerations were identified by the decision-maker before s/he made a decision) and proper purpose (e.g. best interests of beneficiaries).
- It is difficult to find consensus as to the interests of beneficiaries. However, it is accepted that the average beneficiary would agree not to invest in investments that are linked to breaches of human rights, labour conditions, corruption or environmental protection.
- The Pension Law Review Committee published a report in 1993 stating that, when there are investments to be selected that are supposed to offer the same financial benefits, they can be chosen based on ethical criteria.
- Institutional investors, such as insurance companies and non-trust pensions, as they are not based on trust structures, are not limited by fiduciary duties for investment decision making, but have to respect duties in negligence and contract.
- The UK courts have not specifically considered the benefits of engagement. However, Myners argues that appropriate effective engagement contributes to seeking

value maximisation for shareholders. A court would therefore trust shareholder engagement as prudent.

In short, fiduciary law does not obstruct institutional investors and asset managers from doing ESG integration or ESG engagement. Nevertheless, a significant number of trustees of pension funds and portfolio managers continue to act as if it did, and justify their inaction on sustainability issues on the grounds of fiduciary law. This is clearly wrong. Responsible investors would therefore do well to urge clarification through modernisation of fiduciary law in the US, UK and EU to more clearly acknowledge the reflexivity between financial performance and sustainability. Fiduciary duty for institutional investors and asset managers should be reformulated so as to unequivocally accept that:

- seeking to satisfy the financial interests of the beneficiaries without conflicting with their environmental and social interests is satisfactory fiduciary conduct
- giving priority to long-term investment strategies over short-term volatility-reducing investment strategies is acceptable fiduciary conduct.

This would avoid misinterpretations that force institutional investors, asset managers and consultants to favour short-term profit maximisation strategies for long-term investors such as sovereign funds, pension funds and insurance companies, with extant contradictions and shortcomings; but would allow for short-term strategies for shorter-term investors.

Annex 3: Sustainability and value creation

The following provides examples of ways in which companies are creating value in response to ESG trends and factors, or face the risk of part of their value being lost as a result of failure to manage these challenges effectively.

- Companies are responding to existing and potential regulation introduced to tackle climate change by reducing their energy use, increasing energy and material efficiency, and switching to low carbon energy sources. This cuts costs as well as greenhouse gas emissions.⁴⁵ WWF and CDP estimate that the net present value of greenhouse gas emission reductions by US corporations (excluding utilities) could be as high as USD 780 billion between 2010 and 2020 if companies cut their emissions by three per cent per year (CDP/WWF 2013).⁴⁶ CDP's Carbon Action Report 2013 finds median internal rates of return of 33.6 per cent and payback times of three years for emission reduction investments by 241 companies in heavy-emitting industries, generating total net present value of USD 15 billion (CDP 2014).
- Rising demand for natural resources and the difficulty of obtaining new supplies of certain commodities has raised awareness of current and potential resource scarcity. Finding and extracting new supplies of some commodities is increasingly difficult (with the notable exception of shale oil and gas). For example, feasible oil projects are mostly smaller than they were in the past, and more expensive; almost half of new copper projects are in countries with a high degree of political risk; and more than 80 per cent of the world's unused arable land is in countries with insufficient infrastructure or facing political challenges. Companies that can increase the efficiency of resource use reduce costs and help to lessen environmental pressures. McKinsey estimates that the value to society as a whole from the potential to improve resource productivity could be USD 2.9 trillion a year in 2030. A significant proportion of this would take the form of cost savings to business (McKinsey and Company 2011).
- Extreme weather events associated with climate change increase business risk and costs by disrupting supply and distribution chains, necessitating capital expenditure to increase the resilience of infrastructure (e.g. energy transmission networks) and affecting location decisions (e.g. to avoid flood-prone areas).
- Companies that can offer consumers cost-effective sustainability solutions – ways to reduce their own energy or resource use, for example – are finding attractive market opportunities. Over the three years leading up to 2012, Phillips' growth in products with a strong sustainability focus was 8.7 times faster than the average growth of the company. The company reported 45 per cent of overall revenue from these products, which are differentiating it from the existing marketplace. By evolving its product lines, the company aims to increase this to 50 per cent by 2015 and is working toward 100 per cent over the longer term (UN Global Compact 2013a). For DuPont, revenue from products that reduce GHG emissions rose from USD 63 million in 2007 to USD 1.9 billion in 2011 an increase of nearly 3100 per cent. Revenue from products based on non-depletable (i.e. renewable) resources doubled from USD 5 billion to USD 10 billion on a revenue base of USD 33.6 billion in 2011 – an increase of 100 per cent. The proportion of total revenue derived from sustainability solutions of this kind grew from 17 per cent to 30 per cent during this period (UN Global Compact 2013b).
- Strong public concern for human rights creates reputation risk for companies that are not able to guarantee internationally acceptable labour standards in their supply chains, or where controversy surrounds their track record with local communities on issues such as land and resource rights, sharing the benefits of resource extraction and management of environmental impacts. Evidence is starting to emerge that integrated sustainable supply chain management that addresses both environmental and social issues is positively

