Show Me The Money:
Linking Environmental, Social and Governance Issues to Company Value

A product of the UNEP Finance Initiative Asset Management Working Group

UNEP Finance Initiative
Innovative financing for sustainability

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Abbreviations

AMWG	Asset Management Working Group
EAI	Enhanced Analytics Initiative
ESG	Environmental, Social and Governance issues
PRI	Principles for Responsible Investment
UNEP FI	United Nations Environment Programme Finance Initiative

Foreword

There is a growing worldwide understanding of the pivotal role the investment community and capital market actors have to play in addressing critical environmental, social and governance (ESG) challenges.

At the same time, the mainstream investment community is waking to the burgeoning opportunities associated with sustainability promoting companies, technologies and investment funds. From clean-tech, to renewables and ecosystem services, the growth industries of the 21st century are emerging at an accelerated pace.

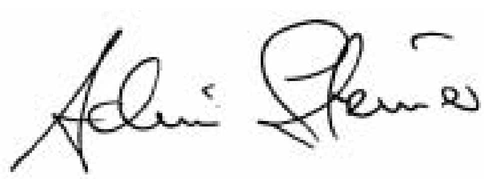
With the United Nations Principles for Responsible Investment (PRI), launched in late April 2006, now signed by more than 70 institutional investors from 16 countries and representing more than USD4 Trillion, we can see that some of the largest and most concentrated pools of capital are sending clear signals to the whole investment chain indicating that ESG issues are material and must be integrated into investment analysis, decision-making and action.

The United Nations Environment Programme wholeheartedly welcomes, therefore, the latest report in the UNEP Finance Initiative "Materiality Series" as a landmark contribution to the thinking in these complex and fast evolving areas.

By exploring the drivers and hurdles linking the ESG issues for specific industry sectors with the way companies are valued in the market-place, these reports make an important contribution.

More than 10 brokerage houses have contributed sector specific reports covering food and beverage, auto, aerospace, property, media, chemicals and capital goods industries. This will further deepen our understanding of how ESG issues impact the risk and reward dynamic in given industry and business sectors.

The member companies of UNEP FI Asset Management Working Group should be congratulated for their ground-breaking work in this area.



Achim Steiner
Under-Secretary-General, UN
Executive Director, UNEP

Introduction from Chairs

Institutional investors who choose to integrate environmental, social and governance issues (ESG) into portfolio management do so for different reasons: to maximise financial returns, to act in accordance with personal ethics, and to further societal goals. These reasons are partially overlapping, so subscribing to one does not necessarily imply subscribing to all. And indeed, perhaps the justification for acting is not as important as the action itself. Nonetheless it is instructive to explore these reasons for acting.

The first – and arguably for investors the most important – reason to integrate ESG issues is, simply, to make more money. There is a hypothesis, which we support, that a more thoroughgoing and systematic approach to integrating ESG issues in portfolios will, over time and in general, result in better financial performance. Some mainstream institutional investors and many practitioners of socially responsible investment apply this hypothesis in their investment strategy.

A second reason is to apply to a portfolio the ethical values that are paramount to the investor, regardless whether such application results in marginally positive or negative impacts to financial performance. Leading government and private sector funds, such as the Norwegian Government Pension Fund, the French Fonds de Réserve pour les Retraites, Storebrand Life Insurance, and US and UK ethical funds subscribe to this view.

The third reason is to seek to channel investment flows in a manner that is more consistent with the goals of sustainable development than is generally the case. That is, to act on the understanding that if capital does not align with goals such as those expressed in Agenda 21 or the Millennium Development Goals, then such aims are likely to remain unrealised ideals. Major Dutch pension funds and a number of European sustainable development funds exemplify this approach.

Regardless of the reasons, the fact is that a growing number of major institutional investors are on the verge of paying more attention to such issues, and to reflect them in portfolio construction and/or their engagement practices with corporate managements. However, even more investors continue to question whether ESG integration makes sense or whether it is worth the effort.

This report furthers the dialogue with those investors who are either sceptical or agnostic concerning the first reason. We wish to show our colleagues in the investment business why we believe that ESG integration makes sense. Thus, the report seeks to show where and how ESG issues are material – that is, are or may become relevant – to security pricing and therefore to portfolio financial performance. Investors who are not sure what to do would do well to refer to Pascal's wager concerning the existence of God: make believe as if the hypothesis is true, thus at little or no cost avoiding the worst-case scenario.

This report was commissioned by the United Nations Environment Programme Finance Initiative (UNEP FI) Asset Management Working Group (AMWG), a group composed of the following companies:

ABN AMRO Asset Management
Acuity Investment Management
BNP Paribas Asset Management
Calvert Group
ClearBridge Advisors, Legg Mason
Groupama Asset Management
Henderson Global Investors
Hermes Pensions Management Ltd
HSBC Halbis Partners
Insight Investment
Mitsubishi UFJ Trust & Banking Corp
Morley Fund Management
RCM (Allianz Global Investors)
Sanpaolo AM, Eurizon Financial Group

One of the key objectives of the group is to continue to explore how ESG metrics or considerations are of importance for company valuation and relevant to the investment decision.

This report illuminates links between ESG issues, financial value and company profitability across eight industry sectors. It directly complements the 11 reports from nine brokerage houses that were involved the group's earlier research in 2004[1]. In a global effort, the compilation of this document has involved the expertise of more than 22 different financial services firms internationally, including sell side research houses, asset management firms and an investment consultancy. The most salient factors have been extracted from more than 1,000 pages of financial analysis.

As with the 2004 research, the material contained in this document provides strong independent support for the view that effective attention to environmental, social and governance issues will enhance shareholder value. Investors who do not pay attention to environmental, social and governance issues are taking unnecessary risks with their portfolios. Investors who do pay attention are probably improving the risk/return relationship.

This report is an important contribution to the ongoing work of the AMWG. It logically follows from the report we commissioned of the law firm Freshfields Bruckhaus Deringer in 2005, which highlights that consideration of ESG factors is a fiduciary obligation of institutional investors, and provides particular demonstrations of ESG materiality.

By publishing and broadly promoting this research we seek to expand the number of investment professionals who take ESG issues into consideration, as we do, because we not only believe that responsible investment practice is part and parcel of creating the conditions that lead to global sustainability, but also that it can result in better financial returns for those whose assets we manage.

Carlos Joly
Advisor to the CEO
Groupama Asset Management
Co-Chair,
UNEPFI Asset Management Working Group

Vincent Zeller
General Manager and Chief Investment Officer
Groupama Asset Management, France
Co-Chair,
UNEPFI Asset Management Working Group

1) http://www.unepfi.org/fileadmin/publications/amwg/amwg_materiality_equity_pricing_report_2004.pdf

Introduction and Background

Investors have a unique kind of power: Their beliefs can shape markets. If they believe something is true, and invest as if it were, then it often becomes so. In such a world, there are times when it is legitimate to ponder whether the reality created is always sensible. Financial markets occasionally go through episodes of irrational exuberance that are often followed by dramatic crashes. And, while there is a long-term average rationality, the conventional wisdom of financial markets, no matter how quantitative and sophisticated, can often be quite mercurial.

Information is critical to shaping the beliefs of investors and in turn the trends of markets. And, the investment industry is forever seeking better ways to illuminate opportunities, risks, and more accurate manners to reliably interpret and value data. While there are no defined rules, there is a long-standing general consensus on the elements of information that are relevant, or material, to investment decision-making and security valuation.

However, in today's increasingly information rich and globalised business world, it is becoming apparent that this long-standing consensus is becoming outdated and the investment industry needs to broaden its understanding and analysis of a wider range of global issues that can affect business performance and investment value. It is in this context that first movers in the investment industry have realised the importance of ESG issues to business performance and the need to include them among the elements of information critical to investment decision-making.

While many remain unconvinced, there is encouraging evidence that the status quo is changing. Examples of progressive work include the European investor-led Enhanced Analytics Initiative[2], an incentive driven collaboration between asset owners and asset managers aimed at encouraging better investment research, and in particular research that takes account of the impact of extra-financial issues on long-term investment. Success is in the numbers: while only 16 reports qualified for its first evaluation period in 2003, 173 qualified for its most recent evaluation period in June 2006[3].

Another element helping to shape the debate includes the recently launched report produced by the international law firm Freshfields Bruckhaus Deringer[4]. The report, commissioned by UNEP FI AMWG in 2005, clarifies much of the long-standing confusion faced by those seeking greater regard for ESG issues in investment decision-making, but hindered by the traditional belief that institutional principals and their agents are legally prevented from doing so. It states that integrating ESG issues into an investment analysis so as to more reliably predict financial performance is clearly permissible and is under some circumstances required in all jurisdictions considered. Those considered include Australia, Canada, France, Germany, Italy, Japan, Spain, UK and USA.

Stepping back to the materiality case and the growing consensus for including ESG issues in investment decision-making processes, UNEP FI AMWG championed work in this area in 2004 when it published "The Materiality of Social, Environmental, and Corporate Governance Issues to Equity Pricing"[5]. The publication produced a robust case for the financial materiality of ESG issues and provided fertile ground for driving forward a number of now flourishing initiatives. Findings from this report, presented to institutional investors in late 2004, helped spark an incentive to develop a set of Principles for Responsible Investment (PRI)[6] that would reflect a commitment to integrate ESG issues in investment decision-making

2) See: http://www.enhanced-analytics.com/

3) *Strengthening Institutional Commitment*, EAI June 2006 evaluation of sell-side extra-financial research.

4) http://www.unepfi.org/fileadmin/documents/freshfields_legal_resp_20051123.pdf

5) http://www.unepfi.org/fileadmin/publications/amwg/amwg_materiality_equity_pricing_report_2004.pdf

6) http://www.unpri.org

and ownership practices. The Principles, launched by UN Secretary-General Kofi Annan together with global investors at the New York Stock Exchange in April 2006, are a major commitment by signatory institutional investors and asset managers to integrate ESG issues into decision-making processes and provide a significant platform for their inclusion in mainstream investment practice.

In short, investors and analysts who wish to consider ESG issues are supported by a seemingly robust business case, legal opinion and structural framework to do so. Yet, despite this apparent momentum driving the uptake of these initiatives in the mainstream investment industry, many analysts and investors still do not routinely consider ESG issues and financial markets are not consistently shaped by them. Why is this? Ask any mainstream investor why they do not consider these ESG issues, and despite the relative documented evidence, most will tell you that ESG issues have little to do with money and profit making or enhancing financial value. Therein lies the most evident blockage to the mainstream integration of ESG issues, many mainstream investors are unconvinced of their materiality, and unless clear links to financial value are consistently made, it will be difficult to persuade many investors to account for them.

Strangely enough, investors have long acquaintance with the financial materiality of environmental and social disasters: ask anyone who was unaware of asbestos liabilities in the late 1980s or early 1990s, or those with substantial allocations to Union Carbide following the Bhopal explosion[7]. More recently, investors who suffered the pain when major accounting irregularities or governance problems came to light in companies like Enron[8], WorldCom[9], Tyco[10], Parmalat[11], and Vivendi[12] do not question the importance of governance to financial performance. And investors everywhere are beginning to understand the powerful implications of climate change on portfolio performance across sectors[13]. Since the entry into force of the Kyoto Protocol and the advent of the European Union's (EU's) Emissions Trading Scheme (ETS) in early 2005, carbon dioxide (CO_2) and other greenhouse gas (GHG) emissions have a price, and emission reductions have value in most of the major developed markets of the world. When BP announced programmes to go "Beyond Petroleum"[14] and established its own emission reduction programme, and GE unveiled its Ecomagination initiative[15], these companies were signalling that they understood the new opportunities created by climate change on the competitive landscape. On the risk side, there has been a nearly threefold increase in the number of Category 4 and 5 hurricanes in the past two decades, attributable to the warming of the oceans. Infrastructure and property losses

7) In December 1984, an explosion at a Union Carbide India pesticide plant released toxic gas and its reaction products over the city of Bhopal. The estimated mortality of this accident is believed to have been between 2,500 and 5,000 people, with up to 200,000 injured. The Bhopal event was the worst industrial disaster ever.

8) ENRON became notorious at the end of 2001 when it was revealed that its reported financial condition was sustained mostly by institutionalised, systematic, and creatively planned accounting fraud. It was the biggest bankruptcy in U.S history and has since become a popular symbol of willful corporate fraud and corruption

9) Beginning in 1999 and continuing through May 2002, WorldCom used fraudulent accounting methods to mask its declining financial condition by painting a false picture of financial growth and profitability to prop up the stock price. WorldCom's internal audit department uncovered approximately $3.8 billion of the fraud in June 2002

10) Tyco's leadership was rife with accounting irregularities and fraud. In 2004 the former CEO and CFO, were accused of the theft of US$600 million from the company. During their trial in March 2004, they contended the board of directors authorised it as compensation.

11) At the end of 2003, one of the biggest corporate scandals in history came to light as an 8 billion hole was discovered in Parmalat's accounting records.

