ROBECOSAM
Sustainability Investing

RobecoSAM White Paper

Alpha from Sustainability

ROBECOSAM SI RESEARCH & DEVELOPMENT
ROBECO QUANTITATIVE STRATEGIES

RobecoSAM's
Alpha from Sustainability
06/2014
RobecoSAM AG
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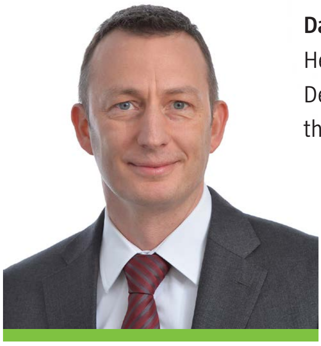
RobecoSAM and Robeco

"Alpha is created by exploiting under-researched factors that have an impact on companies' ability to generate long-term value. By identifying long-term sustainability factors and integrating them into traditional financial analysis, RobecoSAM can gain a competitive advantage over asset managers who do not consider sustainability in their investment process."



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RobecoSAM in brief

RobecoSAM is an investment specialist focused exclusively on Sustainability Investing. It offers asset management, indices, engagement, voting, impact analysis, sustainability assessments, and benchmarking services. Asset management capabilities cater to institutional asset owners and financial intermediaries and cover a range of ESG-integrated investments (in public and private equity), featuring a strong track record in resource efficiency theme strategies. Together with S&P Dow Jones Indices, RobecoSAM publishes the globally recognized Dow Jones Sustainability Indices (DJSI).

Based on its Corporate Sustainability Assessment, an annual ESG analysis of 2,800 listed companies, RobecoSAM has compiled one of the world's most comprehensive databases of financially material sustainability information.

RobecoSAM is a member of the global pure-play asset manager Robeco, which was established in 1929 and is the center of expertise for asset management within the ORIX Corporation. As a reflection of its own commitment to advocating sustainable investment practices, RobecoSAM is a signatory of the UNPRI and a member of Eurosif, ASrIA and Ceres. Approximately 130 professionals work for RobecoSAM, which is headquartered in Zurich.

Robeco's quantitative strategies department

The research presented in this white paper was carried out by Robeco's Quantitative Strategies Department, which is central to Robeco's investment organization and is staffed with around 20 dedicated quantitative researchers with backgrounds in econometrics, mathematics, economics and physics. Some members are affiliated with universities as assistant or associate professors and regularly publish academic research in renowned academic journals. The role of quantitative investment in Robeco's professional investment practice has gained considerable importance in recent years. As of May 2014, Robeco managed more than EUR 23 billion based purely on quantitative models.

RobecoSAM's mission is to be a leader in translating sustainability foresight into outstanding investment results.

Introduction

Executive summary

- RobecoSAM was founded in 1995 as an investment boutique specializing in Sustainability Investing.
- RobecoSAM maintains one of the most comprehensive global databases on Corporate Sustainability.

RobecoSAM's Corporate Sustainability data was analyzed by Robeco's Quantitative Strategies Department, which reached the following conclusions:

- There is a positive relationship between Corporate Sustainability and financial performance as measured by stock returns, demonstrating the alpha potential of integrating RobecoSAM sustainability data into traditional financial analysis.
- The results show a consistent added value of Corporate Sustainability over time, indicated by the positive relationship between financial outperformance and sustainability quality before, during and after the 2009 crisis period.
- The investment strategy based on RobecoSAM Corporate Sustainability data delivered positive information ratios in bull and bear markets, highlighting its effectiveness as an all-weather approach.

Introduction

Sustainability Investing is currently a major subject of debate in the field of finance, generating an increasing amount of interest among a wide range of asset owners and asset managers alike. And the numbers speak for themselves: the UN Principles for Responsible Investment (UN PRI), an initiative that promotes the integration of sustainability factors into investment decisions, has grown to 1200 signatories representing assets worth more than USD 34 trillion.[1]

Can financial performance be enhanced by investing in sustainable companies?

What is the added value of integrating sustainability criteria into traditional financial valuation models? Can financial performance be enhanced by investing in sustainable companies? These are just a few of the questions that have been raised as interest in sustainability investing has continuously gained momentum over the last few years.