⁴⁵ Multiple examples of companies' cost-saving and revenue-generating performance linked to environmental issues can be found in materials developed by the UN Global Compact and PRI ESG Investor Briefing Project – see www.unglobalcompact.org/Issues/financial_markets/value_driver_model/case_examples.html

⁴⁶ This is the amount estimated to be required to keep the world on track to stay below the 20C global temperature increase called for by the scientific community.

associated with companies' return on assets and return on equity, albeit with a time lag of at least two years (Wang and Sarkis 2013). Research also suggests that mining companies that manage these stakeholder relationships well have higher share prices (Henisz, Dorobantu and Narty 2011).

- The contribution of human capital to value creation in the firm is increasingly being understood and recognised. Employee engagement and motivation, and the human resource practices that sustain them, are a source of innovation and commitment in highly competitive markets and can lead to higher share prices (Edmans 2011). 'High Performance Work Practices' – which include training programmes, incentive and profit-sharing programmes and involvement in labour/management decision-making programmes – and employee engagement have been shown to have a significant positive impact on both short- and long-term measures of corporate financial performance (sales, profit and market value) (Huselid 1995; Harter, Schmidt and Keyes 2003). Research by leading UK retail chains shows that stores with improving employee engagement deliver higher sales than those with declining engagement, and that higher engagement can account for up to 15 per cent of a store's year-on-year sales growth (Rayton, Dodge and D'Analeze 2012).
- Ethics, integrity, fairness and responsible behaviour towards consumers are valuable intangible assets and important constituents of the trust that companies need in the eyes of customers and society at large. Ethical and governance failures – and well as regulatory inadequacies – lay at the heart of the financial crisis. The Federal Reserve Bank of Dallas has estimated that the cost of the financial crisis to the US economy alone was USD14 trillion (Luttrell, Atkinson and Rosenblum 2013). Fines for the manipulation of Libor could reach USD 35 billion (Matthews 2013), while the total cost to UK banks for mis-selling payment protection insurance exceeds GBP 18 billion (Khalique 2013). These latter sums may not in themselves be strictly material to share prices. However, they help to sustain investors' caution towards the financial sector, thereby depressing market values, and further erode public trust in the industry. In pharmaceuticals, GlaxoSmithKline's stock price fell 2 per cent on the news that its sales in China were lower as a result of a bribery scandal: analysts started to factor lower future sales into their earnings forecasts (Hirschler 2013).

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7

ACRONYMS

BRICs	Brazil Russia India China
CalPERS	California Public Employees' Retirement System
CDP	Carbon Disclosure Project
CISL	University of Cambridge Institute for Sustainability Leadership (formally CPSL)
CSR	Corporate Social Responsibility
EMH	Efficient Market Hypothesis
ERISA	US Employee Retirement Income Security Act
E-RISC	Environmental Risk Integration in Sovereign Credit Analysis
ESG	Environmental, Social and Governance
EU	European Union
GDP	Gross Domestic Product
GHGs	Greenhouse Gases
ILG	Investment Leaders Group
ILO	International Labour Organization
IMF	International Monetary Fund
KLD	Kinder, Lydenberg and Domini (KLD) firm-level index of social performance
MINTs	Mexico Indonesia Nigeria Turkey
MPT	Modern Portfolio Theory
MSCI	Morgan Stanley Capital International
OECD	Organisation for Economic Co-operation and Development
ROIC	Return On Invested Capital
PRI	Principles of Responsible Investment
REACH Directive	Registration, Evaluation, Authorisation and Restriction of Chemicals
ROA	Return On Assets
SDG	United Nations Sustainable Development Goals
SRI	Socially Responsible Investment
UN	United Nations
UNEP FI	United Nations Environment Programme Finance Initiative
USD	US Dollars
WACC	Weighted Average Cost of Capital
WEF	World Economic Forum
WWF	World Wide Fund for Nature

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