12) In 2002 Vivendi disclosed a corporate loss of 23.3 billion. Its former flamboyant CEO Jean-Marie Messier, who overpaid hugely for media assets, saddling the company with debt far in excess of its market valuation and ultimately bringing it to the brink of collapse, has become a study in the triumph of personal ambition and greed over common sense.

13) Examples include the Investor Network on Climate Risk: http://www.incr.com

14) Beyond Petroleum is BP's initiative on developing renewable energy sources.

15) Ecomagination is GE's initiative and commitment to build innovative solutions that benefit customers and society at large.

soared into hundreds of billions of dollars in 2005[16], following the formidably destructive typhoon Damrey that struck south China and Vietnam only days after Katrina devastated the Gulf Coast of the USA.

Social factors, too, are growing ever more important. The widely respected management consulting firm – McKinsey – points out,

"Increasingly, a company's sources of long-term value (for example, its brand, talent, and relationships) are affected by a rising tide of expectations among stakeholders about the social role of business. Two forces are colliding: an emerging set of sociopolitical megatrends … that are upending the lives of people, communities, and societies, as well as ever-more-powerful stakeholders wielding wide influence."[17]

Investors who pay attention to ESG issues know that disasters are often not surprises. Nothing plagues markets more than uncertainty and imperfect information, and much of the business of finance is the relentless pursuit of better information. With it, investors can anticipate, and anticipation means fewer surprises, the bête noire of the prudent investor. Increasingly, it has been found that looking at corporate environmental and social performance can impart an extra measure of advance notice of well-managed, or equally important, poorly-managed, enterprises. Moreover, looking under these lamp posts is often a hedge against deviousness: companies that are skating on thin financial ice often have small armies of accountants devoted to arranging financial statements designed to lull investors into a false sense of security. Few companies have – or even can have – similar power over their social and environmental reporting, for they are seldom in sole control of such information.

Well-managed companies generally do not abuse the planet, or unfairly exploit their workers, their suppliers, or their communities. Seeking good investments under these lamp posts, as well as looking at more familiar financial factors, can often give excellent insight into a company's quality of management and corporate governance. Clues are often seen to large unpleasant surprises – the thing investors dislike the most – as well as undervalued opportunities in day-to-day management of environmental, social, and governance factors. The key, of course, is simply attentiveness: those who believe that ESG issues are important, and assess them, are much more likely to be prepared for the events that surprise the inattentive.

This publication marks the second iteration of work produced by UNEP FI AMWG on the financial materiality of ESG issues. For this round, the AMWG requested ten sell-side brokerage houses to write reports across various sectors and matters of relevance. Analysts were given a free hand to cover the areas they felt to be the most important and were not influenced in their choices by the AMWG.

To provide an informed and impartial view, CRA RogersCasey[18], a US-based investment consultancy firm, was commissioned to comment on whether the documented ESG links to financial value in the research submitted were strong enough to make a convincing case for mainstream investors.

The publication has a simple objective: to unequivocally link ESG issues to financial value in such a manner that the mainstream value-driven investor can no longer disregard or dismiss them as irrelevant to investment performance.

16) Munich Re: "Annual Review: Natural Catastrophes 2005"

17) Sheila M. Bonini, Lenny T. Mendonca, and Jeremy M. Oppenheim, "When Social Issues Become Strategic: Executives Ignore Sociopolitical Debates at Their Own Peril," *McKinsey Quarterly*, April 2006, No. 2.

18) For further information on CRA RogersCasey, see participating institutions in the appendix

Research Chronology

Date	Research
2003	UNEP FI Asset Management Working Group commissioned 11 mainstream research institutions to research the financial materiality of ESG issues to securities valuation.
2004	The findings were launched at UN Global Compact Leaders summit, New York.
2004	UNEP FI AMWG convened a meeting of Europe's largest pension funds to discuss formulation of a framework and other possible responses by institutional asset owners to the rapidly evolving understanding of the interaction between the largest pools of institutional capital and the environments and societies in which they invest. Following this meeting UNEP Executive Director, Klaus Toepfer, announced the "Principles for Responsible Investment (PRI)".
2004	The investors forming the PRI development group were invited by UN Secretary-General, Kofi Annan, in late 2004 to join a development process co-implemented by UNEP and the UN Global Compact.
2005	20 of the world's largest investors met during the year to develop the PRI, with the initial "investor group" meeting convened by Kofi Annan and subsequent meetings supported by a group of more than 80 experts on responsible investment.
2005	UNEP FI AMWG launched a second call to sell-side researchers to produce ESG-inclusive research.
2005	UNEP FI AMWG worked in partnership with WBCSD (World Business Council for Sustainable Development) on young financial analysts, to perform a "reality check" of whether ESG concepts were really penetrating at grassroots levels within the financial services sector.
2005	UNEP FI AMWG commissioned a legal opinion from Freshfields Bruckhaus Deringer, seeking clarification on the following questions: • Does the law in the largest capital markets jurisdictions permit institutional investors to consider ESG issues in their investment decision-making and ownership practices? • Are investors obligated to take action on such issues in some cases? • What is the likely evolution of the (interpretation of the) law with respect to investors and ESG issues?
2005	12 reports produced by 10 different brokerage houses were submitted for UNEP FI AMWG's materiality research. US headquartered investment consultant CRA RogersCasey was commissioned to produce an independent summary review of each report.
2006	The Principles for Responsible Investment (PRI) were launched at the New York Stock Exchange.
2006	UNEP FI AMWG's second materiality report, "Show Me The Money" is launched.

Findings and Recommendations

The AMWG finds the scope and depth of the brokerage reports presented is considerable.

Some like CM-CIC securities' reports on the automotive and aerospace-defence industries, ABN Amro Real's report on the Brazilian forest products industry, and Goldman Sachs Global Investment Research's report on European media, covered industries and sectors.

Others took on issues, like Dresdner Kleinwort Wasserstein Macro Research's report on demographic trends in Europe, WestLB's auto industry report, Morgan Stanley's analysis of coal power and emissions, and JP Morgan's obesity report. Deutsche Bank's report on the materiality of corporate governance spanned a very wide range of companies, covering over 2,000 enterprises, and a wide range of governance-related topics.

The variety of these reports reflects the general depth and scope of ESG issues, and the fault zones they may create in the landscape of more familiar financial analysis. We find these reports provide an overwhelmingly wide and rich analysis of the impact ESG issues can have on security valuation, business performance and financial value. We particularly applaud those that offer valuation targets or adjustments based on ESG and financial factors.

Some investors are already convinced that the ESG performance of companies is integral to their financial performance; many others are sceptical. To both the converted and the sceptics, the AMWG offers this study, and the twelve analyst reports that are its building blocks, as illumination.

The AMWG findings and recommendations are informed by the views of CRA RogersCasey on the twelve research reports, as well as our own wider experiences exploring ESG issues, both as individuals within investment organisations and collectively as UNEP FI's Asset Management Working Group.

Key Findings and Recommendations

1) **ESG issues are material – there is robust evidence that ESG issues affect shareholder value in both the short and long term.**

2) **The impact of ESG issues on share price can be valued and quantified.**

3) **Key material ESG issues are becoming apparent, and their importance can vary between sectors.**

These findings are based on research by established financial analysts and backed by the views of an independent investment consultant. We call on investors, asset managers and financial service providers to act on the links between ESG issues and company profitability.

1) **ESG issues are material – there is robust evidence that ESG issues affect shareholder value in both the short and long term.** We find over the course of three years of our research, analysts have presented significant evidence of the positive and negative impacts environmental, social and governance issues can have on share price across multiple sectors. Our analysis is supported by a number of initiatives that have produced similar variations of this research. And indeed, investment consultants CRA RogersCasey have reached the same conclusion reviewing the research reports.

2) **The impact of ESG issues on share price can be valued and quantified.** While further development is clearly desirable, the development of valuation tools and increased sophistication of this study compared with the AMWG's first study in 2004 is striking. Using a range of valuation tools, including benchmarking, scenario analysis, proprietary valuation methodologies, and case studies, several of the reports incorporate ESG variables into company valuations. Of the analysts' research provided for the project, nine reports had evidence of a link to materiality, of which six were explicitly quantified.

3) **Key material ESG issues are becoming apparent, and their importance can vary between sectors.** The reports submitted begin to describe an emerging taxonomy of ESG risk categories. While not all the reports use the same language, many acknowledge similar factors: the importance of public policy and regulation in determining materiality; the importance of brand and reputation as emerging categories of risk (particularly to companies whose primary exposure is directly to consumers), the importance of global supply chains and the ability to manage outsourcing and supply chain risk, the importance of ageing workforces, pension obligations, and healthcare costs, and the overarching significance of corporate governance. Additionally, there are issues that are uniquely important to certain industries or sectors. Sector reports included in this study identified several of these.

What this means for investors and asset managers

Investors and asset managers can manage risk better if they consider ESG issues. Application of ESG criteria in investment decision-making processes by asset managers and financial advisors has the potential to reduce portfolio risk through identification of material, but often overlooked, investment issues.

Investors and asset managers can potentially increase profits if they incorporate ESG issues into investment decisions. Evidence suggests company valuation is not complete unless it includes a consideration of ESG issues. Concrete examples linking financial value to ESG issues are now strong enough to support this notion. The conditions where ESG issues can add the most financial value for investors occur when:

- ESG issues can be demonstrated to have a potentially financially-significant impact on specific drivers of equity valuation (for example revenues, costs).
- ESG issues under analysis are known to be under-researched by the consensus of investors.

Active investors who are not only well-informed of ESG issues, but crucially incorporate those issues consistently into equity valuation and consequently, portfolio construction, are therefore more likely (all things being equal) to outperform their peers who under-research these issues.

Asset managers can tap into a growing market by embracing ESG issues in core investment processes. Early movers are making the change now; those who do not are at risk of being behind the curve. Last year law firm Freshfields Bruckhaus Deringer showed that it is certainly permissible – and arguably required – to consider ESG issues when discharging fiduciary duty. And international funds worth more than USD4 trillion now endorse the UN Principles for Responsible Investment (PRI). The asset management landscape is changing, but there is no reason to get lost. Asset managers can find their way, by:

1) Committing to existing initiatives that provide robust frameworks for the integration of ESG issues in mainstream investment, such as the PRI, and show significant change in investment process resulting from such commitment;

2) Joining industry-led initiatives, such as the EAI, where participating asset managers commit portions of their commissions to brokers who are effective at making the link between financial analysis and ESG factors; and

3) Joining public private partnerships between the UN and the financial sector, such as UNEP FI, to help advance the state of the art on ESG matters.

What this means for financial sector service providers

Service providers need to improve their research. The AMWG has identified several key methods analysts can use to do this:

1) Analysts can undertake more historical analysis of the effects of ESG issues. A longer series of historical data will improve the reliability of analytical conclusions.

2) Material evidence is most obvious when comparisons are made across all companies in a sector or industry.

3) Brokerage houses are increasingly developing systematic ESG frameworks resulting in ever more sophisticated and detailed analysis. Systematic and consistent frameworks are more user-friendly for members of the investment management industry.

Broker Report Extracts with CRA RogersCasey Commentary

This section consists of a summary table and relevant material on each of the analyst reports submitted for this project. In addition to highlighting the essential points of each piece of research, CRA RogersCasey have also, in the context of its investment consulting experience and expertise, provided key comments on outstanding features of the various reports.

To view and download the full reports produced by the various analysts and research houses please visit: http://www.unepfi.org/investment

Report	Firm	Sector	Region	ESG Framework	ESG Factors Evaluated	Company Analysis	Materiality Link Y/N	Materiality Link Quantified	Methodology
Forest Products and Sustainability	ABN Amro	Forestry	Brazil	partial	E, S	some	Y	partial	company case study
On the Road Again	CM-CIC	Auto	Multi	partial	E, S, G	Y	Y	partial	company assessment
Business as Usual	CM-CIC	Aerospace & Defence	Multi	N	G	Y	N	N	company assessment and sector review
Beyond the Numbers	Deutsche Bank	Multi	Multi	partial	G	Y	Y	Y	company assessment
Media	Goldman Sachs	Media	Europe	Y	E, S, G	Y	Y	Y	company assessment
Demographic Trends in Europe	DrKW	Economy wide	Europe	N	S	N	N	N	economy wide
Obesity	JP Morgan	Food & Beverage	Multi	Y	S	Y	Y	Y	company assessment
Green Property	Merrill Lynch	Property	Australia	partial	E	some	Y	partial	company case study
Clean Coal	Morgan Stanley	Capital Goods	Europe	N	E	N	partial	N	technology review
Chemicals	Morgan Stanley	Chemicals	Europe	N	E	Y	Y	Y	company assessment
Food & Beverages	UBS	Food & Beverage	Multi	Y	E, S, G	Y	Y	Y	company assessment
Squaring the Circle	West LB	Auto	Multi	Y	E, S, G	Y	Y	Y	company assessment

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On the Road Again	CM-CIC	Auto	Multi	partial	E, S, G	Y	Y	partial	company assessment
Business as Usual	CM-CIC	Aerospace & Defence	Multi	N	G	Y	partial	N	company assessment and sector review
Beyond the Numbers	Deutsche Bank	Multi	Multi	partial	G	Y	Y	Y	company assessment
Media	Goldman Sachs	Media	Europe	Y	E, S, G	Y	Y	Y	company assessment
Demographic Trends in Europe	DrKW	Economy wide	Europe	N	S	N	partial	N	economy wide
Obesity	JP Morgan	Food & Beverage	Multi	Y	S	Y	Y	Y	company assessment
Green Property	Merrill Lynch	Property	Australia	partial	E	some	Y	partial	company case study
Clean Coal	Morgan Stanley	Capital Goods	Europe	N	E	N	partial	N	technology review
Chemicals	Morgan Stanley	Chemicals	Europe	N	E	Y	Y	Y	company assessment
Food & Beverages	UBS	Food & Beverage	Multi	Y	E, S, G	Y	Y	Y	company assessment
Squaring the Circle	West LB	Auto	Multi	Y	E, S, G	Y	Y	Y	company assessment

Forest Products and Sustainability: Risks and Opportunities in the Brazilian Industry

Research firm: ABN Amro Real Corretora
Sector: forestry
ESG issues considered: environmental and social

Summary

This report details the most salient factors affecting the corporate financial results of pursuing sustainability in the context of the Brazilian pulp and paper production industries.

