Sustainable Development and Financial Markets: Old Paths and New Avenues

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Abstract
This article explores the role of financial markets for sustainable development. More specifically, the authors ask to what extent financial markets foster and facilitate more sustainable business practices. The authors highlight that their current role is rather modest and conclude that, on the old paths, a paradoxical situation exists. On one hand, financial market participants increasingly integrate environmental, social, and governance (ESG) criteria into their investment decisions, whereas on the other hand, in terms of organizational reality, there seems to be no real shift toward more sustainable business practices. The authors identify two main challenges within the field of sustainable investments that are relevant for entering new avenues that may help overcome this situation. First, a reorientation toward a long-term paradigm for sustainable investments is important. Second, ESG data must become more trustworthy. From a theoretical point of view, the authors finally highlight the potential market consequences when ESG investment criteria are used.

Keywords
corporate social responsibility, environmental, social, and governance (ESG) data, long-term paradigm, sustainable investments, systems perspective

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To what extent do financial markets foster and facilitate more sustainable business practices? This question has been debated vigorously, given the increasing influence of, and current research on, sustainable and responsible investing. In recent years, sustainable investment practices have been increasing at a fast pace (Bauer, Koedijk, & Otten, 2005; Galema, Plantinga, & Scholtens, 2008; Orlitzky, 2013). In fact, the overall evidence suggests that the market share of sustainable investments (defined in the next section) has been growing in recent years (Eurosif, 2012) and is further expected to increase, as illustrated by a survey among pension fund experts (Boersch, 2010). Likewise, recent investor polls indicate the increasing relevance of sustainability for capital markets (Novethic, 2010). This trend is also reflected by the signatories of the Principles for Responsible Investment, which increased from 100, worth US$6.5 trillion, in 2006 to 1,188, worth US$34 trillion, in 2014. These developments are, in turn, mirrored by practices of institutional investors: some choose to exclude companies based on Environmental, Social, and Governance (ESG) related screens, whereas others integrate this ESG information in the overall investment decision-making process. Moreover, many institutional investors have set up proxy voting processes and increasingly developed engagement programs in which they discuss material ESG issues (in addition to regular issues) with management in a public fashion—by filing shareholder proposals—or in a private fashion (see Bauer, Clark, & Viehs 2014; Bauer, Moers, & Viehs, 2012).

Overall, these developments show that more and more capital owners use ESG criteria in their investment decisions. One might suppose that, because of these developments, business practices have also become more ecologically or socially sustainable. When considering organizational reality, current global production patterns have, on the whole, failed to become more sustainable in the ecological dimension. According to some estimates (WWF, Zoological Society of London, & Global Footprint Network, 2010), the human ecological footprint exceeds the Earth’s capacity to sustain life by 50%, while global resource consumption and carbon dioxide emissions are still growing. Similarly, on the social dimension, at least on a global scale, problems remain, as many observers note. For example, the world is very likely to fail to meet several Millennium Targets by 2015 (United Nations, 2013). So, a paradoxical situation exists. On one hand, financial market participants increasingly integrate ESG criteria into their investment decisions, while on the other, there seem to have been few discernible shifts toward more sustainable business practices in terms of organizational reality. This situation raises the question of whether sustainable investments are in fact a myth (see Entine, 2003).

This article addresses this paradoxical situation related to the market demand for and supply of sustainable development. The authors identify two
main challenges within the field of sustainable investments that are relevant for overcoming this situation. First, a reorientation toward a more long-term paradigm for sustainable investments seems important. Second, ESG data must become more trustworthy.

The remainder of this article is organized as follows. First, we revisit the scope of sustainable investments. Second, we seek to understand current sustainable investment practices in more detail and ask how and why investors incorporate ESG information. Third, given this conceptual understanding, we discuss the need for a reorientation toward a long-term paradigm for sustainable investments, discuss the trustworthiness of ESG data, and reconsider ESG market dynamics from a theoretical point of view. Finally, we point toward exciting avenues ahead and highlight the contributions of the articles featured in this Special Issue of *Business & Society* to the debate on sustainable development in financial markets.

**The Scope of Sustainable Investments—A Critical Appraisal**

In the literature, sustainable investment practices are often described using overlapping and complementary terms, such as *social, ethical, responsible*, *socially responsible*, and others (see Cadman, 2011). In line with recent suggestions (Eurosif, 2010, 2011; Hoffmann, Scherhorn, & Busch, 2004; Juravle & Lewis, 2009; World Economic Forum [WEF], 2011), we regard *sustainable investments* as a generic term for investments that seek to contribute toward sustainable development by integrating long-term ESG criteria into investment decisions. With this scope of sustainable investments, investors’ financial objectives are combined with primarily nonfinancial concerns.

