Environmental Drivers and Shareholder Value

The underlying thesis of the Environmental, Social and Governance (ESG) Investment discipline is that societal trends around globalization, cross-border investing, privatization, technology and natural resource management are increasingly taking on strategic importance to business.

Consequently, how a company integrates these issues into its operations can impact its competitive opportunities and growth possibilities — thereby affecting its risk/reward profile.

Toward this end, we believe that the methods companies use to integrate these trends into their operations can provide insight into competitive position and potential for growth.

This white paper examines the potential implications of environmental trends on a company’s current and future investment outlook. It draws on our own research and analysis, as well as our participation in a series of dialogues convened over the past several years by the CFA Institute, Bloomberg LLC, the US Forum for Sustainable and Responsible Investment (US SIF), the United Nations-supported Principles for Responsible Investment (PRI), New York Society of Security Analysts, and others.¹

The Convergence

As environmental and social factors, such as resources vital to business and the welfare of communities in which companies operate and sell, have become inextricably linked to firms’ sustainable growth and success, increasing attention has been paid to social and environmental value creation in addition to financial sustainability and economic growth when evaluating company performance. Historically, most corporate and financial analysts have viewed environmental issues in the context of compliance costs and legal liabilities that detrimentally affect a company’s bottom line. In fact, past empirical data suggest that environmental factors have had a limited impact on investment decisions, even in the natural resources and manufacturing sectors.²

Recent events in the global economy, however, suggest that environmental issues are becoming more important with regard to economic development, trade, and worldwide demand for goods and services. Among the factors driving this change are:

- A growing political consensus that action is warranted to address the problems of global warming and climate change.
- Increasing world population, growing rates of prosperity and consumption among some segments of society, and the associated demand for goods and services.
- Public concerns about air quality, water scarcity, and other quality-of-life factors are being tackled by governments through increasingly tougher health standards.
- Escalating demand for closed-loop, zero-impact processes and technologies, as opposed to the use of end-of-pipe controls.
- Increasing use of market mechanisms to supplement or replace command-and-control regulations.
- Expanding demands on a limited natural resource base, and the resulting pressure to improve resource productivity.
- Better and more widely available information on the environmental and social impact of development.
- The rapid increases of productivity and major advances in information technology.

We believe these trends will affect virtually every aspect of local, regional and global economies – and are already changing how companies conduct business. These trends are transforming environmental issues from relatively minor factors in corporate decision-making to those that are integral to remaining competitive in the 21st century. Failure to anticipate and integrate these trends in business planning and strategy could put a company’s entire economic model — and investment outlook — at risk.

We believe that integrating environmental factors into our investment process enhances our fundamental analysis and improves our ability to identify those companies that are likely to derive strategic value from their environmental “market intelligence.” A growing body of evidence in business literature appears to support our premise.  

### Risk Reduction Opportunities

The initial step in our investment process is to determine a company’s investment risk, which is based on historical balance sheet data, earnings predictability, and stock price volatility. Understanding a company’s risk profile is a critical first step in the investment process, since it determines what we should expect as an appropriate return on our investment.

In some situations, particularly in the value sectors of the economy (e.g., autos, chemicals, energy, etc.), a company’s approach to environmental factors can have a direct bearing on one or more of these risk factors, and either exacerbate or diminish its overall risk as an investment. For example, nearly 90% of oil and gas industry analysts responded in a survey that company performance in regulatory compliance, employee health and safety, community service and lawsuits impact the value of a firm.  

Some of the specific ways this can occur are summarized below:

- How a company incorporates environmental, health and safety impacts associated with product use, misuse, and disposal into product design could affect its potential liability costs, which in turn could affect its creditworthiness and balance sheet.
- How thoroughly a company identifies and analyzes potential environmental liabilities associated with mergers & acquisitions affects the uncertainty of future litigation, as well as the level of capital expenditures and operating costs required to meet existing and anticipated laws which can affect the balance sheet.
- How successfully a company reduces business disruptions arising from accidents and spills not only affects its environmental, health and safety compliance costs, but also determines the sustainability of its operating license.
- How a company responds to product tampering or accidental chemical releases can affect its image, reputation and investor sentiment, which, in turn, can influence its stock price volatility.

