

Analyst Perspectives

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SUSTAINABLE COMPETITIVE ADVANTAGE THROUGH ESG INTEGRATION

In the 2011 Johns Manville Sustainability Report, Warren Buffett wrote, “Today our world is changing faster than ever before – economic, geo-political, and environmental challenges abound. However, taking shortcuts is not the pathway to achieving sustainable competitive advantage, nor is it an avenue toward satisfying customers. In times such as these, a company must invest in the key ingredients of profitability: its people, communities and the environment”¹.

This paper will show that an increasing number of corporations are considering sustainable practices, not just to meet regulations, but as a new source of innovation and increased profits. Simultaneously, a growing faction of investors are evaluating the actions of companies through a similarly sustainability—driven lens. Investors using these criteria, which we will refer to broadly as Responsible Investing, to improve alpha generation and lower portfolio risk. For those among us who still subscribe to the discipline of long-term investing, these companies and managers can present an attractive opportunity.

Responsible Investing (RI) may be best known for its earliest iteration,

Socially Responsible Investing (SRI). SRI investing was born in the 1970's out of opposition from some religious groups to holding investments that did not align with their values. The main focus of this movement was called 'sin stocks', which included companies deriving revenue from alcohol, gambling, tobacco, and weapons. Though the criteria for SRI investing are very investor specific, the SRI process is more generic. SRI removes companies from consideration based on industry, geography, or source of revenue that falls into an excluded category. The proposition of completely removing entire categories from the investment universe, however, can end a conversation about RI with some mainstream investors fairly quickly, as



many perceive they will lose some level of diversification and sacrifice potential returns.

Environmental, Social, and Governance (ESG) investing represented an evolution of SRI investing. Instead of negatively screening out securities that earn revenue from an excluded category, it looks to find companies that meet predefined criteria in those three categories, as set by the investor. Stated differently, the approach positively screens the investable universe for the best available investment opportunities based on a broad swath of qualitative information, in addition to the financial data that is more typically utilized. This concept is also known as ‘Triple Bottom Line Investing’, meaning measuring a company’s economic, social and environmental impact. These costs are often not considered in traditional financial analysis. However, compelling recent research argues that ESG can both enhance return and decrease the risk of a portfolio. If a company seeks to increase profits at any cost (e.g. abusing employees or significantly polluting the environment), the costs of these practices are likely to be borne by the company at some point, hurting long-term investment performance. These costs can be in the form of reputational damage, fines, sanctions, or even criminal charges.

In 2003, The United Nations Environmental Programme (UNEP) commissioned a group of major brokerage houses (including Citigroup, BNP Paribas, ABN AMRO, and HSBC) to explore ESG investing. These firms evaluated how ESG criteria could impact equity valuations across a wide swath of sectors. The results were significant. The report stated, “Analysts agreed that environmental, social and corporate governance criteria have an impact—both positively and negatively—on long-term shareholder value. In some cases these effects may be profound. It follows that research to determine the financial materiality of these criteria should use longer time spans than is currently the norm for financial analysis”².

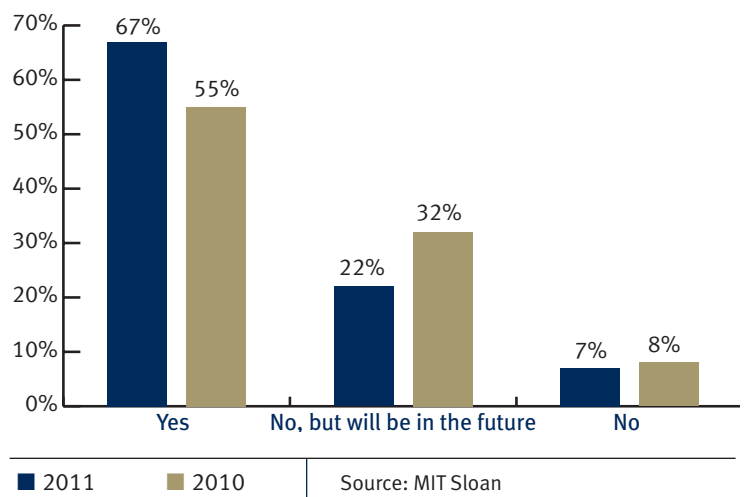
On the back of these findings, the UN formed a committee to construct a framework for ESG investing. In April 2006, the *UN Principles for Responsible Investment (UN PRI)* were created. The Principles focus on integrating ESG into investment analysis, seeking disclosure of ESG issues, and working with companies to improve their behavior in these areas. As of this writing, more than one thousand asset owners, investment managers, and service providers (including RBC Global Asset Management) representing over \$59 Trillion dollars have agreed to abide by the Principles³. This number is growing exponentially. In the U.S. alone, the US Forum for Sustainable Investment (US SIF) estimates that assets invested utilizing some form of responsible mandate grew from \$3.7 T in 2012 to \$6.6 T in 2014, a 76% cumulative growth in 2 years⁴.