One needs to be careful, though, how this combination of financial and nonfinancial aspects works in practice. Investors are not necessarily homogeneous, and the attention to ESG criteria depends on the investor’s objective and varies by asset class. Some investors’ main motivation to incorporate ESG information is to improve returns and risk, whereas others have an additional motive to contribute to sustainable development. Also, many investors (such as large pension funds) spend considerably more resources on ESG in the domain of equity investments, even though fixed-income investments are a larger part of their portfolio, and despite recent evidence that ESG information also affects the pricing of credit risk of corporate bonds and bank loans (Bauer & Hann, 2014; Chava, 2014). More recently, some investors also shifted their attention to the impact of ESG criteria in real estate investments (Eichholtz, Kok, & Quigley, 2010).
When looking at the scope of this definition from a corporate perspective, two other concepts come to mind. First, the confluence of ecological and social concerns is often summarized as corporate social responsibility (CSR). Second, the contested (see Norman & MacDonald, 2004) concept of the triple bottom line promotes the simultaneous consideration of all three dimensions of sustainable development: economic, ecological, and social-ethical (Dyllick & Hockerts, 2002; Schaltegger & Burritt, 2005). Following these definitions above, sustainable investments should—at least from a conceptual point of view—be investments that are aligned with each of these three dimensions of sustainable development. From a practical point of view, considerable work is being done on establishing specific ESG criteria, many of which reflect industry particulars (Society of Investment Professionals in Germany & European Federation of Financial Analysts Societies, 2010).

However, a central paradox remains: Why do sustainable investments not actually spur sustainable development? To answer this question, an investment’s contribution to sustainable development can be described from a systems perspective. It is important that the financial capital provided for investment purposes is aligned with, and supports the existence of, human-social and ecological systems. This relationship means that, in both dimensions, systems can be designed so that they are self-sustaining over the long term. For self-sustaining systems, the economic dimension cannot be omitted. Profitability is central in allocating resources efficiently, and thus to sustaining economic and business systems. In this context, corporate governance aspects have also been suggested to be relevant (Berrone & Gomez-Mejia, 2009; Cogan, 2006; Cremers, Nair, & Wei, 2007; Gompers, Ishii, & Metrick, 2003; Kolk & Pinkse, 2010). For example, board diversity and gender composition may affect firms’ sustainability ratings and reputation (Bear, Rahman, & Post, 2010), and family-controlled public firms have been found to have a better environmental performance than their nonfamily counterparts (Berrone, Cruz, Gomez-Mejia, & Larraza-Kintana, 2010). The main focus of the following discussion is placed on the ecological and human-social systems.

For ecological systems, the essential question for relevant subsystems is: Is this system sustainably independent of the steady supply of nonrenewable resources? Can the waste be used in other production processes to create industrial symbiosis as discussed in the industrial ecology literature (Chertow, 2000; Jacobsen, 2006)? Or, in simpler terms, is this system able to mimic the closed cycles of the natural environment? Without any significant improvements toward a closed-loop economy, humanity will continue to exceed its ecological limits. Since 1966, humanity’s ecological footprint has more than doubled (WWF et al., 2010). It is estimated that without significant
improvements humanity will require the capacity of two Earths by 2030 (WWF et al., 2010). This development is also reflected in alarming trends in human population growth, the resulting depletion of natural resources, increasing air pollution in many big cities, and a precipitous decline in biodiversity (Stead & Stead, 2009; Wilson, 2002). For example, between 1990 and 2005, worldwide forest coverage has been decreasing at an annual rate of 0.2%, with countries in Africa, Latin America, and the Caribbean being the most affected (United Nations Environment Programme [UNEP], 2007). These developments also manifest in trends in current energy demand and climate change: fossil fuels are increasingly used, and the adverse effects of a changed climate are left for future generations. Although much of the fossil fuel consumption takes place in the developed world, people in developing countries such as Africa are already exposed to severe consequences of climate change (Collier, Conway, & Venables, 2008). Hence, although technological advances typically pave the way to greater sustainable development such as increased eco-efficiency (Frederick, 1995; Hawken, Lovins, & Lovins, 1999), current efforts to increase eco-efficiency may not be enough to move toward long-term ecological sustainability because of overall production growths and rebound effects (Ehrenfeld & Hoffman, 2013).