Increasing awareness of the value in environmental risk management is demonstrated by the growth of the Carbon Disclosure Project (CDP). CDP’s yearly reports provide an
analysis of the commercial risks and opportunities that climate change presents to companies globally. Companies participating in the project share information on regulatory trends, changes in physical environment and consumer sentiment. The project’s main goal is to track company-wide global greenhouse gas emissions and the steps taken to manage and reduce emissions. In 2014, 70% of S&P 500 companies chose to voluntarily report to CDP on their carbon emissions, climate change governance and actions to reduce emissions. Analysis of their disclosures found that U.S. corporate leaders on climate change management, as measured by peer-relative CDP disclosure and performance, have generated superior return on equity, more resilient earnings, and stronger dividend growth than their peers. While the report does not suggest a causal relationship, at a minimum it suggests that there is no penalty to corporate profitability for establishing climate change management systems.\textsuperscript{5}

**The Value Creation Potential**

Research conducted in recent years suggests that integrating environmental considerations across a company’s business proposition can enhance its return potential through improvements to the bottom line and the top line.\textsuperscript{6}

It is now widely accepted that human activity is largely responsible for changes to the world’s climate patterns. Changing rainfall patterns, for instance, appear to be causing increasing desertification and crop failures, while rising sea temperatures seem to have led to a bleaching of coral reefs.\textsuperscript{7}

Environmental initiatives — whether designed to lower energy consumption, reduce waste, or lower the rate of input use — can help drive process changes that improve efficiency, resulting in higher margins and potentially higher return on investment. For example, a food distribution company saved $7.7 million by installing programmable thermostats at storage facilities and replaced light bulbs with high intensity fluorescent lighting. The company also saved $14.6 million in fuel costs and reduced its carbon dioxide emissions by 13% in one year.\textsuperscript{8}

One pharmaceutical company saved approximately $85 million from 2008 to 2012 by taking energy-saving measures such as installing energy-efficient fixtures, timers and occupancy sensors and renewable energy at various facilities, and completing more than 520 energy conservation projects in 2011 alone.\textsuperscript{9} Between 1990 and 2013, a technology company saved $513 million through its energy conservation actions while concurrently saving 6.4 billion kWh of electricity consumption, and avoiding 4 metric tons of CO2 emissions. The company continues to find operational energy efficiencies and cost savings by optimizing logistics and applying its technologies in innovative ways.\textsuperscript{10}

Incorporating environmental factors into product design from the outset, in some situations, can lead to product and quality enhancements, that increase competitive advantage. Increasing water demand and water pollution mean that demand is set to overshoot supply by 40% in the next 20 years and 50% of the world’s population will be living in conditions of “water stress” by 2030.\textsuperscript{11}

Aware of water as a compelling megatrend, a global industrials company offers products that help its customers increase their water efficiency. One of its gas turbine technologies helps power plants avoid annual water consumption of nearly 10 million gallons compared with other gas turbines, saving annual operators as much as $100,000 in annual operation costs for water consumption and treatment. Even for its own operations the company expects to save an estimated 5% of its global water use by utilizing its own water and process technologies to recycle and reuse water.\textsuperscript{12}

A keen understanding of environmental trends — whether driven by shifting consumer attitudes, changing societal expectations, or new public policy directions — can help a company protect its competitive position, differentiate its products, and gain a “first-mover” advantage in new markets. Responding to consumer sensitivity to rising fuel costs and awareness of climate change, one major auto manufacturer’s sales of hybrid-electric vehicles rose from 2% of its sales in 2004, to 14% in 2012.\textsuperscript{13}

\begin{itemize}
  \item \textsuperscript{1} CDP S&P Climate Change Report 2014: Climate action and profitability,” Snow Fox LLC, 2014.
  \item \textsuperscript{4} Forohar, Kambiz, “Environmentalists at the Gate,” Bloomberg Markets Magazine, May 2011, p. 55.
  \item \textsuperscript{5}www.pfizer.com/responsibility.
  \item \textsuperscript{6} http://www.ibm.com/ibm/environment/.
  \item \textsuperscript{7} Forohar, Kambiz, “Environmentalists at the Gate,” Bloomberg Markets Magazine, May 2011, p. 55.
  \item \textsuperscript{8} Bank of America Merrill Lynch, April 2014.
  \item \textsuperscript{9} www.gecitizenship.com.
  \item \textsuperscript{10} Societe Generale Cross Asset Research, “Global Automobiles,” November 2013.
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The Environment/Investment Integration

The degree to which environmental management strategies can affect risk, return potential and ultimately, financial performance, has been a subject of considerable debate. However, incorporating these trends into our analysis, we believe, adds an important dimension to the valuation process that most investment advisers neglect. Moreover, our experience suggests that our unique, integrated approach to financial analysis gives us a competitive edge when identifying top-quality corporate managements that are better positioned to create value in their companies and maintain leading positions in their industries. Our research is consistent with the results of numerous industry and trade studies indicating that companies with better environmental performance often have higher returns on investment compared with their competitors.¹⁴ We focus on the concept of corporate eco-efficiency, a concept that reflects the environmental governance of the firm beyond that which is indicated by elementary environmental compliance and pollution control policies. Broadly, we can define eco-efficiency as creating more value with fewer environmental resources resulting in less environmental impact (for example, less pollution or natural resource exhaustion).¹⁵

This concept assumes that the more efficient a company’s operations are with regard to resource usage, production and output, the greater the positive impact in terms of environmental stewardship, corporate citizenship and ultimately its potential economic value.

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