THE REINVENTION OF LONG-TERM INVESTING

ESG investing offers a new interpretation of one of our most closely held investment tenets, long-term investing. Investing within an ESG framework inherently forces an extended investment horizon. The edge offered by a company that exhibits strong ESG characteristics is typically one that plays out over years, as the company gains incrementally through maintaining its health and stability. In 2012, MIT’s Sloan Business school conducted a survey of more than 3,000 executives asking about their company’s plans for sustainability and seventy percent responded that sustainability has been placed permanently on their agendas within the past 6 years. They also asked if sustainability was going to be necessary to be competitive and 89% believed it would be⁵.

The crux of the study was whether sustainability-related actions and decisions had added to these companies’ profits, to which almost one third of the executives answered affirmatively. The study classified these companies as “Harvesters”, which were found in every industry included in the survey. These companies had identified a business case for sustainability, as well as a way to turn this into a competitive advantage. This type of thinking can be transformative to a company and a source of innovation. Management can change, processes fail, and other factors may come into play, but when a company is able to increase its profitability through sustainability and innovation, ESG often becomes embedded within the company’s culture, becoming an ongoing competitive advantage. These advantages can be gained through a wide range of initiatives, from reducing waste to increasing the quality of a supply chain⁶.

Is Pursuing Sustainability - Related Strategies Necessary to be Competitive?

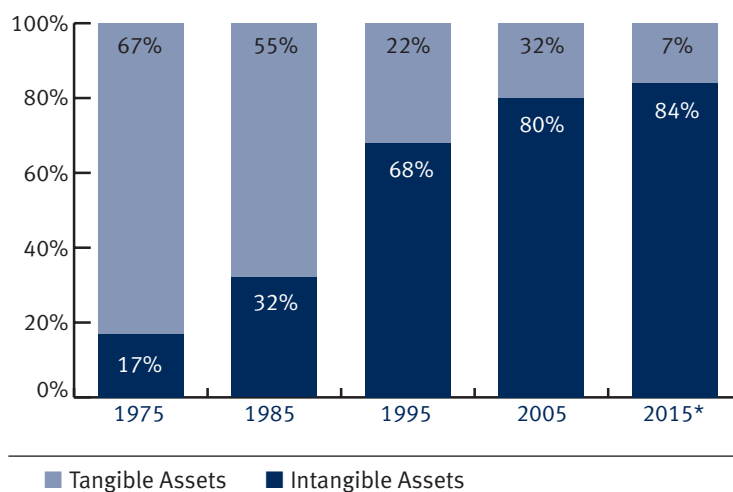


Benjamin Graham, often known as the father of modern investing and a famously long-term thinker, laid out how most investors evaluate companies in his seminal books, *Security Analysis* and *The Intelligent Investor*. For many, investment analysis relies heavily on the evaluation of tangible assets and traditional financial data. However, in their annual study of Intangible Asset Market value, think tank Ocean Tomo found that tangible data make up a surprisingly small percentage of the market value of the S&P 500 Index⁷. This means that the majority of the value for companies within the index is comprised of goodwill, reputation, customer and employee relationships, environmental performance, brand, and other intangible assets. Based on this, ESG investors may have an advantage over investors who do not put as much weight on this information. Examples like Transocean after the Macondo Oil spill or, more recently, Volkswagen after the discovery of its fuel efficiency deception show the impact that ignoring ESG factors within a company can have on the value of a stock. As Warren Buffet is fond of saying, “it takes 20 years to build a reputation and five minutes to destroy it.” This is not to say that ESG investors ignore financial data, but considering information other than financials should be a key part of any modern investment process.