Regarding human-social systems, the principles of inter- and intragenerational equity are often considered key elements of sustainable development. The Brundtland definition states what would be required for sustainable development in terms of intergenerational equity (World Commission on Environment and Development [WCED], 1987): future generations shall be able to satisfy their needs under the same conditions as the present generation is able to do so. Similarly, it can be argued that sustainable development also requires that the conditions of intragenerational equity are met: the developed world cannot live at the cost of the developing world. It is often claimed (Weiss, 1989) that many current business practices are in breach of intergenerational and intragenerational dimensions of justice. In response to these inequalities, the United Nations established eight international development goals in 2000. All UN member states and the world’s leading development institutions committed to help achieving the UN Millennium Development Goals by 2015.² The goals cover aspects such as extreme poverty and hunger, universal primary education, HIV/AIDS, child mortality and maternal health, and ecological sustainability. For each goal, specific targets are derived. Is the world on track toward reaching these targets? Progress has been uneven across countries. While Brazil achieved many of the goals, other countries, mostly African countries, are not on track.³ The world as a whole met the poverty reduction target by halving the number of people living in extreme poverty. Furthermore, the goal for access to clean water was met in 2012. For
the other targets, the situation is less hopeful, notably in the following areas (United Nations, 2013): child survival, maternal deaths, HIV prevention, primary education, and sanitation. Thus, there were improvements; however, much remains to be done to maximize progress on achieving the targets set by the goals (Sachs, 2013). The following conclusion can be drawn: Several developments and innovations illustrate how we could move forward toward a more sustainable future, such as clean-tech investments in the developing world through renewable energy projects (Waissbein, Glemarec, Bayraktar, & Schmidt, 2013). At present, however, humanity has a way to go toward achieving many of the goals related to human-social sustainability.

Both systems reveal the current somewhat paradoxical observation: Increasing sustainable investments do not necessarily spur sustainable development. One reason for this paradox can be seen in the circumstance that, in current practice, sustainable investments per se do not exist. In fact, it would probably be more sensible to speak of more sustainable investments. The current reality is that we can see incremental improvements. More sustainable investments can contribute to a more sustainable future. For example, by choosing investments in renewable energy firms, ecologically conscious investors make, under given circumstances at a certain time, the highest contribution currently possible toward sustainable development. However, the theoretical claim of truly sustainable investments would only be met if investments in long-lasting and self-supporting ecological and human-social systems were feasible.

In addition, binary distinctions between sustainable and unsustainable investments can be considered logically flawed. If there were only sustainable investments, the opposite would be unsustainable investments. Consequently, the best-in-class principle would not be applicable in such a bifurcated world, and the first steps toward greater sustainability would neither be taken into account nor honored. Thus, although it may ultimately be more appropriate to speak of more sustainable investments, the term sustainable investments seems to be a satisfactory short hand in common usage and, moreover, is already widely established. As such, we continue to use sustainable investments as an umbrella term for all types of investments in sustainability-oriented assets.

In terms of what sustainable investments should then reflect in practice, the Darmstadt Definition of Sustainable Investments may serve as a helpful overarching guideline that reflects the systems perspective to which we alluded above (Hoffmann et al., 2004).

From an economic perspective, sustainable investments require that

- profits are accrued on the basis of long-term production and investment strategies instead of short-term profit maximization,
• profits from investments are responsibly related to the actual increase of economic value in real terms,
• the fulfillment of basic needs (such as water supply) is not threatened, and
• profits are not based on corruption.

From an ecological perspective, sustainable investments require that profit making is consistent with

• an increase of resource productivity,
• investments in renewable resources,
• the recycling and reuse of used material and substances, and
• the workability of global and local ecological systems (e.g., rainforests, oceans).

From a social and cultural perspective sustainable investments require that profit making is consistent with

• the development of human capital (responsibility for employment, education and upgrading, support of self-governing workers, compatibility with family and job, and respect for a person’s individuality),
• the development of social capital (creation of opportunities for gainful employment, fair balance between generations, treatment of minorities without discrimination, functioning regions, and commitment toward responsible corporate citizenship), and
• the development of cultural capital (respect and empowerment for cultural diversity encompassing the protection of personal civil rights and liberties and societal integrity).

The individual points of the Darmstadt Definition illustrate in which areas investors can provide concrete contributions toward a more sustainable future. As a common denominator, truly sustainable investments—following this definition—would need to reflect long-term trends and consider long-term adjustment processes. Hence, it is the notion of the long run that is important. A shift toward a long-term paradigm for sustainable investments may be able to overcome the current dilemma and result in investments actually spurring more sustainable development in the ecological and social sense and at the same time contribute to value creation.

In the past few years, several new initiatives have emerged that aspire to “fundamentally rewire the ways [institutional investors] invest, govern, manage, and lead to better focus on long-term outcomes” (quote from

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Another good example of this trend is the recent report *High Level Principles of Long-Term Investment Financing by Institutional Investors*, issued jointly by the G20 and the OECD (2013). Other initiatives that deserve attention, particularly because they try to deal with the measurement challenges, are the Integrated Reporting Initiative\(^4\) and the WEF’s project on Long Horizon Investing (World Economic Forum, 2011).

Through these initiatives, institutional investors, especially those with long time horizons, such as pension funds, play a major role in encouraging corporate directors to focus on long-term firm value instead of only short-term profits. Clearly, this development is linked to the above-mentioned long-term paradigm for sustainable investments. At the same time, such a long-term perspective may also lead to superior economic value creation in for-profit organizations (Grant, 2013; Orlitzky, Schmidt, & Rynes, 2003; Porter & Kramer, 2006). To understand what needs to happen so that the world of business and finance shifts toward this long-term paradigm, the next section discusses in general how and why investors may incorporate ESG information.