Given the industry's reliance on natural resources, as well as the heated polemics surrounding Brazilian forests, the report stresses environmental issues along with economic ones.

The report presents case studies of four major Brazilian pulp and paper producers.

Essential Points

Pursuing sustainability can have positive short-term effects on financial performance

The author highlights three primary routes through which this can occur:

1) impacts on revenues;

2) reduction of capital costs; and

3) reduction of operational costs.

With regard to the first route, impacts on revenues, the most significant sustainability factor that drives potential sales increases is product certification. Product certification creates product differentiation, which can be valuable in markets where consumers are sensitive to the environmental and or social issues related to Brazilian forests (for example in Europe). Eco-labels and recycled paper products are two other potential ways to increase revenue that have been under-exploited in Brazil.

The second effect, reduction of capital costs, is linked to regulatory changes.

The third effect, reduction of operational costs, is driven by efficiency standards implied by sustainability (for example, less waste, more efficient water usage). Carbon emission trading is also noted as a financial opportunity related to sustainability.

There are a number of environmental and social factors – directly related to the objective of sustainability – that can affect corporate financial results

Those examined by the analyst in this report are:

1) Input side:

- sustainable forest management;
- efficient water usage; and
- efficient energy usage.

2) Output side:

- atmospheric emissions;
- effluents;
- product lifecycle; and
- innovative processes.

The key financial impacts of the aforementioned factors are:

Forest Management: long-term sustainable production, and reduction of wood wasting can lead to the reduction of related exploration costs. Furthermore, good forest management is necessary for certification, which can result in lower insurance and financing costs, as well as the product differentiation discussed previously.

Water Usage and Effluents: efficient water usage postpones resource scarcity and decreases the costs of using water. The proper treatment of effluents can help avoid costly environmental externalities.

Energy Efficiency: using less energy from fossil fuels reduces carbon dioxide emissions that cause climate change, and also reduces costs.

Atmospheric Emissions: Profiting from the sale of carbon credits is another potential source of corporate revenue.

Product Lifecycle / Innovative Processes: the author also mentions some innovations and research that could help lead to more efficient, cleaner production processes (for example, recycling, and the promotion of non-wood fibres).

In addition, the report analyses the importance for these industries in engaging with the various stakeholders concerned about the fate of Brazil's forests (for example, environmental groups and indigenous peoples).

Report Conclusions

- Environmental and social concerns can impact corporate financial results and are extremely relevant to the forestry industry.
- Adopting a sustainable path can have a positive short-term impact on company financial results.
- Corporate governance with regard to these environmental and social concerns has been improving but there is still a long way to go.
- Environmental concerns are a very important driver of technological change in the pulp and paper industries.
- Adherence to an international standard by the industry would permit greater transparency and comparability across firms – the author found existing sustainability reports and data to be difficult to compare. The advent of the Enterprise Sustainability Index is a helpful step in that direction.

CRA RogersCasey Comments

- This report is an effective analysis of sustainability considerations relevant to the Brazilian paper and pulp industries, which naturally have applications for these industries internationally, as well as other productive activities within the forestry sector.
- Some examples of key forestry considerations and practices that can be extended beyond Brazil are:

  — the potential revenue benefits of receiving a recognised certification;

  — the importance of environmental concern as a driver of technological process;

  — the financial benefits of operating more efficiently; and

  — the importance of public scrutiny and regulation in affecting the market dynamics of these industries.
- Potential positive revenue effects resulting from certification are contingent on the sensibilities of the final marketplace. If a given market is less environmentally sensitive, say, in the case of Indonesia exporting forest products to China, then certification would have less impact on product differentiation and revenues.
- The corporate case studies are effective in providing evidence for the report's key points. One key focus is certainly the firms' efforts to become certified by a variety of forestry oversight organisations. It might be helpful in further reports to examine some firms that have lagged vis-à-vis sustainability initiatives for the sake of comparison and to get a more detailed feel for the actual financial impact of pursuing sustainable practices.
- This report clearly states, and makes a solid logical case for, the material financial benefits that sustainable practices can have in the Brazilian pulp and paper industries. However, it would also be desirable to get some feel for the actual dollar magnitude of adopting various practices and standards. If indeed, as the author suggests, sustainability initiatives can have a direct material impact on company financial results, as well as enhance the perception of corporate governance, then these initiatives would obviously be of interest to an international asset manager (given direct financial impact, as well as the importance of strong corporate governance, an issue that is particularly salient for emerging markets managers).

On the Road Again: A Financial and Extra-financial Analysis of the Auto Industry

Research firm: CM-CIC securities
Sector: auto
ESG issues considered: environmental, social and governance

Summary

This report provides a comprehensive assessment of ESG issues that can affect the global auto industry – the current operating environment, industry trends, environmental and regulatory challenges, current and future leaders, alternative technology and environmental impacts. Opportunities and constraints resulting in BRIC (Brazil, Russia, India, China) emerging markets are considered. Company profiles and ratings of 13 leading automakers are included. CM-CIC identifies Toyota as a clear winner today and positioned for the future. The report concludes with an environmental performance and reporting assessment by TruCost.

Essential Points

Long term winners in this sector will be those with the best strategic management of legacy costs, governance issues, environmental laws and new technologies

CM-CIC looks out 10 to 15 years for the auto industry. The huge increase in oil prices and the realization that fossil fuels are a limited resource will push alternative technologies to the forefront. Controlling costs, fuel efficiency and technology will be key. Suppliers are likely to have more impact as they face similar pressures regarding offshoring, research and development (R&D) and costs. Future partnerships between automakers may emerge. Most automakers are looking at more than one option for the future, specifically diesel, fuel cells and hybrids. Toyota stands apart because of its strong financial position and strategic vision. Toyota has successfully positioned the Prius hybrid as the alternative.

CM-CIC reviews offshoring (moving production to low cost labour centres). It notes that labour is only 10 to 15 percent of production costs and there are other important factors such as local laws, quality and training that can also have a major impact. Up to 80 percent of production costs come from procurement-buying raw materials, components, sub-assemblies, etc. A major area for cost savings is therefore local sourcing, with procurement shifting east to Eastern Europe, China and India. For many "older" automakers, the legacy costs of healthcare and pension may also be crippling. Older workers cost 2 to 3 times a younger worker, with European and Japanese firms being much better positioned than US firms. These legacy costs could be the Achilles' heel of the auto sector.

CM-CIC believes all firms can make improvements in governance. Most boards lack international representation, too many have "buddy-buddy" relationships with executives and not enough are asking the challenging questions. In addition, environmental laws and regulations are increasing and becoming stricter over time. Automobile manufacturer associations in Europe, Japan and Korea have agreed voluntarily to reach the European Commission's objectives for 2012 on CO_2. In the USA, the Corporate Average Fuel Economy has not changed since 1990 (27.5 mpg) and is being challenged by California and other states that are setting more stringent goals. China has adopted fuel efficiency standards by model as opposed to fleet, and cars may not be sold if they don't meet the standard. New technologies have to date, focused on non-carbon producing options: hydrogen, electric and fuel cells. Reducing emissions has been a driver for increasing fuel efficiency. Consumers are driven by costs and will respond accordingly to cleaner technology and fuel efficiency. Technology and infrastructure will determine the proportion of internal combustion engines (ICEs) and non-ICEs – hybrids and alternative fuel. Whatever mix emerges needs to be accessible and affordable.

With the exception of Porsche, all thirteen companies profiled, are investigating more than one option for the future: hybrids, diesel, bio-fuel, batteries, H2, fuel cell, or CNG. All but Porsche are looking at both diesel and fuel cells, and 7 of the 13 are also working on hybrids. Toyota stands apart because of its increasing market share, strong margins, large production facilities and strategic vision. Toyota has already been innovative and successfully created the Prius hybrid as the alternative vehicle. Toyota is likely to become the leader in volume within the next 5 years. Honda and Hyundai are also strong competition to Toyota.

Emerging markets offer growth opportunities in the near and longer term

The emerging middle class of Brazil, Russia, India and China potentially represent over 1 billion new auto buyers. CM-CIC believes the growth potential of the BRICs is forecast as strong not only for today but also for the next 5 to 10 years as well.

Brazil has been an alternative fuel pioneer, with 30 years experience with ethanol, and in the mid-1980s had up to 70 percent of car sales ethanol based in response to a government programme to reduce dependence on foreign oil. The US has shown interest in the alternative fuels programme and developing countries are moving quickly on bio-fuels. Russia has the least developed auto market of the BRICs and the automakers have been in decline. India has enormous potential and has become the world’s fastest growing major car market. Car sales are expected to grow 10 to 30 percent over the next 5 years. Affordability is an issue yet the middle class is growing. China is the most competitive and cut-throat market. China is the world’s number three auto market globally, after the US and Japan. CM-CIC Securities expects China could overtake Japan and even the US in 15 to 20 years. The key to understanding the market is the Chinese government who sets the rules.

Poor Environmental disclosure can be a liability

Environmental performance is becoming more important as energy costs rise and pressure increases to reduce carbon emissions. Environmental performance, in this instance, is measured by the use and sourcing of energy and raw materials in the production process, supply chain and waste. TruCost evaluates 11 of the 13 companies profiled in the report and finds a wide disparity on environmental disclosure. Of three key indicators (greenhouse gas emissions, water use and waste), only 5 of 11 companies quantified data for all three areas in public disclosures. Lack of disclosure in itself may be a liability for companies as investors seek to assess a company’s future competitiveness and liabilities.

Recent legislation around the world has been aimed at company reporting, including the EU Modernisation Directive and French legislation requiring companies to disclose how “the company takes into account the social and environmental consequences of its activities.”

Direct external costs, primarily from Green House Gas (GHG) emissions and water use, are estimated to have an impact ranging from below 1 to 3.5 per cent of Earnings Before Interest, Taxes, Depreciation and Amortization (EBITDA). Other environment-related legislation relates to responsible disposal of electrical and electronic equipment and vehicles at the end of their life.

Report Conclusions

CM-CIC Securities clearly states that the complexity of the auto industry and the issues facing it make it difficult, if not impossible, to be definitive with projections. That notwithstanding, CM-CIC identifies Toyota as a leader today and well positioned for tomorrow, given its strong financial position and long term sustainable strategic vision. Hyundai and Honda are also strong competition. Legacy costs (pensions and healthcare) may cripple past giants such as GM and Ford which will require restructuring to be competitive. Emerging countries provide the most growth opportunities for the short and longer term.

Given the financial, regulatory and environmental pressures to reduce carbon emissions, alternative fuels and technology are imperative. Most companies are assessing more than one alternative for the future, primarily diesel, fuel cells and hybrids. Yet, fuel cells are unlikely to be fully viable for 10 to 15 years. Regulatory requirements for public disclosure of environmental impacts are increasing and will provide data for companies and investors to assess implicit future liabilities.

CRA RogersCasey Comments

- CM-CIC provides a comprehensive review of the global auto industry focusing on 13 top producers.
- Rather than including a separate ESG framework, CM-CIC incorporates ESG issues into the automaker's cost structure. TruCost calculates the effect of 11 companies' environmental impacts (primarily greenhouse gas emissions and water use) on EBITDA. For CM-CIC, evaluating extra-financial issues is about "facts, figures, key drivers and above all – costs". Incorporating this evaluation into the existing cost structure is therefore helpful to show the "value" of the environmental impacts.
- Through the TruCost analysis, CM-CIC clearly shows materiality of environmental impacts. For each company, TruCost identifies and quantifies the impact for the top ten direct (company) and indirect (supply chain) external environmental costs.
- CM-CIC also evaluates social costs within the context of labour benefits (healthcare and pensions) and the impact on automakers' cost structure. The ageing workforce and high benefit structure of the Big 3 (DaimlerChrysler, Ford and GM) and Canadian automakers create a significant competitive disadvantage compared to European and Japanese automakers. The social cost of job losses as market share is lost to competitors is also identified as a potential trade-off, yet not explicitly quantified.
- Governance is evaluated for all companies with a focus on German automakers and the practice of "co-determination" where union or employee representatives are given seats on a company's board of directors. While the strengths and weaknesses of corporate governance practices are not quantified, CM-CIC has identified board structures, linkages between automakers and financiers (banks), old boys networks, and "cosy" relationships. These practices indicate lack of independence and often lack of transparency. How the lack of independent board structures corresponds to the company rating and financial assessment was not clear.
- CM-CIC is to be commended for their thorough review of the auto sector.