INVESTING’S HOLY GRAIL: HIGHER RETURN WITH LOWER RISK

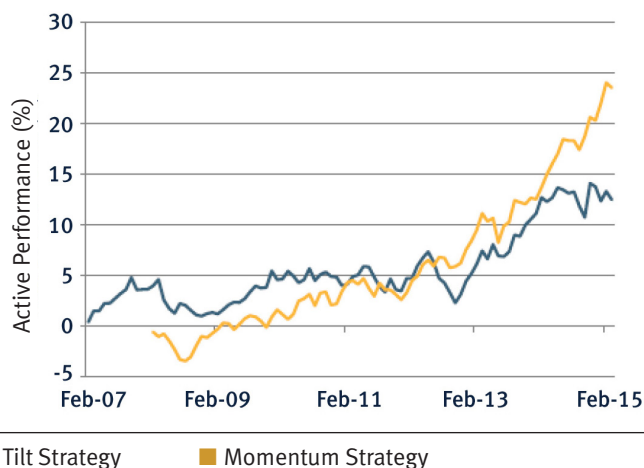
In 2015, MSCI published a research report showing the performance of two portfolios that were created based solely on ESG criteria. The first was known as “ESG Tilt” and assumed that ESG scores are linked to future stock performance. Using the MSCI World Index as the universe, they created a portfolio that was overweight securities with higher ESG scores and underweight securities with lower ESG scores. The second portfolio was called “ESG Momentum” and assumed that future stock performance is linked to the change in the ESG score of the company. This portfolio’s absolute ESG score was not particularly high, but it was based on the year-over-year improvement of the companies ESG score. Both portfolios handily outperformed the MSCI World Index. The annualized active performance over the benchmark was 1.1% for the Tilt portfolio and 2.2% for the Momentum portfolio. Within each, a significant portion of this return came from stock-specific sources. Portfolio constraints allowed the portfolio to deviate away from the benchmark to replicate an active management style. Their conclusion was that investors who are willing to take active risk could improve their return and ESG scores in the same portfolio by tilting toward higher ESG rated securities⁸.

Components of S&P 500 Market Value



Source: Ocean Tomo, LLC ; *January 1, 2015

Exhibit 1: ESG Tilt and Momentum Strategy Active Performance vs. MSCI World Index



Meta-analysis performed by both Deutsche Bank⁹ and the 2003 UNEP¹⁰ referenced earlier confirmed these conclusions. Both looked at large collections of studies into the impact of ESG criteria on a portfolio. Together, the analysis evaluated 34 studies or research reports. Of those, only one report concluded there was a negative impact on returns, while three stated it was neutral or mixed and the rest indicated that ESG criteria was additive to returns.

In theory, all investors are risk averse. When offered two assets with a similar return profile but differing risk expectations, a logical investor will pick the asset with less risk. One of the key outcomes from the Deutsche Bank study was that companies with higher ratings on Corporate Social Responsibility reports, as well as companies with higher ESG scores, had a lower cost of capital in terms of both debt and equity. This indicates that the market believes companies who implement ESG-based practices are a lower fundamental risk than companies who do so to a lesser degree. Taking it a step further, studies have shown that ESG portfolios can in fact lower the risk of overall portfolios. A separate Deutsche Bank study looked at the drawdown of portfolios with high EIRIS's (another ESG research provider) environmental responsibility criteria from 2005-2010. During that period, the best ESG-rated portfolio had by far the lowest drawdown¹¹.

HOW ESG CAN ADD TO RETURNS: INFORMATIONAL ADVANTAGE

How is it possible to add alpha while taking lower volatility? Modern portfolio theory states that in an efficient market this kind of opportunity should be arbitrated away. Said another way, if an investment is clearly superior on a risk-adjusted basis, investors will take advantage of the mispricing until the cost of the investment increases to match its risk. Efficient market theory, however assumes that information is equally absorbed and applied by all investors in the market. As we have discussed, ESG criteria are neither looked at nor evaluated by all investors. This leads to potential mispricing in the market and a possible informational advantage for ESG investors.

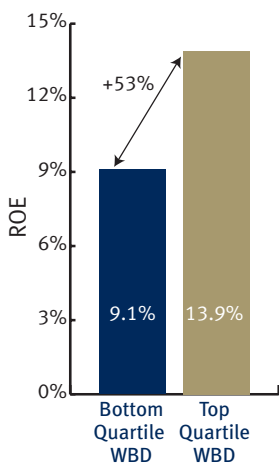
Another section of Deutsche Bank's meta-study showed that companies with higher overall ESG scores exhibited high correlation with financial outperformance. The study further broke down the contribution from each of the criteria, to some interesting conclusions.