### How and Why Do Investors Incorporate ESG Information?

Eurosif (2012) recently updated its classification for sustainable investment strategies in its prominent *European Socially Responsible Investment (SRI) Study*. This classification refers to seven main categories: sustainability-themed investment funds, best-in-class investment selection, norms-based screening, exclusion of holdings from investment universe, integration of ESG factors in financial analysis, engagement and voting on sustainability matters, and impact investing. Table 1 provides an overview of the specific approach of each type of sustainable investment strategy in detail.

Based on these different investment strategies, investors and analysts currently seek to determine whether investments are more or less sustainable. The notion of short term and long term is not explicitly anchored in one of the strategies. In fact, based on the underlying screening concepts and assessment approaches, different aspects of the previously described general requirements for sustainable investments following the Darmstadt Definition can be addressed. To what extent these investment strategies really support a long-term paradigm depends, however, on the sophistication and scope of the individual concept and approach. Due to the wide variety of individual screening and assessment concepts, some strategies result in a bigger impact,
whereas others make only a minor contribution to sustainable development. Some may yield short-term benefits; others may contribute to a long-term shift in business models. For example, the effect of a simple exclusion of a particular company’s stock by an institutional investor could be considered less effective relative to a far-reaching shared value approach, which seeks to incentivize entire corporate- and business-level strategies toward addressing sustainability issues proactively (Porter & Kramer, 2011).

Especially ESG integration strategies are contested because their effectiveness primarily depends on the extent to which such strategies are implemented. Integration strategies are defined as the “explicit inclusion by asset managers of ESG risk criteria into traditional financial analysis” (Eurosif, 2010, p. 60). For this definition to be met, it is sufficient to have a formal policy integration document. However, even Eurosif acknowledges that it is often not clearly articulated how this approach works in practice. Thus, the key question is: How are the ESG criteria integrated in traditional financial analysis? And what are the consequences for buying and holding a specific asset? Forty-five percent of asset managers and owners claim that they integrate ESG issues, which implies they perform some type of (isolated) thematic analyses and research on ESG issues. However, it remains unclear what the effect of current ESG integration strategies is. Only 8% state that the

### Table 1. Sustainable Investment Strategies.

<table>
<thead>
<tr>
<th>Strategies</th>
<th>Description</th>
<th>Example</th>
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<tbody>
<tr>
<td>Thematic funds</td>
<td>Specific sustainability-themed investment</td>
<td>Clean tech funds</td>
</tr>
<tr>
<td>Best in class</td>
<td>Only the best performing firms within each industry</td>
<td>Only the 10% best regarding ESG criteria</td>
</tr>
<tr>
<td>Norm-based screening</td>
<td>Addressing specific aspects</td>
<td>Only firms with ISO 14001</td>
</tr>
<tr>
<td>Exclusion</td>
<td>Applying negative criteria</td>
<td>No weapons, nuclear, and/or tobacco</td>
</tr>
<tr>
<td>Integration</td>
<td>Integration of ESG aspects into traditional financial analysis</td>
<td>In-house research of many institutional investors</td>
</tr>
<tr>
<td>Engagement and voting</td>
<td>Active ownership</td>
<td>Shareholder resolutions</td>
</tr>
<tr>
<td>Impact investing</td>
<td>Impact comes first (for financial considerations)</td>
<td>Microfinance to help farmers in India</td>
</tr>
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Note. ESG = environmental, social, and governance.
ESG-based rating results are systematically included within investment decisions (Eurosif, 2010).5

Eurosif’s investment strategies illustrate how investors may incorporate ESG information, but do not explicitly advocate the idea of a long-term paradigm for sustainable investments. Thus, the question arises why banks and investors incorporate ESG data. Are there any investor motivations that could be attributed to long-term value creation? Chatterji, Levine, and Toffel (2009) provide an overview of the various investor motives driving sustainable investments. In the following, we rely on their categorization of (a) financial, (b) deontological, (c) consequential, and (d) expressive investors and discuss the underlying logic of their sustainable investment practices.

First, financial investors seek to achieve superior financial performance by relying on ESG criteria. Several reasons can be identified as to why this win–win or it pays to be green/good argument holds and, as some predict (Barnett & Salomon, 2006; Edmans, 2011, 2012; King & Lenox, 2002; Porter & Kramer, 2006, 2011), is even expected to increase in importance. When the biophysical or social environment imposes new constraints and offers new opportunities, firms need to adequately respond to sustainability challenges (Busch & Hoffmann, 2011; Hart & Milstein, 1999; Orlitzky, 2005; Russo & Fouts, 1997; Shrivastava, 1995). Such changing conditions in business environments can affect business risk, profitability, and ultimately firms’ competitive advantage, according to some evidence (Orlitzky, 2001, 2008; Orlitzky & Benjamin, 2001; Orlitzky & Swanson, 2008). This situation has led certain investors to start examining a focal firm’s ESG criteria reflecting a company’s broader competitive advantage along with a number of soft non-financial criteria.