Business as Usual: A Financial and Extra-financial Analysis of the Aerospace & Defence Industry

Research firm: CM-CIC securities
Sector: aerospace & defence
ESG issues considered: governance

Summary

This report focuses heavily on the defence portion of the sector with very little emphasis on non-defence related portions of the aerospace industry. The authors conclude early on in the report that the very nature of the defence industry largely eliminates any possible inclusion of extra-financial factors in the analysis of these companies. The report seems to further conclude that politics and analysis of security policies play as large a role as traditional financial analysis in analysing defence companies. This is reflected in the report's minimal use of financial models in evaluating companies in the industry.

Essential Points

ESG factors have very little direct financial impact on the aerospace and defence sector

In the author's view defence companies are primarily driven by the security policies of the state. Nationalistic considerations often trump other considerations in awarding defence contracts, with ESG factors having no material impact.

The defence industry is rife with bribery and corruption

Rather than being a straightforward governance consideration, the often insidious nature of the industry's bribery and corruption is a double-edged sword for governance considerations in the sector. While many countries have attempted to reduce bribery and corruption, few have been successful. As a result, bribery is an accepted cost of doing business in some countries. The author concludes that companies with strong controls on bribery and corruption may actually be at a competitive disadvantage because purchasers accept it as the normal state of business.

Defence companies that rely on exports to less democratic countries have greater risks

Given the view that bribery and corruption are virtually required to do business in many states, but especially less democratic ones, the longer-term business risk is higher for companies that export to such regimes. There is also the additional reputational risk for companies that are seen to provide support for potentially repressive regimes.

Defence companies' ESG-related policies are heavily driven by states' policies on the factors

Given the authors' view that defence companies are in some ways vassal companies of the state and that nationalistic considerations trump normal business considerations, aerospace and defence companies will only value ESG factors to the extent the sponsor state does.

Several corporate governance considerations in this industry can be identified

Relationships with the state often distort free competition in the industry. This is further complicated by the convoluted ownership structure common in the industry. Ownership structures also vary by country, which makes analysing governance even more difficult. In the USA, defence companies tend to be straightforward public companies, while in the UK they tend to be privatised formerly state-owned companies. In France and continental Europe, defence companies tend to have a web of government and private cross holdings. Corporate governance regarding conflicts and corruption is largely subservient to the state's management and corruption enforcement. In addition, the general corporate culture of the defence sector is counterproductive for efforts to combat corruption and the management of conflicts of interest.

The impact of corruption on the industry is far reaching

While the reputational impact of incidents of corruption and bribery are now having a greater financial impact than in the past, the defence sector is often a fertile ground for corruption. Factors that contribute to this are:

- secrecy;
- security requirements can be used to justify nearly any purchase;
- complexity, especially the products, contracts and use of sub-contractors;
- the use of agents; and
- the hierarchical nature of defence contracts.

Report Conclusions

Governance within the defence portion of the industry is the overwhelming material concern identified for analysis by report authors. While not directly quantifying the financial impacts of this issue the report clearly identifies why each specific factor is relevant for companies operating within the sector. It also enables asset managers to use the report to distinguish how closely aligned a particular company's procedures are with the government policies within the country in which it operates.

CRA RogersCasey Comments

- The CM-CIC report focuses on defence and takes little consideration of the civil aerospace component of the sector. While the civil aerospace segment of the sector is admittedly small and difficult to separate from the defence component, it would seem that there are a number of material ESG factors that may also play a significant role in civil aerospace. Examples include impact of fuel prices and fuel efficiency on civil aerospace contracts, noise pollution regulations as well as governance issues surrounding the ever more globalised network of parts suppliers and sub-contractors.
- No financial framework for analysing the materiality of any ESG factors was established in the report. Given CM-CIC's identification of the governance issues surrounding bribery and corruption, we might have expected the authors to attempt to establish a financial analysis framework.

Beyond the Numbers: Materiality of Corporate Governance

Research firm: Deutsche Bank AG, London
Sector: multiple
ESG issues considered: governance

Summary

This report provides an overview of Deutsche Bank's corporate governance materiality research. Analysis of this subject has been a dedicated Deutsche Bank research effort for about four years.

Deutsche Bank has developed a multi-factor methodology for assessing the quality of a given company's corporate governance. The results demonstrate a positive relationship between corporate governance and stock prices in each region covered.

While the report briefly attempts to expand its governance work into a broader ESG framework via an analysis of major oil companies, this treatment is not as detailed.

Essential Points

Corporate governance undoubtedly has a material impact on equity performance

The author provides a concise definition of corporate governance as "the system by which corporations are directed and controlled". Furthermore, "companies typically interpret this as the promotion of corporate fairness, transparency, and accountability". The report notes that a number of subjective factors contribute to the quality of corporate governance and that they are difficult to measure.

Because corporate governance can be difficult to formulate and research, the author notes the frequent presence of time and information gaps that cause investors to react to negative governance events rather than anticipate them. Concomitantly, positive governance events are often taken for granted by investors. Given that corporate governance can obviously have an impact on shareholder value, the report cites such notable crises as those at Refco, Enron, WorldCom, and Parmalat. Deutsche Bank's primary contribution in this regard is to define governance factors, develop and test a governance research methodology, and subsequently demonstrate results that evidence the material impact of corporate governance factors on equity performance.

Corporate Governance can be broken down into multiple material factors

In this report, Deutsche Bank deepens the robust and established evidence of the materiality of corporate governance, by exploring 50 factors that can be used to quantify it. These have been grouped into four "pillars" with three accompanying guiding principles:

1) Board Independence:
   - Chairman independence, separation of Chairman and CEO;
   - Majority board independence; and
   - Independence of board committees.
2) Shareholder Treatment:
   - One share, one vote;

- No shareholder agreements; and
- No anti-takeover mechanisms.

3) Information Disclosure:
   - Procedural transparency;
   - Auditor interests appropriate and defined; and
   - Shareholder resolutions are comprehensive.
4) Executive Remuneration:
   - Remuneration structure simple and transparent;
   - Management and shareholder interests aligned; and
   - All remuneration policy changes approved by shareholders.

The author argues that these pillars and guiding principles should largely be logical and intuitive given the objective of promoting corporate fairness, transparency, and accountability. The report makes an effort to elucidate the importance of some of these points. Specifically, it spends time explaining the importance of Chairman independence and the separation of the Chairman and CEO positions, the independence of the board and its committees, having no anti-takeover provisions, and having equal voting rights. These points are supported by evidential anecdotes. The report also draws some special attention to the importance of having an independent audit committee, stating this to be "one of the most crucial issues that can affect governance standards".

There is robust evidence of a positive relationship between good corporate governance and profitability

Deutsche Bank's corporate governance assessment methodology involves the quantification of company governance position across the 50 factors, and this is done on an absolute scale of 0 to 100 per cent. These 50 data points encompass "primary, secondary, and tertiary issues of corporate governance".

Gathering data on corporate governance factors is often difficult, costly, and time-consuming. This means that even for the most transparent economies, the USA and the UK, only a five-year (2000-2005) historical model was possible.

Deutsche Bank used two primary testing methods:

1) The compilation of governance scores for a large set of companies at a common point in time (for example, at the end of 2000), and the subsequent compilation of equally weighted buy-and-hold top- and bottom-quintile portfolios; and
2) The compilation of equally weighted top- and bottom-ranked corporate governance momentum portfolios.

The report presents regional level results for Europe (202 companies in 14 countries). For this one plus year of modelling, Deutsche Bank finds that those companies with high initial governance scores and large positive momentum significantly outperformed the counterpart poorly ranked companies by a wide margin.

Country level data is presented for the UK, and robust results are also presented: a 34 per cent outperformance by the top quintile firms over the lowest quintile during 2000-2005 for the static approach, and also significant outperformance by positive momentum portfolios during a 20-month period from 2004 to 2005. Strong results are also shown for the USA, but are not further explained. In addition, the report mentions similar significant results for South Africa and other emerging markets.

These results constitute the bulk of this report, although some further testing is also presented. Specifically, governance event analysis is briefly presented, and, in greater detail, as well as testing of corporate governance quality on profitability. Profitability here is used as a proxy for competitiveness.

The report prefaces its findings by noting that profitability is additionally affected by regional and sectoral differences, and presents results that indicate a positive relationship between good corporate governance and profitability in the USA and the UK, less conclusive results in continental Europe, and a weakly positive relationship between good governance and profitability at the sector level.

Finally, the paper presents a brief methodology and test of a broader ESG measurement framework on 11 major oil companies. This section represents the presentation of an area for further research, rather than meaningful, extrapolative data.

Report Conclusions

The conclusions of this summary report are very clear: corporate governance factors have a significant material impact on equity performance. Because governance data is difficult and costly to collect, historical models are limited (sometimes very limited). However, the results that are presented (with a large sample of companies) demonstrate a robust correlation between good corporate governance and equity outperformance. Furthermore, it is shown that the positive and negative impacts of corporate governance can extend well beyond shareholders and affect a variety of stakeholders. Incorporating environmental and social factors into a governance measurement model is a difficult, but desirable, objective.

CRA RogersCasey Comments

- The thesis of the report is resoundingly clear: corporate governance can have a very meaningful impact on equity performance and can also materially impact a variety of non-shareholding parties.
- While the results presented in the report appear robust as they are supported by a large sample size and a transparent methodology, one would like to see these historical tests carried out over a longer time horizon. In this way, Deutsche Bank's corporate governance database and testing should perhaps be viewed as a dynamic, nascent undertaking more than a stable proof of the importance of governance on equity performance.
- While the project is relatively lacking in data, the results presented are quite conclusive. Furthermore, the quantitative results are supported by simple intuitive insight. The hugely negative impacts of poor governance have been witnessed at firms like Enron and WorldCom.
- Corporate governance is an area of increasing interest and research for equity managers, particularly in the emerging markets.

Demographic Trends in Europe: One Foot in the Grave?

Research firm: Dresdner Kleinwort Wasserstein Securities Limited
Sector: multiple
ESG issues considered: social

Summary

The report is a combination of several individual reports prepared by the research analysts at DrKW on demographic trends in Europe and their implications on economic growth. The report addresses several topics:

- The retirement of ageing baby boomers;
- The productive age of the workforce and its projected decline over the next 15 years:
- The possibility that current official life estimates are too conservative and its resultant impact on savings and domestic investments;
- The impact of higher government spending on budget deficits and debt levels given an ageing European populace;
- The implications of a projected move away from defined benefit plans towards defined contribution plans, and the ensuing effect on individuals who may be forced to take responsibility for their pensions, thereby resulting in an increase in mutual fund sales; and
- Changes in the spending patterns of this ageing demographic and the potential implications for companies in defensive sectors such as utilities, pharmaceuticals, health, personal care and food and beverages.

Essential Points

Ageing demographics are expected to have a very real impact on GDP growth trends

The first report in the series addresses the impact of ageing demographics on average productivity and economic growth. The author used three metrics (population of working age, labour force and productive age of labour force) and reviewed this data in five year periods going back to 1971. All three metrics indicate that the ageing demographic has resulted in a steady deterioration in labour supply beginning in the 1980s, with a small positive uptrend in the last five years.

The ageing demographic can affect economic growth (that is, GDP) in several ways – growth of labour supply, impact on savings and investment patterns and last, but not least, the cost of an ageing and dependant population. A look at the growth rates by decade (1970-2000) indicates slower GDP growth for the Eurozone in each decade when compared to the previous decade. The USA and the UK are two notable exceptions and have witnessed more stable GDP trends. The author uses GDP growth minus productive age labour force to determine if the decline in growth in the Eurozone can be explained by demographic trends.

The ageing of European populations will impact domestic savings, currency valuations and interest rates

The second report in the series addresses current life expectancy estimates and their impact on domestic savings and currencies, if in fact the estimates prove to be too conservative. According to the EU, the

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working age population in the Eurozone is likely to decrease by over 15 per cent by 2050. If one adds to this, the uncertainty of life expectancy, there are likely to be significant implications for domestic investments and interest rates.

Flight of capital from the Eurozone to other markets in search of higher returns is likely to result in a decrease in demand for domestic investments and consequently put downward pressure on interest rates. Additionally, longer life expectancy implies potentially higher pension provisions, which in turn implies higher savings ratios. The author highlights that this scenario could change if people take on additional household debt. The author also briefly touches on the possibility that asset prices may witness a depression as the reduction in total savings caused by people retiring causes an increase in interest rates

Government spending is expected to increase as a result of ageing populations

The third report in the series reviews the latest estimates generated by the EC regarding debt levels of the Eurozone's members to address the fiscal implications of an ageing population demographic.