Governance scores were not believed to be an informational advantage, as they had largely been priced into the market¹². That is not to say that they are completely irrelevant. As an example, Governance may be the most evaluated of the three criteria, but that does not mean that it is universally accepted or used by every corporation or manager. In one study, it was found that Fortune 500 companies with a higher representation of women on the board outperformed companies with lower representation on Return on Equity, Return on Sales, and Return on Invested Capital¹³.

Companies with high Environmental scores seemed to outperform due to a "first-mover" advantage. Companies with higher E scores were often making technological innovations in energy efficiency or carbon reduction, which led to higher earnings or margins¹⁴. In 2007, Newton Investment Management wrote a report indicating that overuse and pollution of Chinese water resources in Northern China was going to increase the operational risks in that region. They identified water-intensive sectors such as agriculture, textiles, and power generation to be most at risk. In 2007 and 2010, the Chinese Government implemented regulation to limit manufacturing permits, placing restrictions on pesticides, and lower other planning. Newton had integrated this information into their macro view and had avoided investing in water-intensive industries in that region¹⁵. This story sounds very similar to what is currently occurring in California. Due to extreme drought, California has mandated that everyone in urban areas reduce water consumption from 2013 levels by 25%¹⁷. This has sent companies that were not considering sustainability in their long-term plans scrambling for a way to meet these new standards. Investors who had the foresight to

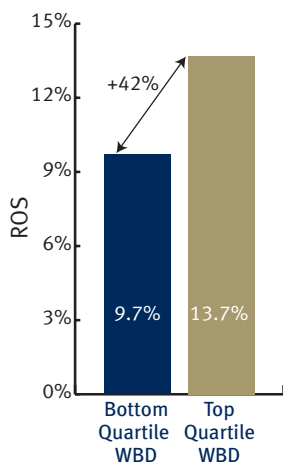
Return on Equity by Women's Representation on the Board

Companies with more WBD outperform those with the least by 53%



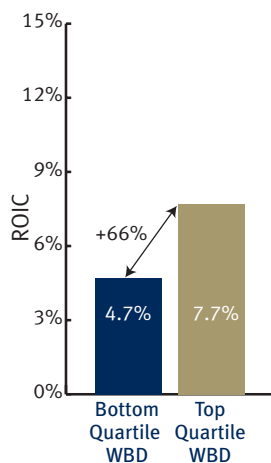
Return on Sales by Women's Representation on the Board

Companies with more WBD outperform those with the least by 42%



Return on Invested Capital by Women's Representation on the Board

Companies with more WBD outperform those with the least by 66%



include this in their analysis would have been better prepared to evaluate the risk and return of companies based in California¹⁷.

What drove Social scores to be beneficial was the least understood. The study hypothesized that this could be a large area of alpha generation in the future, as investors increased scrutiny on safety, the treatment of human capital, and how companies affect the health of society as a whole¹⁸. Social factors generally include employee considerations, supplier and customer relations, safety, and product quality. Supply chains have become an area of increased scrutiny recently. Traditionally, corporations have looked to squeeze their supply chain and drive prices down through their vast purchasing power. For instance, many Western clothing retailers receive most of their textiles from Southeast Asia, as they have continually offered clothing at the lowest price point versus other regions. At times, this has led to suppliers cutting corners to maintain a price point that is often unsustainable. A recent example of this was the collapse of the eight-story Rana Plaza textile factory in Bangladesh in 2013, which killed 1,100 people¹⁹. Some argue that instead of squeezing suppliers, some companies are beginning to view them as an asset. If corporations can work with their suppliers to increase access to inputs, technology, and financing, they can stabilize their supply and increase quality. They also avoid headline risk and the emotional distress of being linked to a catastrophe like the one in Bangladesh. An example:

A good example of such new procurement thinking can be found at Nespresso, one of Nestlé's fastest growing divisions, which has enjoyed annual growth of 30% since 2000. Nespresso combines a sophisticated espresso machine with single-cup aluminum capsules containing ground coffees from around the world. Offering quality and convenience, Nespresso has expanded the market for premium coffee. Obtaining a reliable supply of specialized coffees is extremely challenging, however. Most coffees are grown by small farmers in impoverished rural

areas of Africa and Latin America, who are trapped in a cycle of low productivity, poor quality, and environmental degradation that limits production volume. To address these issues, Nestlé redesigned procurement. It worked intensively with its growers, providing advice on farming practices, guaranteeing bank loans, and helping secure inputs such as plant stock, pesticides, and fertilizers. Nestlé established local facilities to measure the quality of the coffee at the point of purchase, which allowed it to pay a premium for better beans directly to the growers and thus improve their incentives. Greater yield per hectare and higher production quality increased growers' incomes, and the environmental impact of farms shrank. Meanwhile, Nestlé's reliable supply of good coffee grew significantly²⁰.