Second, so-called deontological investors do not want to support irresponsible business practices and avoid investments in such assets. Thus, in addition to business motivations, many investors follow a values-based, ethical approach (Cadman, 2011; MSCI, 2011). More recently, the term impact investing has also been increasingly used, which illustrates a logic typical for deontological investors. This investment style critically reflects on the outcomes of an investment strategy prior to purchase of an asset or development of a portfolio (Eurosif, 2010; Mercer, 2009). Thus, many investors follow norms and values by taking into account their responsibility as good citizens and the outcomes of their investment activities. For companies, corporate sustainability efforts are able to attract financial resources from socially conscious investors (Kapstein, 2001).

Third, consequential investors seek to influence firms by directing their investments to more sustainable firms. Waygood (2011) argues that capital
markets may influence firms in their sustainability efforts in two principal ways: via financial influence and investor advocacy influence. The former refers to the fact that the cost of capital for listed companies is determined by the buying and selling of equity shares and debt. Using an economic equilibrium model, it has been estimated that more than 20% of green investors (of a firm’s total investors) are required to prompt polluting firms to reform (Heinkel, Kraus, & Zechner, 2001). The latter considers the shareholders as principals who can exercise their rights of share ownership over a company’s management. Such efforts are usually referred to as engagement or shareholder activism. After all, 88% of the Principles of Responsible Investment signatories declared that they would vote at corporate annual meetings on issues relating to ESG criteria (Principles for Responsible Investment, 2011), indicating that investor advocacy influence seems to be a topic of increasing corporate relevance. However, investors can engage with companies in other ways as well. They can also file shareholder proposals themselves, start private engagement talks individually or in a collaborate fashion (Becht, Franks, Mayer, & Rossi, 2009), use the media (e.g., “just vote no campaigns”), or file class action lawsuits (Bauer & Braun, 2010). However, relatively few institutional investors use these tools to the full extent, and the effectiveness of their efforts is not measured in most cases. Conflicts of interest, the free rider problem, reputational risk, and lack of knowledge are most likely the main reasons why engagement intensity is relatively low.

The fourth and final category of expressive investors focuses on sustainable investments as a mechanism of enhancing their own social identity. These investors worry about negative information about firms as negative information “taints companies and, by extension, those who invest in them” (Chatterji et al., 2009, p. 131). Going beyond this argument, the concept of universal owners could be seen as an extension of this view toward institutional investors. The underlying logic of this concept is that large institutional investors have highly diversified and widely dispersed portfolios, which can be regarded as a representative sample of global capital markets (PRI Association & UNEP Finance Initiative [FI], 2010). Consequently, as some hold (Hawley & Williams, 2000), it is probably in institutional investors’ long-term interest not to invest in firms that cause environmental harm and/or do not pay for the clean-up costs. Then, these clean-up costs have to be borne by society at large and, thus, may affect other firms included in the investor’s portfolio.

These different investor motivations illustrate why ESG information is taken into account. Clearly, consequential and expressive investors are most likely to pursue a long-term investment approach; deontological investors
perhaps do so to a certain extent. However, the existence of the previously derived paradoxical situation corroborates: This orientation does not seem to be sufficient for sustainable investments to spur sustainable development. Thus, the biggest yet not fully realized lever could be financial investors. So, is there any empirical evidence supporting their view that there needs to be the business case for sustainability? In case there is support for the business case, should we expect this case to be lasting?

**Going Beyond Old Paths: A Reorientation Toward a Long-Term Paradigm**

Since the early studies several decades ago (such as Spicer, 1978), many academic scholars and practitioners in the financial industry have continued to investigate the business case for sustainability. With respect to the relationship between corporate social/environmental performance and financial performance, the management literature yields a rather mixed picture. Some researchers find support for a positive link (Dowell, Hart, & Yeung, 2000), some propose a negative link (Walley & Whitehead, 1994), yet others cannot detect a clear effect or find a neutral link (Elsayed & Paton, 2005). To our knowledge, the only study that supports an unqualified, positive conclusion is Orlitzky et al.’s (2003) meta-analysis, examining the financial benefits of corporate social and environmental responsibilities. And even those meta-analytic findings were later qualified in Orlitzky’s (2011, 2013) critical reassessments. In finance studies, there is a similarly mixed picture. Studies find that stocks reflecting on sustainability issues may outperform the market (Derwall, Guenster, Bauer, & Koedijk, 2005), underperform the market (Chong, Her, & Phillips, 2006), or show no clear or detectable link in terms of firms’ share price performance (Bauer, Derwall, & Otten, 2007). One common conclusion is that, at the very least, there is no clear indication of a negative relationship, or trade-off, between corporate social/environmental performance and corporate financial performance (Margolis & Walsh, 2003; Mercer, 2009; Mercer & UNEP FI, 2007).