In light of the most recent estimates, the report states that the Eurozone, as a whole, is unlikely to face issues regarding its debt sustainability if the member countries observe the Stability Pact. However, individual countries could be impacted.

Broadly speaking, there is no definitive target for achieving the improvement in debt/GDP levels; the Eurozone countries have the next 15 to 20 years to effect this improvement before the ageing demographic begins to play a factor post 2030. The report highlights the issue of increasing age related spending as a percentage of GDP. For example, in 2050, ageing is expected to increase government spending by about 3 per cent of GDP. The final revision to GDP could be lower, if countries are able to undertake significant reforms especially in the arena of pension spending.

Ageing populations will impact consumption trends and will, therefore, materially benefit select industry sectors over others

The fourth report reviews spending patterns across various age groups to determine several sectors and companies therein that are poised to benefit from an ageing demographic. In addition, the author states that mutual fund sales are likely to experience a surge, as companies close defined benefit plans and individuals find themselves responsible for their own retirement savings.

Report Conclusions

Over the past 20 years, the Eurozone has enjoyed favourable demographics due to baby boomers that boosted the ranks of the workforce and positively impacted economic growth. But with the retirement of baby boomers impending, the Eurozone finds itself facing a demographic crisis. This is further compounded by rising life expectancy and declining birth rates. This changing population demographic is likely to have a significant impact on economic growth.

The challenge is less exacerbated in the USA due to higher birth rates and large-scale migration.

The report goes on to review the EC's most recent estimates on the impact of ageing on fiscal issues. The report finds that while debt levels in some member countries appear unsustainable over the short term, the scenario could change if countries were to implement reforms to spending and eliminate budget deficits.

The report also addresses changing spending patterns of an ageing population and identifies certain defensive sectors such as utilities, food producers, beverages, health, pharmaceuticals and personal care to benefit from the increased spending in these sectors by an ageing population. The report identifies financial sector companies that specialise in selling mutual funds to be potential beneficiaries of this ageing demographic group.

CRA RogersCasey Comments

- The report provides an insightful look at the demographic changes looming for the Eurozone. It includes historical data to support its case for declining productive age work force and its resultant impact on economic growth, rising life expectancy, the impact of rising government spending on budget and debt levels in the Eurozone and the changing spending patterns of various age groups. While a thoughtful piece on the demographic crisis facing the Eurozone, the report in its current format, does not have direct implications for investors focused on ESG factors.
- We would recommend that the report include a framework detailing the extra-financial ESG factors that are relevant to and are impacted by the ageing Eurozone population. The authors do not address ESG factors in their individual reports and do not tie the individual reports together to address ESG factors that they deem relevant.
- The report details industry sectors that are poised to benefit from an ageing demographic, but stops short of detailed company specific analysis within these sectors. As such, in its current format, it is not possible for the reader to determine what, if any, impact the ageing population and their spending habits are likely to have on companies' bottom line and stock price.

Europe: Media - Introducing our Sustainable Investing Framework for Media

Research firm: Goldman Sachs Global Investment Research
Sector: media
ESG issues considered: environmental, social and governance

Summary

Using an explicitly defined framework, this report provides an analysis of material ESG impacts to the European media sector. At 176 pages, it is the most extensive, thoroughly developed report that we have received. Goldman's media-specific ESG framework is integrated with an analysis of the key themes and financial metrics influencing returns in the sector, and is used to analyse 23 European media firms to evidence the importance of ESG factors in contributing to investment performance.

Essential Points

Three primary drivers determine the sustainability of investments in the European media sector: cash returns, media-specific themes, and ESG factors

While the report explores ESG factors vis-à-vis the performance of the European media sector, it also provides a thorough analysis of multiple relevant sector drivers that help to frame the analysis. Specifically, Cash Return on Invested Capital (CROIC) is identified as the key financial metric in determining the valuation of European media firms over the past decade. Media-specific themes such as investment in human capital, exposure to emerging markets and the development of global brands, adaptation to technological change, that are necessary to tell the full story, are also explored. The key objective, of course, is to identify clear links between ESG factors and stock performance. In this case, links between ESG performance and cash returns.

Goldman Sachs has developed an explicitly defined ESG framework for the analysis of this sector

Goldman Sachs initially developed an ESG framework for analysis of the global energy sector in 2005. That 42-factor model was used to analyse oil and gas companies. It has now developed a similar, 31-factor framework that is media-specific. A number of environmental factors that were relevant in the former analysis are not relevant in the latter.

These 31 factors are included in five broader categories (weights):

- corporate governance (33 per cent)
- social - leadership (17 per cent)
- social - labour (23 per cent)
- social - communities and investment (13 per cent), and
- environment (14 per cent).

Note that the model weights lean overwhelmingly towards social and governance factors (86 per cent), as environmental factors (including consumption, waste, emissions and recycling considerations) are thought to be relatively less significant for media firms.

The report thoroughly delineates and explores the ways in which ESG factors have and will continue to have an impact in the European and global media sector

The relatively low explanatory power (21 per cent) of Goldman's ESG factors vis-à-vis cash returns would seem to be an impediment in evidencing their importance to sustainable investment in the sector. However, Goldman presents a very extensive analysis (on a sector, sub-sector, and case-by-case basis) of why these factors have been, and will continue to be, more significant than this one number indicates. For example, when the broadcasting oligopolies are excluded, eight out of ten ESG leaders are also sector leaders on cash returns. This seemingly strong relationship between ESG and CROIC (and, thus, valuation as well) continues at a sub-sector level, where ESG leaders are also sub-sector leaders. There are, of course, inherent differences in ESG scores across sub-sectors. The overall conclusion is that, given an industry with a high level of intangible assets and a concomitant focus on human and intellectual capital, in the context of a rapidly evolving competitive environment, quantitative and qualitative factors indicate a significant link between explicit, relevant ESG factors and sustainable performance in the European media sector.

CRA RogersCasey Comments

- This report should probably serve as a relative model to approaching ESG issues in that it elucidates an explicit, transparent, detailed and logical framework. It works to integrate that with a highly relevant sector analysis, is thoughtful and thorough on most levels, and draws from a fairly broad sample of companies. That being said, it could be substantially shorter and still communicate the salient points in sufficient depth.
- Global application: while this report deals with European media firms, much of the analysis will be highly germane to media companies domiciled around the globe. Factors and themes such as investment in human and intellectual capital, ability to cope with and innovate technological change, and growth in emerging markets will be relevant determinants of future success for many media firms around the world. However, local issues such as regulatory structures (as they have in some of the European cases, for example the broadcasting and pay-TV oligopolies) will have an impact and influence the explanatory power of Goldman's framework in some cases.
- Some important points are dealt with, but are not focal points of the report, and they deserve to be noted and reiterated. The report states on page 36 that management of ESG factors becomes increasingly necessary in a competitive, non-oligopolistic environment to gain approval for mergers and acquisitions, licensing, and other potential impediments. This explains the unusual inverse relationship between cash returns and ESG scores in the increasingly competitive broadcasting and pay-TV industry. This is of huge significance because it describes the power relationships that work to incentivise firms to improve along the ESG axis (particularly governance). It might be of interest to explore how similar incentive structures exist, or could exist, for factors other than those most directly tied to shareholders and the bottom line (that is, environmental improvements). Furthermore, Goldman Sachs finds that there exists a strong relationship between corporate governance scores and overall ESG scores.
- If one were to look at certain elements of this analysis they might be considered statistically insignificant (for example, the sub-sector analysis). However, when examining the report as a whole, and all of the arguments and analyses presented therein, Goldman Sachs does a very good job of presenting the case for the importance of ESG factors in media sector performance.

Obesity: Re-Shaping the Food Industry

Research firm: JP Morgan Securities Ltd
Sector: food and beverage
ESG issues considered: social

Summary

Obesity is a major health concern facing the food and beverage industry. This report examines the material impact a heightened understanding of the relationship between health, diet and obesity can have on company fundamentals. It does this by examining two major influencing factors: changing consumption trends and increasing potential regulatory and litigation issues.

Essential Points

Obesity is a serious concern for the food and beverage industry

The role of the food and beverage industry is at the heart of the obesity debate. In addition, it is estimated that in the EU, obesity now accounts for up to seven per cent of healthcare costs. These costs will increase as obesity continues to rise.

Healthy food is the key driver of food and beverage industry growth

Consumption is trending towards products deemed "healthier" by consumers, with the growth of these products increasing over the last couple of years. A supporting study, commissioned by JP Morgan across 59 countries and 89 food and beverage companies, found that companies who were embracing healthy products were experiencing above average growth; whereas those that were not were experiencing slower or declining growth. Value continues to be a key concern for consumers; companies need to find the right balance in terms of offering healthy products at prices that do not marginalise their business.

The largest challenge for food and beverage companies is to enter into the healthy eating segment, which has historically had less margin expansion than less healthy alternatives

Profitability of many healthy food and beverages is below industry average. This can make it hard to justify a move into the segment by companies who have historically experienced above average margins from their less than healthy product lines.

Moving down the value chain is not an option for many companies. Instead, the solution seems to be a focus on the improvement of current product recipes and formulas to create healthier alternatives.

However, when done correctly the business of healthy eating has given companies an opportunity to improve gross margins by:

- pricing at a significant premium;
- lowering the cost of goods through reformulation; and
- reducing the package size whilst maintaining the price.

Pressure from the European Union (EU) makes the combination of successful research and development (R&D) and strong marketing particularly important in Europe

The proposed EU Regulation "Nutrition and Health Claims made on Foods" is being taken into consideration by companies in both the UK and France. This legislation would limit marketing capabilities by greatly reducing the number of health-related claims that can be advertised for a product.

If this regulation is accepted:

1) Health claims will have to be supported by scientific studies driving food companies to spend more on R&D;
2) The list of unacceptable health claims will force marketing groups to be more creative and food manufacturers to continually improve their formulations; and
3) A scoring system developed by the Food Standards Agency (FSA) will help consumers quickly recognise foods that are not healthy.

Restrictions on advertising unhealthy food to children are being considered, and there is some country-based legislation. For example, France and the UK have banned vending machines from schools. In France, companies will have to pay a 1.5 per cent tax if advertisements of unhealthy products do not include a health message.

The food and beverage industry in the USA will be influence by litigation, not legislation

The current regulatory pressure in the EU has not been felt in the USA, as the government has been much slower to act and, in fact, may be unwilling to act in the near future.

Despite several attempts to introduce legislation to help combat the obesity problem at a federal level, none of the initiatives in the USA have succeeded yet. Federal agencies such as the Food Trade Commission and the Food and Drug Administration have not taken an increased role in regulations; in fact they have clearly stated they are more in favour of self regulation. At the same time, consumer advocacy groups believe they may be able to achieve change faster through litigation rather than legislation.

To date, most of the change in the USA has taken place at state and local levels limited, for the most part, to schools.

With liability laws rolling out throughout the country, the risk of litigation remains low, but any litigation that is brought forward will continue to attract negative media attention, which could harm a company's reputation.

As a consequence, much of the pressure on the food and beverage industry in the USA will come in the form of litigation from consumer advocacy groups and the negative media attention this litigation will attract. Even though obesity and health concerns have not been adequately addressed at the federal level, state and local governments have taken some regulatory action limiting the availability of unhealthy foods in school settings. Many of the large companies have recognised the risks mentioned above and have been proactive, as well as reactive, addressing obesity related issues within their firms.

R&D will be an integral part of a food and beverage company's competitive advantage

Entering the healthy eating segment may reduce margins for some companies because not all sectors produce high profit margins. This conundrum will make R&D critical in the next few years.

Health and nutrition issues have shed light on the importance of a good R&D department that has the ability to take on some of the concerns that are beyond the scope of company marketing functions. Investment in R&D will continue to rise as companies recognise its importance in achieving and/or maintaining a competitive advantage

It is expected that R&D and marketing will now be complementary functions rather than one being in the shadow of the other. The strength of a company's network with universities, suppliers, venture capitalists, and biotech firms may ultimately determine how successful they are. The major challenges of R&D within the food and beverage industry will be to:

1) improve the nutritional profile of products while maintaining the taste; and

2) develop lower calorie snacks and confectionary foods at a reasonable price while maintaining taste.

Companies will need to reformulate current products and develop new ones to meet the growing demand for healthy alternatives, while maintaining stable margins. In fact, successful R&D combined with strong marketing will be the catalyst companies need to maintain their competitive advantage.

Report Conclusions

Obesity is a political and social issue affecting trends in food and beverage companies around the globe. This report clearly states, and makes a solid logical case for, the material financial benefits of offering healthier foods at reasonable prices, providing education to the general public on nutrition labels, and stopping advertising of unhealthy foods especially to children.