This white paper seeks to address these questions. We begin with a brief overview of RobecoSAM's research philosophy and assessment process before presenting the updated results of our empirical study, carried out by Robeco's Quantitative Strategies Department.

[1] http://www.unpri.org/about-pri/about-pri/, retrieved May 5, 2014

Investment Philosophy

RobecoSAM sustainability criteria enable a more comprehensive view of companies' value creation potential

Long-term approach

Sustainability Investing is a long-term investment approach that integrates economic, environmental and social considerations into financial analysis for the selection and retention of investments.

Why consider sustainability in the first place? A company's position in the financial market depends on its potential to generate value and is determined by its individual characteristics in relation to those of its peers. Sustainability trends such as climate change, resource scarcity or demographic change shape the competitive environment in which companies operate by introducing long-term sustainability opportunities and risks. Our conviction is that companies that can effectively manage risks and seize opportunities related to such trends exhibit a superior capacity to prosper over the long run.

A firm's ability to grow earnings increasingly depends on intangible assets such as the quality of management, branding power, human capital development and intellectual capital, to name a few. Clearly, investment professionals can no longer afford to underestimate the value of intangibles when performing fundamental analysis. RobecoSAM's sustainability criteria act as a suitable proxy for quantifying the value of a firm's intangible assets by introducing a new dimension to financial analysis, offering investors a more comprehensive view of companies' value creation potential and ultimately leading to better informed investment decisions.

By analyzing the sustainability profile of companies, RobecoSAM gains additional insights that facilitate the selection of stocks offering the potential for attractive long-term returns, while investing in responsible corporate citizens.

Companies that can effectively manage risks and seize opportunities related to sustainability trends exhibit a superior capacity to prosper over the long run.

Research Approach

Economic, environmental, and social criteria are integrated into RobecoSAM's sustainability analysis

RobecoSAM Corporate Sustainability Assessment
RobecoSAM seeks to identify companies that both:

1. demonstrate a core ability to manage sustainability issues and
2. represent an attractive investment opportunity

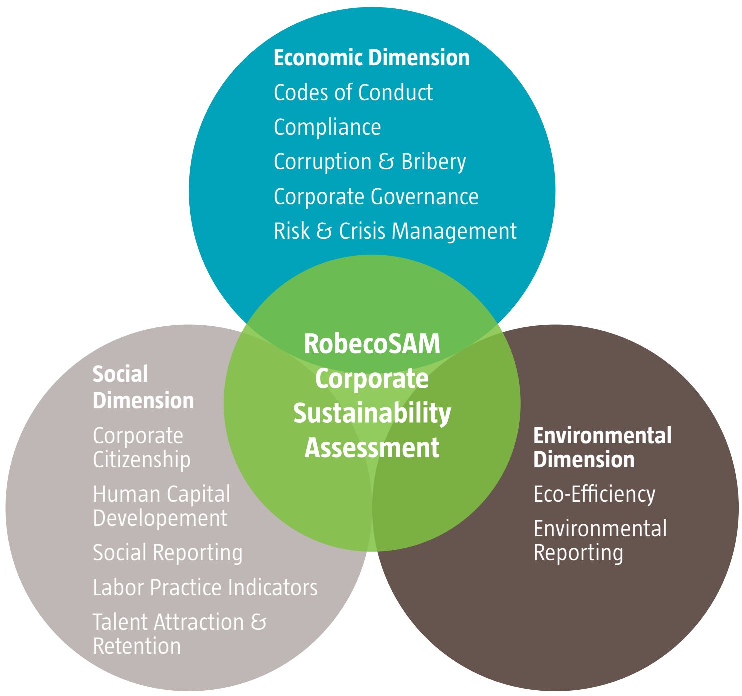
The first step in achieving this goal is to identify the sustainability trends that are likely to have an impact on a company's ability to create shareholder value in the future. In conjunction with its professional network of industry experts and NGOs, RobecoSAM then develops a number of criteria designed to assess a company's ability to manage challenges associated with these trends.

Sustainability performance is of greatest relevance to financial analysis when companies are evaluated in relation to their industry peers. Therefore, our methodology is based on an industry-specific assessment questionnaire, with information submitted directly by the companies, allowing RobecoSAM to identify the leading and lagging companies within each sector.