Hence, based on the current research, there is only limited evidence for the unqualified business case for sustainability. Win–win scenarios may be possible (Porter & Kramer, 2006, 2011), but such low-hanging fruits cannot be the foundation for a shift toward a long-term paradigm; the emphasis often remains on the short run. The field of sustainable investments requires a mental shift toward long-term risk and, perhaps more notably, opportunity perspective. Such a perspective takes a systems view that seeks to understand and incorporate global trends such as the alleged negative externalities of climate change and their effects on ecological and human-social systems.
Such a perspective acknowledges that a change in these systems significantly alters the world and, thus, certain businesses are at risk while new business models may emerge. Arguably, these changes and resulting effects on businesses can only be captured and understood by a long-term and systems perspective as outlined in the Darmstadt Definition of sustainable investments.

Moreover, many institutional investors motivate their activities in the field of sustainable investing by stating that sustainable firms will have higher stock returns (previously mentioned financial investors). This expectation has led to many best-in-class portfolios as well as many ESG-based strategies in institutional investing. We need to be careful, however. The real question is whether security prices already reflect the material ESG-relevant information. Some research shows that markets have difficulties with pricing intangible information (Edmans, 2011; Gompers et al., 2003), but other studies show that the market has already picked up some of this information (Bauer & Hann, 2014; Chava, 2014).

In the long run, one would expect that (rational) investors learn how to price material ESG information, just as they have learned how to price financial information. In that case, high-scoring companies also have higher valuations on stock markets. In such an environment, starting an engagement with poorly performing companies can be a good strategy. If the engagement effort is successful and other market participants agree with the materiality of the engagement topics, stock returns of these firms will rise (ceteris paribus).

For investors, the aforementioned considerations may have three implications. First, sustainability investment strategies need to be reflected in strategic asset allocation as the global trends affect risks and returns across asset classes (Garz & Volk, 2011). Second, in terms of portfolio management, investment screening based on ESG information needs to put more emphasis on a forward-looking perspective. However, much of the current ESG research and data are looking backward while the biggest sustainability challenges are ahead of us. Third, investors need to have access to trustworthy ESG data. The following critical reflection on the current data and screening techniques will shed light on the latter in more detail.

**Increasing the Trustworthiness of ESG Data**

The shift toward a long-term paradigm needs to be accompanied by improvements in ESG measurement. Concerns with the trustworthiness of ESG data are well founded. Several researchers point out that currently available ESG data often lack reliability and validity (Griffin & Mahon, 1997; Mattingly &
Berman, 2006; Orlitzky, 2013; Orlitzky & Swanson, 2012; Rowley & Berman, 2000; Vogel, 2005). The general untrustworthiness of ESG data can be summarized as follows:

First, rating agencies appear to disagree on the meaning and scope of CSR (Chatterji, Levine, & Toffel, 2009; Entine, 2003; Orlitzky & Swanson, 2012; Porter & Kramer, 2006). Second, CSR assessments have been found to be influenced more by organizational rhetoric than concrete action (Cho, Guidry, Hageman, & Patten, 2012). Third, firms have been found to be socially responsible and irresponsible at the same time (Strike, Gao, & Bansal, 2006), making overall assessments of an entire firm’s CSR (especially in large international corporations) problematic. Yet, these overall judgments about whole firms are necessary for “socially responsible” investors to make sound, rational investment decisions about firm stocks. (Orlitzky, 2013, p. 242)

Consequently, if ESG data do not reliably and validly reflect organizational reality—that is, we do not measure what we want to manage, then how can sustainable investment practices contribute to sustainable development?

In addition, doubts have emerged over whether financial analysts really know what to do with ESG-related information. This information is not very standardized and harmonized, which makes its interpretation for investment decision makers even more difficult (Garz & Volk, 2011). Practitioners have started to address this shortcoming. For example, Goldman Sachs (2011) developed an assessment framework named GS SUSTAIN Focus list to incorporate ESG criteria into stock-picking processes. Apart from traditional investment metrics, such as return on capital and company’s industry positioning, the assessment process converts a set of 20 to 25 ESG criteria (depending on particular industry characteristics) into quantitative scores. Although such an approach may probably be considered current best practice, the choice and weighting of ESG criteria still remains largely arbitrary.