Pressure to do the aforementioned is coming from governments, health organisations, consumer advocacy groups and the media. An integral part of a food and beverage company's future growth and success will be its ability to combine a successful R&D staff with a strong marketing team.

If a food and beverage company is unwilling to address the health-related issues facing the industry, they are opening themselves up to the risk of litigation, the costly effects of adhering to new regulations, and negative media attention. These three things will have a lasting negative affect on the company.

While JP Morgan states it would be unwise to make an investment decision based solely on obesity issues, it should be considered in the analysis of any food and beverage company. The companies that are better positioned and better prepared for the consequences of obesity will most likely have higher future growth rates than those that are not, because consumption trends and the way companies adapt to those trends have a major impact on the operational performance of the company.

CRA RogersCasey Comments

- This is a robust and effective analysis of obesity and its impact on the food and beverage industry. It does not cover broader environmental or governance issues that could also be material.
- The report has a clearly stated conclusion. Obesity has a material impact on food and beverage companies globally.
- The extensive corporate case studies presented are effective in providing evidence for the report's key points. The largest companies in the industry are examined in detail.
- The research clearly delineates the differences between regulations on the food and beverage industry in Europe and the USA noting that global companies will be required to adhere to the stricter of the two standards.

Green Property: Does it Pay?

Research firm: Merrill Lynch Global Securities Research & Economics Group
Sector: property securities
ESG issues considered: environmental

Summary

This report assesses the value associated with "green" or sustainable property. The author limited his research efforts to the Australian property market and, within this market, to the Listed Property Trusts (LPTs).

Property is by far the largest single asset class in the world and, as a result, the development and use of these properties is likely to have a tremendous effect on the environment. Using three case studies – office, retail and residential property – the report attempts to analyse key green/sustainability issues and identify whether it "pays" to be green.

Essential Points

Impact on profitability is a clear driver for property owners to adopt green/sustainability initiatives

The author sees a surge in the attention being given to green/sustainable policies by LPTs as a function of their inability to obtain development approvals without a clearly articulated focus on sustainability. This is in addition to the increased demand for green/sustainable buildings from Governments and large corporate organisations.

The author highlights the following as being key reasons for the LPTs' desire to implement green/sustainable policies:

- The brand value of the green/sustainable label;
- The ability to attract and retain clients and thereby boost income;
- Lower costs in the form of reduced GHG emissions and water use; and
- Potential for an increased investor base.

These aspects when combined with a reasonable internal rate of return (IRR) appear to make the case for the move towards green/sustainable policies by LPTs.

A formal definition of green/sustainable property development is needed

The author highlights the lack of a commonly accepted, all-encompassing, definition of a green/sustainable building. As part of the report, he reviewed the National Australian Built Environment Rating System (NABERS) and the Australian Building Greenhouse Rating System (ABGR) rating tools and provided details of their definitions of a green/sustainable building.

To address the lack of a uniform definition of green/sustainable buildings, the author attempts to create his own definition, that incorporates easily measurable direct costs and incomes as well as harder to measure productivity gains and subjective social aspects.

Green property development is profitable, but further metrics are needed

The author assesses sustainability in the property industry by undertaking case studies for the office, retail and residential sectors. The author finds that while the impact on the LPTs' ability to win contracts for office space from green-focused governments and large corporates can be easily measured, the impact of green initiatives on tenant retention in the retail and industrial property segments is more subjective and complicated to measure.

The author also finds the social impacts hard to quantify. However, he notes that, a property trust's inclusion in a green index such as the Dow Jones Sustainability Index could prove beneficial if it improves access to previously unavailable investors.

Case Study 1: Office property – Investa Property Group:

- The author finds Investa's green/sustainable initiatives have resulted in meaningful and measurable impact in the form of lower electricity, water and gas consumption, reduction in gas emissions and an improvement in the ABGR rating.
- In actual dollar terms, the author estimates that Investa benefited from cost savings of about A$600,000 per annum due to lower energy costs.
- In addition, the author notes Investa's attempts to generate tenant buy-in for its green/sustainable policies by offering the "Investa Greenhouse Guarantee," which allows the tenant to save 20 to 30 per cent off their energy costs by recouping their costs (within a year or two) and offers returns of about 20 per cent per annum.

Case Study 2: Retail property – The GPT Group:

- The GPT Group has clearly defined several green/sustainable initiatives and listed its desired outcomes under three categories – Environmental, Social/Community and Economic.
- The Group has targeted savings of A$17.50/m2 resulting from lower energy costs and conservation and re-use of water.

Case Study 3: Residential Sustainability:

- The author assesses residential sustainability from the environmental and social perspective. He notes that in general, legislation leans favourably towards green/sustainable initiatives. New South Wales, in particular, requires all new residential dwellings to be compliant with a Building Sustainability Index (BASIX).
- The case study estimates that BASIX compliance for a multi storey would cost A$6,800 to A$9,100 per unit and result in cost savings of A$600 per year in the form of lower electricity and water bills. For a house, the estimated cost of BASIX compliance ranges from A$3,000 to A$8,000 with estimated savings of about A$5,000 over a 10-year period.

Report Conclusions

Green/sustainable policies and initiatives are receiving increased attention among LPTs in the Australian property market. The author notes that for most members of the property industry, being "green" is perceived to take a backseat to profits. The increased costs associated with being "green" are coupled with several advantages. While some of these advantages are quantifiable (for example the impact to the bottom line from cost savings in the form of lower energy and water consumption, and ability to win government contracts), many others are subjective (for example the brand value of being green and tenant retention).

The author notes that the desire to be green is in part driven by a mindset and can signify sound management. However, property developers have to be willing to look beyond the costs today before they become proponents of the green/sustainability initiatives.

The author finds that there is definite requirement for green buildings in the office market driven by tenants such as the government. Early adopters in the market, have succeeded in converting their green rating into a key differentiator and a competitive advantage and thereby paved the way for other developers to follow in their footsteps.

Most retail and residential properties, on the other hand, have not yet been impacted by the tenants' desire to be green. In instances where a building is green, it has been a function of design rather than policy.

The author leaves unanswered the question regarding the role of the tenants as relates to the success of green/sustainability initiatives.

CRA RogersCasey Comments

- The report provides an effective analysis of the green/sustainability considerations as applicable to the Australian LPT sector. In particular the analysis is effective within the office space segment of the market.
- Another noteworthy aspect is the ambiguous impact of green ratings on property developers' ability to retain tenants. Given the lack of historical information, it is impossible to measure the success of the green "label" and its efficacy as a marketing and tenant retention tool.
- The success and pay-offs associated with these green/sustainable initiatives are closely tied to the behaviours of the tenant. The author briefly touches on the impact of the tenant, but unfortunately there is not enough historical information to determine what portion of the cost savings are being driven by the tenant and whether initiatives such as the "Investa Greenhouse Guarantee" are successful in motivating and or changing tenant behaviours to become more green.
- The author rightly notes that there is a mindset associated with the desire to become green, one that goes hand in hand with the property developer's ability to see the impact to the bottom-line over the long term as opposed to the more immediate costs associated with being green.
- Despite the increased focus on green/sustainable initiatives and legislative changes requiring property developers to have some degree of green focus, there is a chasm between the desire to be green and the willingness to pay for green/sustainable initiatives. The author notes that "profit comes before sustainability" and also that while the end consumers (particularly in the residential property sector) favour the idea of being green, they are often unwilling to pay to achieve this.
- While a great portion of the analysis is devoted to arriving at a comprehensive and thoughtful definition of what elements constitute a green/sustainable property, the overall analysis is impeded by a lack of information. In most instances, the analysis uses one company specific case study to illustrate its point. To extrapolate the findings to a broader group of companies within the same property sector would be premature.
- In its current format, the case studies illustrate findings that are company specific and particularly of companies that are at the leading edge in terms of adoption of green/sustainable initiatives. But this analysis, in its current format, does not provide sector specific information regarding the adoption and success of green/sustainable initiatives within the broader Australian LPT sector. It appears to be early days yet for the adoption of these initiatives and as such, too soon to determine the success of these initiatives and the financial impact of the same, beyond the specific companies cited in the analysis.

Chemicals, Carbon Credits

Research firm: Morgan Stanley & Co. International Limited
Sector: chemicals
ESG issues considered: environmental

Summary

Morgan Stanley Equity Research Europe evaluated the near-term impact of carbon credit programmes on their universe coverage of 22 European chemical companies. The authors provide a brief overview of the Kyoto Protocol, its implications for European chemical companies, and identified future investment opportunities. The report also discussed factors that may disadvantage the industry. While financial benefits to the sector are limited over the next several years, there are some opportunities to reap significant financial rewards from carbon credits.

Essential Points

Phase One of the Kyoto Protocol is expected to have little impact on European chemical companies

Kyoto Protocol Overview

The Kyoto Protocol was negotiated in Japan in 1997 to create a market-based mechanism for developed nations to reduce GHG emissions measured in tons of CO_2 equivalent. Developed nations that signed the Protocol committed to CO_2 reduction targets. Developing nations would have an incentive to reduce emissions by selling credits to the developed world. The agreement became legally binding on February 16, 2005. Annex 1 countries (EU-15, Canada, Japan, Russian Federation, Ukraine) pledged to reduce GHG emissions, as measured in tons of CO_2 equivalent, by 5.2 per cent by 2012. Phase One (2005-2007) is an introductory phase and focuses on CO_2 emissions. Phase Two (2008-2012) is expected to be more restrictive and concentrate on bringing countries in line with the Kyoto pledges.

Allocation of GHG Emission Reduction Targets

The individual country targets for greenhouse gas emissions reductions are allocated to specific companies in a National Allocation Plan (NAP). A country or company may purchase credits from another country or company if it cannot meet its target. This process will become more restrictive in Phase Two (2008-2012) as only 50 per cent of target reductions may be met through credit purchases. The balance will need to be met through reductions domestically (within the country).

Clean Development Mechanism and Credits of Emission Reduction

While developing countries have no limits on CO_2 emissions, they may invest in projects to reduce emissions. These projects are eligible for Credits of Emission Reduction (CERs) which may be sold to companies through the Clean Development Mechanism (CDM) programme. The CERs are applicable through Phase Two (2012) and may be used to cover GHG emissions shortfalls in the EU, Japan and Canada. Currently the CERs are not traded (as they lack a registration infrastructure) and they are sold at a discount to EU programme credits. (The largest company-level trading programme for CO_2 emissions is the EU ETS, opened in January 2005.) There is a significant backlog with CDM projects, as they must be registered and approved by the UN.

Impact on European Chemical Companies

As of 2002, energy (61 per cent) and transport (21 per cent) sectors generated over 80 per cent of GHG emissions. For Phase One reductions, the transport sector was not a target for CO_2 reductions for political reasons. In the EU, energy was the sector targeted for Phase One reductions. Although the Kyoto Protocol covers six green house gases, the EU programme covers only CO_2 emissions for Phase One.

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The chemical industry is not generally an energy-intensive industry and, thus, has less opportunity to reduce CO_2 emissions. In addition, the industry has already reduced fuel combustion CO_2 emissions by more than 40 per cent per unit of chemical output since 1980 (according to CEFIC, the European Chemical Industry Council).

European chemical companies may be disadvantaged by the Kyoto Protocol

The European chemical industry believes it may be in a position of disadvantage because:

1) Overseas competitors are not subject to the same emissions restrictions;

2) There are different targets for northern and southern European countries; and

3) The reduction programme may favour large polluters.

Emissions credits are material to the stock price

Opportunities in Nitrous Oxide and Hydroflourocarbons

Little room exists for further CO_2 emission reductions within the European chemical industry. Thus, under Phase One of the Kyoto Protocol, carbon credits have little benefit. However, if the USA and China and other non-Kyoto participants that collectively produce 48 per cent of the GHG emissions would commit to reductions, the trading market could broaden significantly. In addition, as CDM projects are approved and developed, CERs may be issued to cover emissions other than CO_2, such as N_2O and HFCs. Morgan Stanley believes the emissions credits are material to the stock price.

Report Conclusions

The authors conclude the European chemical sector as a whole is not a significant beneficiary of carbon credits in the near term. Reasons behind the sector's limited impact include the fact that Phase One of the Kyoto Protocol does not target the chemical sector and the EU reduction programme focuses solely on CO_2 emissions. European chemical companies have already reduced CO_2 emissions and improved energy efficiency to the point that additional reductions would need to come from plant closures. In terms of financial impact, the authors highlight N_2O and HFCs as investment opportunities going forward.

CRA RogersCasey Comments

- Morgan Stanley's report is focused regionally rather than globally and it acknowledges that countries responsible for 48 per cent of GHG emissions (predominantly the U.S). are not included. The regional analysis is focused on the European chemical sector and the carbon credits scheme has limited impact at this stage.
- Carbon credits are shown to have an impact on stock price, however, Morgan Stanley did not include any discussion on carbon credits as an ESG factor. GHG emissions, not carbon credits, may be seen as the factor that is an externality. Carbon credits are a way to quantify the impact of the externality.
- The report did not present a framework for ESG factors and how carbon credits could be assessed within that framework. We would highly recommend further development on an ESG framework.