Every year, RobecoSAM invites over 3,000 companies worldwide to take part in the RobecoSAM Corporate Sustainability Assessment (CSA). Since 1999, the number of companies that actively participate in our assessment has steadily grown, reaching close to over 800 companies in 2013. The assessment is complemented by a media and stakeholder analysis, which enables analysts to consider additional information from NGOs and the media. Lastly, the CSA is reviewed on an annual basis by an independent third-party auditing firm. RobecoSAM makes a sample of its assessment questionnaire publicly available on the web.

Sustainability performance is of greatest relevance to financial analysis when companies are evaluated in relation to their industry peers.

General Sustainability Criteria



Source: RobecoSAM

Alpha from Sustainability

RobecoSAM's sustainability scores lay the foundation for identifying companies with superior alpha potential

Objective
The purpose of this study is to investigate whether sustainability, as measured by RobecoSAM's sustainability scores, has predictive power that enhances the stock picking process. More specifically, we investigate whether sustainability leaders outperform sustainability laggards once key risk factors have been neutralized.

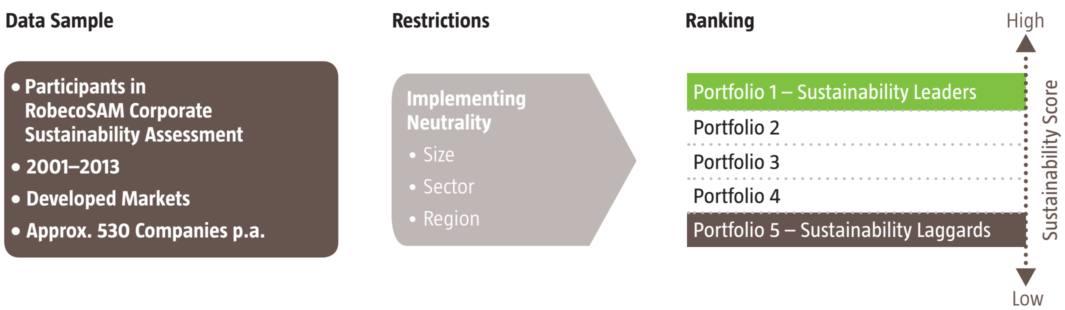
Descriptives
The universe used in the study comprises all of the companies from a developed country that participated in RobecoSAM's annual Corporate Sustainability Assessment between 2001 and 2013, i.e., a thirteen-year observation period. On average, our data set includes approximately 530 companies per year.[2]

Methodology
Portfolio construction is based on a ranking methodology, which means that our population sample has been split into five individual portfolios containing an equal number of companies. Stocks are allocated to these portfolios according to their sustainability score. Portfolio 1 consists of the sustainability leaders and Portfolio 5 consists of the sustainability laggards.

Portfolios are rebalanced monthly to maintain an equal weighting for all companies.

In order to capture and measure the alpha potential of sustainability independently of other risk factors, a number of restrictions have been put in place in order to neutralize the effect of size, sector and region.

Portfolio Construction



Source: RobecoSAM

[2] In order to reconcile RobecoSAM's sustainability data with Robeco's quantitative databases, companies from Canada were excluded from the sample before 2009. This does not alter the conclusions described in this document.