Recent research may have some implications about the ways in which reliability and validity of ESG measures can be improved. For example, Chatterji et al. (2009) ask how well sustainability-related ratings actually measure corporate efforts in addressing sustainability issues. The authors based their analysis on the widely used ESG ratings of KLD Analytics and compared the ratings with both environmental performance data obtained from the U.S. Environmental Protection Agency’s (EPA) Toxic Release Inventory (TRI) and the rate of compliance with environmental regulations. On one hand, the results show that KLD concern ratings are an adequate measure of past environmental performance and, to a lesser extent, predict future performance and compliance violations. On the other hand, strength ratings predict neither future performance nor
compliance violations. In a related study, Delmas and Blass (2010) examine the criteria for comparing companies and the pros and cons of current sustainable investment practices. Based on an analysis of data from 15 chemical companies, the authors find that firms can exhibit a superior and inferior performance simultaneously, depending on the metrics chosen. Those with a poor result in terms of environmental performance (e.g., indicators of toxic releases) had a better result regarding pollution prevention activities. Both studies illustrate that ESG ratings clearly depend on the underlying screening criteria and metrics. Some ESG criteria are actually related to (i.e., measure) improvements in ecological and/or social-ethical outcomes, whereas others must be regarded as relatively meaningless artifacts. The difficulty of distinguishing between meaningful and meaningless sustainability measures leads to several nontrivial unintended consequences (Orlitzky, 2013).

Two main conclusions can be drawn from these findings. First, current practices in using ESG information require significant improvements for data collection processes to result in more reliable and valid outcomes. Intuitively, more emphasis needs to be put on the question of which ESG criteria reliably reflect which type of information and organizational activities, and how such ESG information is actually integrated in the investment process, so that ESG screening has an effect on sustainability performance (i.e., the predictive validity of the environmental outcomes). Future research on sustainable investments may reach a more congruent picture by focusing more on disaggregated measures of corporate sustainability and analyzing the underlying moderating and mediating effects (Barnett, 2007; Busch & Hoffmann, 2011; Peloza, 2009; Schreck, 2011).

Second, a greater level of transparency is needed regarding the underlying screening techniques applied in sustainability assessments and ratings. This suggestion is also supported by the recent findings of the second phase of the Rate-the-Raters’ project, which was launched by SustainAbility. The central message so far has been that, if investors cannot understand and trust ESG assessments and ratings, they will not have any confidence in sustainable investments—whether from a purely instrumental or normative perspective. For sustainable investments to really spur sustainable development, investors need to understand and trust ESG-related data and ratings. Adequate managerial and investor competencies and knowledge are an important prerequisite.

**ESG Market Dynamics Reconsidered**

What may also be needed in this context is a more theory-based, yet realistic description of how financial market dynamics may change in response to
influential social movements that insist on investment criteria unrelated to firms’ economic fundamentals. The article “Corporate Social Responsibility, Noise, and Stock Market Volatility” in a recent issue of *Academy of Management Perspectives* takes a step in this direction. Specifically, Orlitzky (2013) argues that investors’ reliance on untrustworthy data (of any kind) typically leads to more noise in markets, which in turn will increase noise trading and stock market volatility. Particularly if there is an emerging consensus on the desirability of investment decisions relying on ESG criteria, such social movements could result in potential stock price bubbles, which in the long run might lead to massive market corrections. This argument, largely based on behavioral finance, implies that even a significant improvement in the reliability and validity of ESG measurement would be no panacea in eliminating these unintended consequences. Unless ESG measures are also related to changes in firms’ underlying economic fundamentals, ESG data are bound to produce more market noise and distort stock prices. From a pessimistic perspective, this model, highlighting the endogenous creation of noise through “sustainability logics” and other similar “social responsibility” rhetoric, seems to confirm the old adage about the road to hell being paved with good intentions. So, even if the debate about the logical weaknesses of sustainable development (Beckerman, 1992, 1994, 2003; Carter, 2000) is set aside, consequentialist reasoning, based on concepts and theories in behavioral finance, will require a more critical attitude toward sustainable investments as currently seen. On a more positive note, though, Orlitzky’s model also reaffirms our earlier claim that stock price movements should always be assessed from a long-term perspective because, in the short run, stock prices may be distorted by investors who are—perhaps understandably—unable to price ESG data correctly.

Orlitzky’s (2013) model is based on theoretical considerations from behavioral finance; however, other models of market dynamics in response to greater ESG investment activity should be considered as well. For example, if we assume that investors are, for the most part, rational utility calculators (Mackey, Mackey, & Barney, 2007) and, thus, markets can generally be assumed to be efficient, the mispricing of stocks is impossible, minor, or a rare occurrence (Orlitzky, 2013). Yet, this latter view would also imply that in the past few years we have not learnt very much from the widespread behavioral—sometimes irrational and emotional—forces, such as price bubbles and busts, which distorted financial markets everywhere (Fox, 2009). In the real world, information asymmetries and behavioral biases inevitably affect market transactions (Mandelbrot & Hudson, 2004; Shiller, 2005). To what extent markets are inefficient may
depend on environmental factors such as the number of competitors in the market or the magnitude of profit opportunities available (Lo, 2004, 2005)—and, with greater ESG investment activity, on the reliability of the underlying ESG data.