Capital Goods, Clean Coal: Opportunities

Research firm: Morgan Stanley & Co. International Limited
Sector: capital goods
ESG issues considered: environmental and social

Summary

Morgan Stanley Equity Research Europe examines coal as a power and pollution source, looks at potential clean coal technologies, and assesses the leading companies that are expected to benefit from sustainable approaches.

Coal continues to be a major fuel source for electricity generation globally. With emerging economies such as China and India pushing demand, coal is expected to add 1,400GW (gigawatts) of capacity over the next 25 years. It is found that plant efficiency could significantly reduce emissions.

The authors evaluate three clean coal technologies for emissions reduction:

- supercritical pulverized coal;
- coal gasification; and
- pressurised fluidised bed combustion.

Essential Points

Coal is a major fuel and pollution source

Coal currently accounts for 39 per cent of electricity generation globally. With increasing power demands from emerging economies such as China and India, coal is expected to provide an even larger percentage of power generation. Although the USA has the largest coal reserves, coal only accounts for roughly 50 per cent of its power generation whereas it accounts for 75 per cent of the power generation in China and India. Over the next 25 years, coal is expected to add 1,400 GW of capacity additions globally, second only to natural gas at roughly 2,000 GW. Coal reserves are expected to last 190 years versus less than 50 years for oil and 60 years for natural gas.

Legislation in both the USA and EU is calling for a significant reduction in noxious emissions, and the possible extension of emissions trading programmes, already introduced in Europe. Emissions from coal powered electricity generation include nitrous oxides (NOx), sulphur dioxide (SO_2), carbon dioxide (CO_2) and mercury. In the USA, coal accounts for 83 per cent of CO_2 emissions from power generation. Clean coal technology will offer an opportunity to increase thermal efficiency in coal fired power plants. An increase in thermal efficiency has been shown to proportionately decrease CO_2 emissions. Currently, the average thermal efficiency in developing and developed countries ranges from 27 to 35 per cent, respectively.

Clean Coal Technologies: A Range of Options - No Single Answer

Morgan Stanley reviews three clean coal technologies and compares emissions reduction, cost and reliability. Each offers similar thermal efficiency and thus would reduce CO_2 emissions by similar amounts. Using current technologies, coal gasification provides the largest emissions reduction and supercritical pulverized coal combustion is the most dependable. Pressurised fluidised bed combustion is the best for low grade coal.

Supercritical Pulverized Coal Combustion (PCC): Most established

Currently over 90 per cent of coal-fired plants use PCC. In this process, coal is ground into a fine powder then blown into the boiler plant to generate steam that drives a generator and turbine to create electricity.

The newer technology, called "supercritical", uses higher pressure boilers and higher operating temperatures to increase efficiency. The increased efficiency lowers fuel costs and reduces emissions. Even more efficient plants are being developed, called "ultra-supercritical." Of the three clean coal technologies, the supercritical PCC is the most proven (already 400 plants in operation) and has the lowest capital cost. Thermal efficiency is at 40 to 45 percent, and emissions reductions include: SO_2 up to 99 per cent, NOx 80 to 90 per cent, and CO_2 10 to 20 per cent.

Coal Gasification (IGCC): Reduced Emissions

In the gasification process, coal is converted to a synthetic gas comprised of carbon monoxide and hydrogen that can be used as a fuel to generate electricity. Compared to conventional technologies, IGCC (Integrated Gasification Combined Cycle) produces significantly fewer waste by-products and emissions. More than 98 per cent of the sulphur is removed and solid waste is reduced by more than one-sixth. While the environmental benefits stand out compared to the other technologies reviewed, IGCC is currently more expensive and less reliable. Conventional gas-fired technology has capital costs one-third of IGCC. However, with the rise in natural gas prices and environmental demands, the authors expect IGCC technology to be more closely considered in the future.

Pressurised Fluidised Bed Combustion (PFBC): Best for Low Grade Coal

With PFBC, any combustible fuel may be used, making it possible to burn a mix of low grade coal, coal waste and biomass. The process produces lower NOx emissions because complete combustion occurs at relatively low temperatures. Sulphur emissions may be less than the supercritical PCC since sulphur may be removed at the time of combustion, much more effective than post-combustion methods. However, PFBC has not been widely adopted. There are only seven plants operational today and many were built with government support. While no supplier is pushing this technology and the capital costs are highest of the three technologies reviewed, it offers the most opportunity for low grade coal. Nearly half of global coal reserves are low grade, implying there may be future opportunities for this technology.

There is a clear business case for clean coal technologies

The authors make the case that coal will continue to be a significant fuel source for power generation. Growth will be more rapid in emerging economies with fast-growing demand and high coal reserves. The Chinese Government has voiced support for clean coal technology and estimates show China representing more than one-third of the capacity of power generation orders from 2004-2007. India's high demand and projected shortage for coal by 2011-12 also boosts the urgency for increased efficiency. In addition, opportunities for clean coal technologies will increase as regulatory and environmental concerns continue to grow.

The authors identify three companies that stand to benefit from the production of clean coal technologies: Alstom, GE and Siemens.

- Alstom is the leader in desulphurisation and pressurised fluidised bed combustion. Alstom also makes high pressure and high temperature boilers used in supercritical PCC.
- GE, through acquisition of ChevronTexaco's operations, may be the leader in coal gasification.
- Siemens is the leader for gasification turbines in Europe and will provide steam turbines and a generator to a new ultra-supercritical PCC plant in China.

Report Conclusions

The authors conclude that clean coal technologies provide environmental benefits. All three technologies explored offer increases in thermal efficiency, reducing CO_2 emissions. Differences lie in reducing other noxious emissions, cost and reliability. Capital costs are currently two to three times higher than conventional technology. Costs range from US$1,200/kW for supercritical PCC, US$1,300/kW for PFBC and US$1,600/kW for coal gasification.

CRA RogersCasey Comments

- Morgan Stanley's report is focused on clean coal technologies without a clear framework for assessing how broader ESG factors impact stock prices of companies in this sector.
- For future studies, we recommend the authors include their perspective of what would be considered extra-financial factors within the capital goods sector. The authors do not mention ESG factors except in the introduction. How do the clean coal technologies fit in the framework? Is there only an environmental application?
- The authors make a strong point that coal will continue to be a fuel for future power generation. The implication is increased coal usage will cause more pollution. The authors could expand the discussion on by-products of coal-fired power generation and costs that are internalised versus costs that are not.

The authors identify the leading companies involved in production of clean coal technology. It is clear that with a continued growth in demand for coal-generated power and pressure both in developed and emerging economies to produce cleanly, those leading in clean technology production are expected to gain significant material benefits. However, further discussion and development of the impact of this technology on companies' earnings would be helpful for a financial assessment.

Food and Beverages: Corporate Responsibility

Research firm: UBS Limited
Sector: food and beverage
ESG issues considered: environmental and social

Summary

In this report, UBS analysts use their Q-Series[19] framework to identify the most important corporate social responsibility (CSR) issues affecting the food and beverage industry. According to the Q-Series, the material significance of any particular CSR issue is determined by three things: how firms compete, how costs are distributed, and how much society cares about the issue. Using this framework, six issues were identified as material to the food and beverage sector: obesity, climate change, supply chain, fresh water, product risk and waste management.

This report focused on the top three – obesity, climate change, and supply chain Five of the six issues were addressed in the document due to the overlap between some of the issues. For instance water risk is covered in both supply chain risk and climate change risk since it ties into both. For each of the three main issues, UBS presented case studies to consider what impacts these risks, and the companies' mitigating risk management strategies had on the company's business model as well as its share price.

Essential Points

Obesity and the management of this issue can affect company value and share price

Over the last years, the general public has become sensitised to obesity as a health problem that needs to be addressed. Media coverage of the issue has garnered the attention of consumers, especially as it relates to children, and put obesity at the forefront of policy makers' agendas. Globally, the share prices of food and beverage companies have been affected by this increased attention. In response to this pressure, companies have begun to adapt their business models, offering healthier foods and avoiding marketing their unhealthy products to children. Companies such as Pepsi Co, Kraft, McDonalds, Nestle, Unilever, and Danone have responded to obesity concerns through product reform and increased support for healthy lifestyles. It has been found that those companies that have been proactive in taking the steps to make changes have experienced less of a negative impact on their stock prices than those that haven't.

Environmental performance appears to be a strong predictor of future operational performance

All else being equal, it is reasonable to expect firms that incorporate climate change management approaches in their business models and operate in a sustainable manner outperform their peers. Moreover, for those experiencing below average profitability, the incorporation of climate change management across company operations may signal an opportunity to investors.

Climate change is a systematic issue that cannot be externalised. The safety and quality of raw materials and strong reliance on water and energy make the food and beverage sector particularly susceptible to climate change issues.

Another key impact of climate change is declining crop yields. While the extent of these effects is not likely to be seen for quite some time, consumers view the risks and potential impact on financial performance as important. This can be observed by the increasing expectations on corporations to take a pre-emptive role with respect to climate change issues. Some of the actions already being taken by firms are:

- implementation of green plant programmes to limit the consumption of water and energy;
- monitoring of water consumption and discharge, energy use, CO_2 emissions, and solid waste generation and measurement of performance numerically in terms of tonne per production;

Many companies have realised that their future operational strength is reliant upon how well they address climate change issues. As such, financial analysts should also regard environmental data as a routine company performance metric affecting a company's operational success.

A sustainable approach to supply chain management can impact share price

Share price and business models are affected by supply chain management. The business impact can be controlled by how well the company responds to supply chain risk. The response to this risk appears to have more impact on the share price than the risk itself. Companies with robust infrastructure systems tend to have temporary rather than long term share price fluctuations with regards to supply chain issues.

Climate change and the resulting impact on crop yields amongst others, is an important element of supply chain risk. Decrease in crop supply will have a direct impact on company financials as the price of supplies rises. Other supply chain risks include:

- the amount of raw food needed to produce products due to the need for precise hygiene and quality controls which can easily be disrupted;
- the degree of production processing that food and beverages must go through due to the threat of unwanted content being filtered into a product; and
- product risk.

Product risk is often unquantifiable. Analysts can take risks into consideration when reviewing a company, but it appears that a company's anticipation and preparation for these risks plays the largest role in share price movement.

CSR issues need to be consistently accounted for in analyst reports

All CSR issues expected to have a financial impact in a sector need to be consistently accounted for in analyst models.

There are two types of corporate liabilities, as defined by the Q-Series that should be considered by analysts: current and potential liabilities. The key differentiator of a current and potential corporate social liability is that the potential liability allows the company an opportunity to prevent the liability from ever occurring. Most CSR issues will lead to a liability rather than an asset. Therefore it is important that the company, as well as potential investors, have an understanding of both the current and potential CSR issues affecting the organisation. If the market has not yet recognised a potential CSR liability the enterprise value of the company will be affected once the liability is realised. Recently, companies themselves have begun to recognise the importance of CSR issues.

Report Conclusions

- The impact of news relating to a CSR liability on a company's share price can vary greatly. The impact will generally depends on the size of the company, the public's knowledge of the company and current and potential corporate responsibility issues inherent to the sector.
- A company's response to key issues that constitute risk (encompassing financial, economic, operational,

environmental, social, or governance issues) will determine the relative impact these risks have on business and share price. The impact of these issues on valuations may vary over time. Impacts may occur over intervals, and can be linked to a major event on a company's financial statements, or if a company keeps its shareholders well informed of the potential risks it faces, not at all.

CRA RogersCasey Comments

- This is an effective analysis of the environmental, social and governance issues faced by the food and beverage industry. Sustainability issues have a direct financial impact on food and beverage companies around the globe.
- The impacts of obesity and health related issues on share price are the least clear cut of all those considered. The analysis did not make a direct connection between this issue and its impact on a company's share price. When and how companies respond to this issue has greater impact on share prices than the issue itself.
- The impacts from climate change were shown to have a direct impact on financial statements, company valuations, and share prices. When evaluating a company, these issues will be key in determining a company's operational strength. Food and beverage companies that do not have business models that acknowledge the impacts of climate change were shown to experience a negative impact on their financial statements. Unlike obesity risk, it was determined that climate change risk cannot be externalised and is uncontrollable at times, making it imperative that companies address and respond to this issue.
- Supply chain issues resulting from ESG factors were also shown to have a direct impact on a food and beverage company's financial statements. As raw materials become scarcer or their supply less constant the cost to companies will increase, affecting profitability. Like climate change risk, UBS demonstrated that supply chain risk cannot be externalised and is at times unforeseen. Unlike climate change risk, a company's method of managing supply chain risks has the most direct impact on share price.
- The corporate case studies are effective in providing evidence for the report's key points. The report adequately compares the impact of sustainability issues across a global set of companies that focus on CSR and those that do not.
- This report clearly states, and makes a solid logical case for, the material financial benefits that sustainable practices can have in the food and beverage industry financials, valuations, and share price.
- However, it would be difficult for analysts outside of UBS to utilise this research without a complete understanding of the Q-Series analysis.