Results

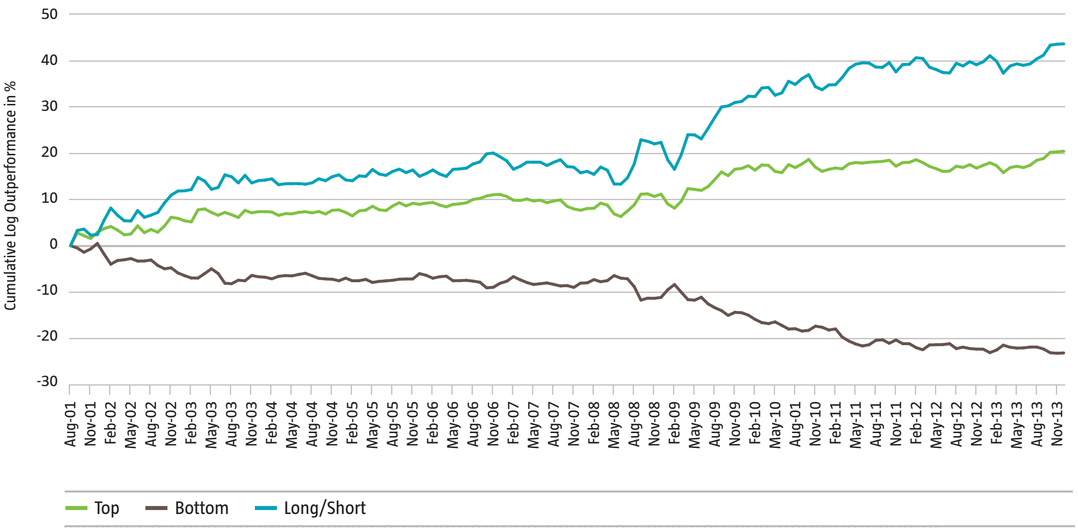
The results of the statistical analysis are shown in the graph below. The green line tracks the cumulative outperformance of Portfolio 1 "Sustainability Leaders" versus the overall sample of companies. The black line tracks the cumulative underperformance of Portfolio 5 "Sustainability Laggards" versus the broader sample. The turquoise line tracks the outperformance of an investment strategy that consists of maintaining the sustainability leaders on a long position and short-selling the sustainability laggards.

Sustainability can Outperform

Benchmark:
Companies rated on the basis of the RobecoSAM Corporate Sustainability Assessments

Metric:
Total sustainability score (economic, environmental, and social criteria)

Past performance is not indicative of future results.



Source: RobecoSAM

	Portfolio 1 Sustainability Leaders	Portfolio 5 Sustainability Laggards	Long/Short (Pf. 1 vs. Pf. 5)
Outperformance (p.a. in %):	1,67	-1,86	3,60
Tracking Error (in %):	3,05	2,56	4,82
Information Ratio:	0,55	-0,73	0,75
T-Stat:	1,96	-2,53	2,66

Terminology

Outperformance (p.a. in%) refers to the average annualized outperformance of a given portfolio relative to the overall sample of companies (Portfolios 1, 2, 3, 4, and 5).

Tracking Error (in%) refers to how closely a portfolio follows the wider sample to which it is benchmarked, as measured by the standard deviation of the relative stock returns.

Information Ratio = outperformance/tracking error. This is basically a measure of risk-adjusted returns.

T-Stat in this context is a measure of statistical significance.

Conclusion and Discussion

Results reveal a positive relationship between sustainability and financial performance

Findings

The purpose of this white paper was to introduce RobecoSAM's research philosophy, which places sustainability at the heart of any fundamental analysis, before presenting the results of the latest empirical study carried out by Robeco's Quantitative Strategies Department. This study is based on data from RobecoSAM's proprietary corporate sustainability database, which is one of the most comprehensive in the financial industry.

The results reveal a positive relationship between sustainability and financial performance, as measured by stock returns, demonstrating the superior alpha potential of the sustainability leaders identified by RobecoSAM's sustainability data. This is reflected in the positive information ratio (0.55) of the portfolio of sustainability leaders. Moreover, the relationship between financial outperformance and sustainability quality is very consistent: it is positive before, during and after the 2009 crisis period.

Sustainability creates value

Value is created both by picking sustainability leaders and avoiding sustainability laggards, as shown by the positive information ratio for long/short investment portfolio (0.75), a strategy which consists of maintaining the sustainability leaders on a long position and short-selling sustainability laggards. All three regions (US, Europe and Japan) contributed to the outperformance. In addition, the information ratios of the strategy are positive during bull and bear markets, confirming the additional risk management benefits of incorporating RobecoSAM's sustainability data into financial analysis. The positive relationship between sustainability and financial performance is not artificial, as our statistical models account for key risk factors such as company size, sector and region, which could potentially confound the relationship under investigation. As far as statistical significance is concerned, a t-stat of 2.66 (for long/short) means that we can say with a 99% confidence level that the performance of this investment strategy is statistically significantly different from 0. A t-stat of 1.96 for the portfolio containing sustainability leaders implies a confidence level of 95%.