This "Harvester" approach to its supply chain allows Nespresso to add value to its products and in turn, increase margins.

CONCLUSION

Investing in companies which operate in a way that improves society certainly offers some psychological benefits, but without a strong case for financial benefit, an ESG approach could be a hard sell to most investors. However, study after study has now shown that not only does an ESG approach, when combined with traditional financial analysis, benefit return, it also can decrease risk. Logically, this makes sense as well—companies that cut corners tend to reap the penalty of those practices in the end. Additionally, as Millennials mature into a true force in the market²¹, their bias toward considering ESG factors cannot be ignored by the investment community. Companies that identify these changes as opportunities rather than obstacles will be better positioned to thrive in this changing environment, and investors who look to identify these companies and invest in them are in a prime position to add alpha and lower the risk of their portfolio. Global Manager Research believes that this area will continue to grow as investors continue to seek investments that can add value over the long-term.

Sources

1. "Johns Manville 2011 Sustainability Report" *JM.com*. Johns Manville, 03/2012. Web.
2. Joly, C., Zeller, V. "The Materiality of Social, Environmental, and Corporate Governance Issues to Equity Pricing". United Nations Environmental Programme, 06/2004. Print.
3. "The six Principles". *UNPRI.org*. The Principles for Responsible Investment, 04/2006. Web. 09/25/2015.
4. Voorhes, M., Humphreys, J. "US Sustainable, Responsible and Impact Investing Trends 2014". *USSIF.org*. Forum for Sustainable and Responsible Investment. 11/2014. Web.
5. Haanaes, K., Reeves, M., Von Strengvelken, I., Audretsch, M., Kiron, D. Kruschwitz, N. "Sustainability Nears a Tipping Point." *MIT Sloan Management Review*. Massachusetts Institute of Technology. Winter 2012. Print.
6. Ibid.
7. "Annual Study of Intangible Asset Market Value from Ocean Tomo, LLC". OceanTomo.com, Ocean Tomo, LLC. 5 March 2015. Web.
8. Nagy, Z., Kassam, A., Lee, L. "Can ESG Add Alpha? An Analysis of ESG Tilt and Momentum Strategies". *MSCI ESG Research Inc*. MSCI Inc. June 2015. Web.
9. Fulton, M., Kahn, B., Sharples, C. "Sustainable Investing: Establishing Long-Term Value and Performance." *DB Climate Change Advisors*. Deutsche Bank AG, June 2012. Print.
10. Ibid.
11. Hoepner, Dr. A. "Environmental, social, and governance (ESG) data: Can it enhance returns and reduce risk?" *Deutsche Asset & Wealth Management*. Deutsche Bank. April 2013. Web
12. Ibid.
13. Joy, L. Ph.D., Carter, N. Ph.D., Wagner, H. Ph. D., Narayana, S. Ph.D. "The Bottom Line: Corporate Performance and Women's Representation on Boards". *Catalyst Inc*. 15 Oct 2007. Web.
14. Ibid.
15. Beith, K. Brown, N., Cassey, J., Lake, R. "How Investors are Addressing Environmental, Social, And Governance Factors in Fundamental Equity Valuation". *Principles for Responsible Investment*. UN PRI. Feb 2013. Web.
16. Ibid.
17. James, I. "California board approves emergency water rules". *USA Today*. 6 May 2015. Web.
18. Ibid.
19. Yardley, J. "Report on Deadly Factory Collapse in Bangladesh Finds Widespread Blame." *The New York Times*. 22 May 2013. Web.
20. Porter, M., Kramer, M. "Creating Shared Value" *Harvard Business Review*, January-February 2011. P 1-17.
21. Petruno, T. "Beyond Profits: Millennials embrace investing for social good." *LA Times*. 7 December 2014. Web.

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