Squaring the Circle: Emissions Standards in the Car Industry

Research firm: WestLB AG
Sector: auto
ESG issues considered: environmental

Summary

In “Squaring the Circle”, WestLB quantifies the cost of emissions standards and addresses other material “extra-financial” risks inherent in the auto sector. After a review of emissions guidelines in the USA and Europe, WestLB also quantifies compliance costs for seven auto manufacturers. The implications of reducing emissions through voluntary and mandatory standards are discussed in light of technology (diesel versus gas, hybrid, and alternatives fuels). In addition to the traditional financial review, West LB highlights extra-financial risks by assigning a sustainability rating to all companies. The sustainability rating explicitly includes environment, governance and stakeholder categories as well as a new “controversy risk discount” developed by WestLB. The risk discount attempts to incorporate social or political risk to which a company may be exposed.

Essential Points

Regulatory environment in Europe and the USA technology bias

The research focuses on Europe and the USA, as they are the most important markets for European auto manufacturers. European standards have focused on emissions by vehicle type whereas in the USA standards focus on engine fuel efficiency. These two approaches pose challenges for auto manufacturers and result in a bias towards diesel technology in Europe and gas and hybrid technology in the USA.

1) Europe: ACEA Voluntary Agreement and Euro 4/5 Standards

The European auto manufacturers association’s voluntary agreement (ACEA) sets a CO_2 emissions target whereas the EU’s mandatory Euro 4 and 5 standards regulate nitrous oxide emissions, hydrocarbon, and particulate emissions. The ACEA targets a reduction in CO_2 emissions from current levels. WestLB states it is unlikely that goal will be reached and the consequences of not reaching the goal are uncertain. The Euro 4/5 standards are vehicular emissions standards that will be regulated by granting an approval certificate by vehicle type. The Euro 4 standard came into effect in January 2005 and the Euro 5 proposal is expected in mid 2008.

2) USA: CAFÉ Standards and Tier 2/LEV II

In the USA, regulations focus on fuel consumption limits for manufacturers (Corporate Average Fuel Economy) with separate limits for passenger cars and light commercial vehicles. Passenger car limits and light commercial vehicle standards will slowly be raised between 2007 and 2012. The new classification will be by vehicle footprint rather than volume weighted; this favours manufacturers of large vehicles. Emissions standards of NOx, HC and particulates are governed by Tier 2 (issued by the US EPA) and LEV II (issued by the California Air Resources Board, CARB). While the standards are similar, LEV II would come into effect earlier (2007 vs. 2010 for Tier 2).

3) Technologies Favoured by US and European Regulations

Diesel technology has a regulatory advantage through tax subsidies in many European countries and is favoured by European manufacturers. The diesel engine is more fuel efficient (thus producing less CO_2) yet results in higher NOx, hydrocarbon and particulate emissions. Diesel poses a dilemma: since the technology is already highly advanced, diesel will not be a major contributor to further CO_2 reductions; and, since Tier 2 has more stringent NOx standards than Euro 5, it will be more costly for European manufacturers to compete in the USA The US regulations, on the other hand, clearly favour gas-fueled engines and hybrid technologies.

Cost Impact of Compliance with Emission Standards

WestLB evaluates the compliance costs of the Euro 5/Tier 2 standards and the ACEA voluntary commitment/CAFÉ for seven auto manufacturers. In general, a larger proportion of the fleet in diesel corresponded to lower compliance for ACEA/CAFÉ and higher compliance for Euro 5/Tier 2. WestLB found cost impacts significantly different among manufacturers. In general, compliance costs resulted in an earnings loss of 15 per cent.

The Extra-Financial Risk Perspective

Cars currently produce roughly 40 per cent of global CO_2 emissions and are a part of daily reality, providing significant costs and benefits in industrial and emerging economies. In this context, WestLB looks at issues facing the auto industry. WestLB identifies PSA Peugeot as one of the leading manufacturers and "best in class" as rated by SiRi, the company providing sustainability research to WestLB.

WestLB considers local environment, lifecycle, vehicle safety standards, labour and supply chain as issues. Rising local pollution and congestion will continue to be a concern in developing countries. Also, as tens of millions of cars and trucks continue to be produced every year, disposal will become a greater issue. Manufacturers face reputation and labour risks if cost-cutting is the only factor taken into consideration with outsourcing and offshoring. These issues are all raised and presumed to be included in the SRI rating.

WestLB produces an SRI rating by integrating a "controversy risk discount" based on a company's exposure to social or political controversies and a 'performance score' founded on environment, governance and stakeholder ratings. Each company is given an alphanumeric SRI rating from A++ to B similar to a credit rating methodology.

Report Conclusions

WestLB identifies Euro 5 and Tier 2 emissions guidelines as the biggest concern and most costly for compliance. The CAFÉ standard, because of the low mpg target, is more easily reached. The European voluntary agreement for CO_2 emissions targets (ACEA) will not be reached and the consequences of not reaching the goal are uncertain. WestLB identifies the additional cost of these guidelines for seven European auto manufacturers. The additional product costs are estimated to reduce the manufacturers' operating profit by 15 to 30 per cent. The magnitude of the impact comes from the company's CO_2 emissions profile, proportion of diesel and the manufacturer's product mix. On the extra-financial side, PSA Peugeot is identified as a leader and best in class. All companies are assigned a sustainability or SRI rating. The seven manufacturers all rank as having "good" (A) to "very good" (A+) sustainability performance.

CRA RogersCasey Comments

- With growing investor concern and involvement on climate change issues, West LB's report on the cost impact of emissions standards is very relevant.
- The sustainability score incorporates "environment" as a piece of the analysis, yet WestLB does not explicitly show how the cost impact of emissions guidelines are factored into the rating. WestLB clearly illustrates the cost impact of emissions standards, yet presents the discussion of ESG factors separately. The "SRI Perspective" is a section at the end of the report. It appears that an opportunity exists to integrate the traditional research and ESG research at WestLB. Similarly, as emissions are clearly seen as an environmental issue, more information would be useful on how they are integrated into both the sustainability and traditional research rating.
- In the Foreword to the report, WestLB acknowledges that the incentive to reduce auto emissions is not only driven by regulatory policy but by consumers. Consumers are demanding cleaner technology and higher fuel efficiency. Media attention on climate change has helped push consumers to be more vocal and companies to be more aware of their reputation and environmental "report card". Similarly, WestLB states the growing interest in Socially Responsible Investing and expectation that it will become mainstream. Continuing on this theme, it would also be helpful to see more discussion on how to make the direct material link and provide a combination of both in traditional research.
- WestLB's new CRD or controversy risk discount appears to be truly an innovative addition to the environment, governance and stakeholder analysis. WestLB is systematically incorporating so-called "controversial business activities" (factory farming, nuclear power, GMOs, CO_2 generating activities) and other "risky" factors such as child labour, discrimination and bribery. The schematic on page 72 of the report does an excellent job of showing how all major components are amalgamated in the sustainability score.
- Apart from environment as an ESG issue, WestLB addresses the social and corporate governance aspects through its stakeholder and governance analyses, respectively. WestLB uses SiRi as a data provider. Subcategories for the stakeholder and governance factories are identified and quantified in a relative rating. As well as just providing the methodology, it would also be useful to have further discussion on what the underlying factors are for each company and how the companies' scores were developed

CRA RogersCasey Conclusions

"We believe incorporating ESG issues in investment processes is likely to become an essential part of all assessments in the future."

CRA RogersCasey, June 2006

In June 2005, CRA RogersCasey was invited to participate in UNEP FI AMWG's Materiality programme and provide an independent review of sell-side reports requested by the group. As a mainstream investment consultant, we work with institutional asset owners, monitoring investment programmes and providing advice on asset structure, investment policy, and investment manager selection. Research is integral to our work. Our investment manager due diligence process integrates qualitative and quantitative analysis across ten categories and 50 factors. We assess an investment manager's ability to add value to clients' investment programmes by providing consistent, superior returns. In the past, we have not explicitly included ESG or extra-financial factors in this process. Nor has the core of our client base been traditionally focused on Socially Responsible Investment (SRI).

The CRA RogersCasey's team involved in this project includes both investment consulting and investment manager research specialists. The former assist clients in structuring, implementing and monitoring investment programmes. The latter evaluate investment managers and analyse portfolio structures and performance. When selecting an investment manager, the quality of investment research and decision-making is fundamental to our clients. Given the implications of ESG issues on investment decision-making quality, the UNEP FI AMWG's work programme is of key interest to CRA RogersCasey.

In the 12 reports reviewed, we found a wide range of approaches, assessment and evaluation of ESG issues. Some reports provided a comprehensive ESG assessment and were successful in identifying specific issues and providing frameworks for evaluating and quantifying the impact of these issues on stock price. Other reports did not explicitly identify ESG issues, and not all reports were effective in quantifying the materiality link of the ESG factors' impact on stock price. However, we were impressed by the quantity of reports that showed a strong link between ESG issues, profits, business activities and, ultimately, stock prices. We find that a clear case is emerging for the investment community to consider including ESG issues in investment decision-making processes. However, we believe a lot of work remains to both strengthen these links and further document their impact on portfolio value.

As a firm, our involvement in this project has led us to seriously:

- Assess whether, and how, we will incorporate ESG factor analysis into our investment manager due diligence process;
- Assess what it would mean to us to be a signatory to investment industry wide commitments such as the Principles for Responsible Investment (PRI);
- Develop questions for our investment manager questionnaire regarding investment managers' ESG analysis;
- Talk to investment managers about the potential financial implications of ESG issues and the materiality research programme project;
- Discuss the potential financial implications of ESG issues with our clients.

Traditionally we have found ESG issues to be more important to our ethically-minded clients. Yet more and more frequently we are asked by mainstream prospective clients about SRI and responsible investment. We believe this trend is due in part to the increasing realization of the importance of ESG issues to financial value creation among mainstream investors. Investors are likely to pay further attention as value links to investment performance solidify. Today the assessment is represented in risk and return, and whether these issues will potentially increase or lower a client's portfolio market value.

CRA RogersCasey strives to be a thought leader in the industry and help clients assess future risks and opportunities ahead of the curve. We believe incorporating ESG issues in investment processes is likely to become an essential part of all assessments in the future. We further believe this trend will be driven by the extent to which investors are convinced of the material links between these ESG factors and the financial impact on their investments.

Appendix

Participating Institutions

United Nations Environment Programme Finance Initiative

The United Nations Environment Programme Finance Initiative (UNEP FI) is a global partnership between the United Nations Environment Programme and the private financial sector. UNEP FI works closely with the 170 financial institutions that are signatories to the UNEP FI Statements, and a range of partner organisations, to develop and promote linkages between the environment, sustainability and financial performance. Through regional activities, a comprehensive work programme, training activities and research, UNEP FI carries out its mission to identify, promote, and realise the adoption of best environmental and sustainability practice at all levels of financial institution operations.

UNEP FI Asset Management Working Group

A global platform of asset managers that collaborate to drive the mainstream integration of ESG issues in investment decision-making and ownership practices. The Working Group consists of 14 asset managers with combined mandates of 1.7 trillion USD.

ABN AMRO Asset Management

Hermes Pensions Management Ltd

Acuity Investment Management

HSBC Halbis Partners

BNP Paribas Asset Management

Insight Investment

Calvert Group

Mitsubishi UFJ Trust & Banking Corp

ClearBridge Advisors, Legg Mason

Morley Fund Management

Groupama Asset Management

RCM (Allianz Global Investors)

Henderson Global Investors

Sanpaolo AM, Eurizon Financial Group

BT Financial Group also participated in this particular piece of work.

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CRA RogersCasey

CRA RogersCasey is an independent, investment consulting firm that serves over 125 corporate and public retirement plans, leading endowments and foundations, large healthcare systems, select high net worth family offices, and diversified financial intermediaries from five offices around the USA. Its experienced consultants design, build and closely monitor investment programmes. Whether performing asset allocation studies, building asset class structures, or identifying investment managers to implement strategies, the organisation's research based approach helps institutional investors meet, and exceed, their objectives.

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2006 Report

This report finds that mismanagement of environmental, social and governance issues can pose a real threat to company and investor value. Analysts are beginning to consistently document and quantify potential material impacts of these issues on profitability and equity pricing. The report recommends that investors and asset managers assess portfolio wide impacts of these issues and include them in investment decision-making processes.

Findings were gathered from more than 1,000 pages of analyst research in an effort that involved more than 22 globally based financial services firms including sell side research houses, asset managers and an investment consultancy.

This publication offers sound reasoning to include environmental, social and governance issues for a complete and thorough assessment of company value.

About the UNEP Finance Initiative

UNEP FI is a unique global partnership between UNEP and the private financial sector. UNEP FI works closely with over 160 financial institutions to develop and promote linkages between the environment, sustainability and financial performance. Through task forces, working groups, training programmes and research, UNEP FI aims to address the opportunities and needs that sustainable development can provide to the financial and subsequently the larger stakeholder community.

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Innovative financing for sustainability

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