Doing well by doing good

Overall, the findings of this research provide us with credible evidence that firms that adopt corporate sustainability best practices are not contradicting or neglecting their primary objective, which is to maximize the profits of their shareholders. On the contrary, it would appear that the puzzle of corporate financial performance broadly encompasses both financial and extra-financial considerations. Investing in sustainability leaders ultimately contributes to superior long-term investment results with improved risk-return profiles.

Appendix

Linking sustainability to financial performance – a review of the academic literature

Brief review of academic literature

In recent years, a growing number of academic studies has been dedicated to the subject of sustainability and financial performance. In this appendix, you will find a short overview of basic concepts and research contributions in this field. For sustainability to translate into financial performance, it must have an impact on either

1. the amount of cash flow generated by the company or
2. the cost of external financing to the company (weighted average cost of capital).

Free cash flow is a function of revenues and expenses, as well as taxes and reinvestment rates. The weighted average cost of capital is a function of short-term interest rates and the risk premiums a company must pay for acquiring equity, debt financing, and cash.

Why should sustainability have a positive impact on the financial performance of a firm?

Let us briefly review some of the main theoretical arguments.

Managing stakeholders

Stakeholder theory argues that sustainability should have a positive impact on financial performance because firms benefit from "addressing and balancing the claims" of multiple key stakeholder groups.[3] On the other hand, constant failure to address the concerns and expectations of those groups will ultimately reduce investors' confidence in the firm's stock, impacting its cost of financing (weighted average cost of capital) and thus its profit-making opportunities.

Reputational benfits

Sustainability can also lead to certain reputational benefits. Firstly, sustainable firms have a greater ability to attract and retain high-quality employees.[4] They may also reap benefits in terms of sales, as customers are becoming increasingly sensitive to sustainability issues, and are often willing to pay a premium for products and services that are perceived to be more sustainable.[5] Lastly, an enhanced reputation and brand image can positively affect relationships with current and potential investors, as well as attract trading partners and suppliers.

[3] Freeman, E.; Evan, W.: "Corporate Governance: A Stakeholder Interpretation": Journal of Behavioral Economics, 19 (4): 337 – 359 (1990)

[4] Turban, D.; Greening, D.: "Corporate Social Performance and Organizational Attractiveness to Prospective Employees": Academy of Management Journal, 40 (3): 658 – 672 (1997)

[5] Russo, M.; Fouts, P.: "A Resource-Based Perspective on Corporate Environmental Performance and Profitability": Academy of Management Journal, 40 (3): 534 – 559 (1997)

Enhancing operational efficiency

Porter & van der Linde (1995) argue that a firm's sustainability performance can also be considered as a measure of operational efficiency.[6] Adhering to sustainability principles, they argue, requires structural changes that may lead to competitive advantages such as technological innovation. They claim that environmental best practices, for instance, can trigger innovations whose benefits may outweigh the costs of implementing them.

A long-term perspective

Corporate sustainability can also be seen as a good indicator of a firm's financial viability because it emphasizes a long-term business perspective. In theory, firms that adhere to sustainability principles should outperform those that do not because they prioritize long-term corporate objectives over short-term profits, thus benefiting from more stable earnings growth and less downside volatility.

Also, due to this long-term focus, these firms need to have a much better understanding of how they relate to their competitive environment and society at large, as well as how that relative position may evolve over time. To quote a senior portfolio manager cited in an Ernst & Young report: "Financial performance tells me what a company has already done. Non-financial performance tells me what it is likely to do."[7]

"Financial performance tells me what a company has already done.
Non-financial performance tells me what it is likely to do."

[6] Porter, M.; van der Linde, C.: "Green and Competitive: Ending the Stalemate": Harvard Business Review (1995)

[7] Ernst & Young: Measures That Matter (2003)

Bibliography, further reading and other sources

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Further reading

Other studies using RobecoSAM's corporate sustainability data (can be made available upon request)

- Derwall, J.; Guenster, N.; Koedijk, K.: "Human Capital Management and Financial Markets: Rotterdam Business School – Erasmus University" (2005)
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Other Source

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