**Exciting Avenues Ahead**

At present, the contribution of capital markets to sustainable development should probably be regarded as rather modest (Schepers & Sethi, 2003). We discussed two main reasons for this condition: the lack of a clear shift toward a long-term paradigm and the untrustworthiness of ESG data. To fill our knowledge gaps in this area and other domains where sustainability matters in financial markets, the articles of this Special Issue provide several important empirical insights and exciting avenues for the future.

Eichholtz, Kok, and Quigley (2015) focus on real estate as an important asset class when it comes to impacts on the natural environment. This focus is of relevance for financial intermediaries at the level of the company, as asset owners of real estate investment trusts (REITs) or as institutional investors. Based on data from a large sample of more than 11,000 organizations, decisions about office space leases are analyzed. The results demonstrate that oil, banking, nonprofits, and public organizations are among the most prominent industry green tenants and suggest that industry human capital intensity seems to be correlated positively with the propensity to lease green office space.

Guenther, Guenther, Schiemann, and Weber (2015) focus on one specific area of ESG, namely, how and why firms voluntarily disclose environmental information. Their study is centered on the question of how individual stakeholders matter for carbon disclosure practices. Based on an international sample comprising a total of 1,120 firms spanning 4 years of data (2008-2011), the results illustrate the role of stakeholders for firms’ carbon disclosures and highlight the specific role governments may play for the relationship between carbon performance and carbon disclosure.

Slager and Chapple (2015) put special emphasis on intermediaries in financial markets in fostering corporate sustainability. Their main argument is that the role of financial intermediaries is not confined solely to information provision, but can also incentivize high levels of corporate sustainability. Using the FTSE4Good Index, the authors examine the effects of exclusion threats, signaling, and engagement on corporate social performance. Based on these insights, it can be demonstrated how intermediaries and other financial actors may foster greater corporate sustainability.
Dumas and Louche (2015) build on the idea that the financial community still requires a shift to greater sustainability. The authors analyze how the reporting of sustainable investment practices evolved in the U.K. financial press over a time frame of 18 years. Their results present insights about collective beliefs in financial markets and future challenges involved in mainstreaming the field of sustainable investments.

Lopatta, Buchholz, and Kaspereit (2015) show that insider transactions in firms with a high score on CSR are associated with lower abnormal returns. Insider trading can be defined as the trading of a company’s shares by corporate insiders who have an information advantage with the aim to reap gains or avoid losses. Drawing on a sample of U.S. firms listed in the MSCI World Index from 2004 to 2013, the authors investigate the impact of CSR activities on asymmetric information. Although insider trading does constitute information asymmetry, it is an extreme, typically unlawful instance. Often, information asymmetries take another, perfectly legal form. In those contexts, CSR and sustainability data, engendering noise rather than information, may lead to an increase rather than a reduction of information asymmetries (Orlitzky, 2013).

Conclusion

Whatever form economic development takes, banks and investors play a central role in the allocation of capital through their financing function. Because banks, retail investors, and institutional investors play a central role in the economic realm, the same argument applies to sustainable development (Clark & Hebb, 2005; Scholtens, 2006): Whatever form sustainable development takes, banks and investors can be seen as key drivers—or obstacles to it. Sustainable investments are clearly not a myth. A myth is nonexistent; sustainable investments require a methodological redirection. To unlock their full potential, a reorientation toward a long-term paradigm for sustainable investments and enhancements in ESG measurements are vital steps. Essentially, these steps are the foundation for building new avenues on which (more) sustainable investments actually spur sustainable development. What remains an open question is how specifically these “vital steps” can be aligned with another vital social objective, namely, economic growth.

Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.
Funding
The author(s) received no financial support for the research, authorship, and/or publication of this article.

Notes
1. See http://www.unpri.org/about-pri/about-pri/
2. See http://www.un.org/millenniumgoals/
3. See http://www.mdgmonitor.org/country_progress.cfm
4. See http://www.theIIRC.org
5. Recent evidence in real estate investments (see Global Real Estate Sustainability Benchmark Report, 2013) shows that an increasing number of property funds and companies have a clearly articulated environmental, social, and governance (ESG) policy. However, the Report also shows that a considerable part of the real estate community does not fully implement this policy.
6. A number of papers have studied various types of engagement activities by institutional investors and their effectiveness in terms of achieving better risk-adjusted returns or achieving ESG-related goals. Examples are Becht, Franks, Mayer, and Rossi (2009); Bauer, Moers, and Viehs (2012); and Bauer, Clark, and Viehs (2014).
7. There are several methodological concerns within the literature on the business case for sustainability, ranging from reverse causality (McGuire, Sundgren, & Schneeweis, 1988; Orlitzky, Schmidt, & Rynes, 2003) to the influence of researcher ideology (Orlitzky, 2011) to problematic research designs (McWilliams, Siegel, & Teoh, 1999).

References


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Reviewers for the Special Issue

The Special Issue received 17 submissions, of which 5 were accepted for publication.

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