

GREEN FINANCE AND ENVIRONMENTAL INVESTMENT

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During the last couple of years more "ethical, green, social" funds have been launched all around Europe. According to a report conducted by the research and sustainability consultancy centre Avanzi, there were 220 retail funds available in Europe by the end of year 2000, compared with 175 in 1999. With an annual growth rate of 30% for the last three years, the size of the Socially Responsible Investment market in Europe is today over 11 billion euros.

The countries with the largest retail socially responsible investment funds were the United Kingdom (54), Sweden (42) and Switzerland (22). Regarding the retail assets invested in these responsible investments, the UK leads the market with 4.6 billion Euros followed by Italy and Sweden.

What are the main drivers which can explain this spectacular market growth?

Political and legal framework

In its "White Paper on renewable sources of energy," (COM (97) 599, 26.11.97), the EU Commission proposed to increase the regenerative energy quota in the European Union from the current 5-6% to 12% by 2012. At the third World Climate Conference held in Kyoto in December 1997, industrial nations agreed an average reduction of greenhouse emissions of 5% by the year 2012, based on 1990 levels. According to the European Environment Agency's projections, total emissions of greenhouse gases by the Union of 15 Member States are expected to increase by at least 5.2% between 1990 and 2010, if no action is taken. After the Kyoto summit, the EU environmental ministers agreed to a reduction of greenhouse gas emissions in Europe by 8% over the period from 2008 to 2012 compared with the 1990 levels (Council Resolution 11th May 1998). Within the context of this Council Resolution, Germany decided to reduce greenhouse gas emissions by 21% by 2012, the UK is committed to a 12.5% cut, while France and Finland must stabilise their emissions.

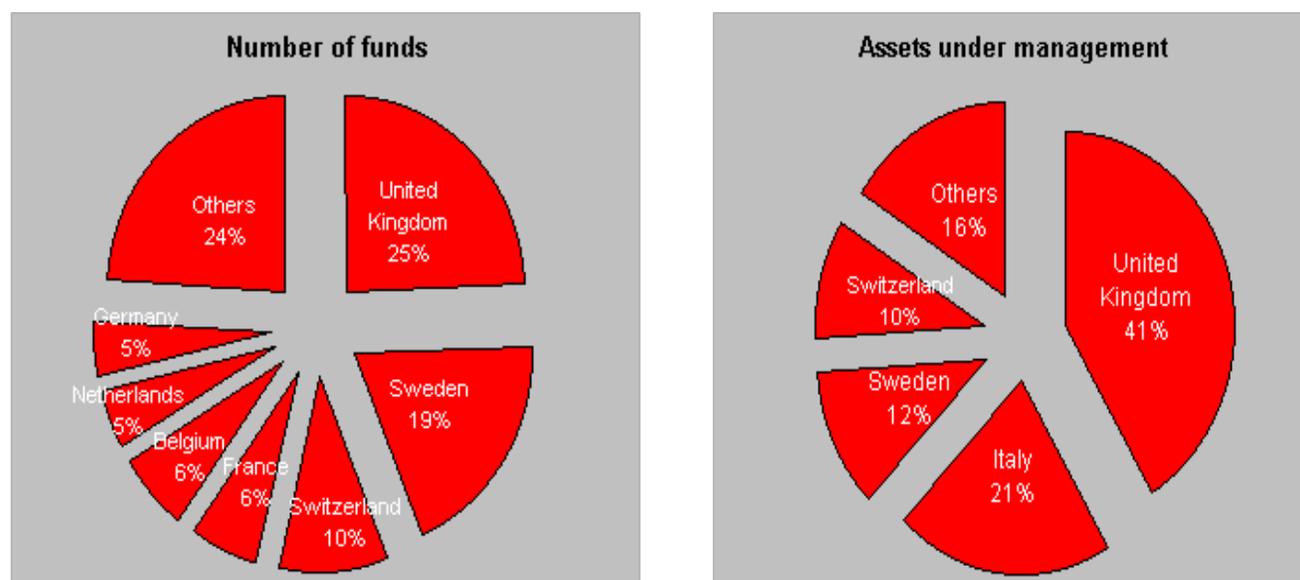


Figure 1. Annual growth rate over the last three years: 30%

Market size: + EUR 11 billion. *Source: Avanzi, December 2000*

Public awareness

The second driver is public awareness. Climatic problems, such as the greenhouse effect, the increasing concern over the risks of nuclear energy, acidification warning and many other environmental issues, have led to wide social consensus on the introduction of alternative means of power generation from renewable clean energy, as well as other environment related topics. This social concern is reflected in the rising popularity and political influence of green parties all around Europe.

Public awareness increases the demand for "green" products and investment tools. It also has an effect through the regulation of investments.. The UK government called for a responsible investment approach in last year's pension reform legislation. From July 2000, the pension fund "statement of investment principles" must include policies on how social, environmental and ethical considerations are taken into account in investment decisions, as well as policies on how rights, such as voting rights, attached to investments are exercised. Similar actions are taken in countries such as Switzerland, the Netherlands, Norway and Sweden.

While the main focus of green finance is on investments in public companies, ecological and social criteria are also gaining in importance as far as the supply and demand for private equity and loan products are concerned. At the Banque et Caisse d'Epargne de l'Etat we realised that our clients were willing to support ecological and socially responsible initiatives. In co-operation with the non-profit association Alterfinanz asbl, BCEE launched an Alternative Savings account which is remunerated below the common savings rate. This funding permits the financing of ecological, social and international solidarity projects through lower interest rate loans.

Technology

Technological change is a third driver in the growing importance of ecological features in an investment context.

Renewable energy has the potential to provide a safe, clean and affordable energy supply using indigenous sources, without threat of a limited supply. However, technology has generally not reached a sufficiently mature stage in order to make renewable energy sources economically attractive. Therefore, financial incentives are still needed to promote them. Technological innovation increases their competitiveness and their economic viability, however, in those sectors where technology is advancing, e.g. wind power energy, costs have fallen dramatically over the previous decade and continue to fall.

In this context we have faced a real boom in the renewable energy sector. The annual installation rate of wind capacity has increased by more than 3% on average in recent years. The same spectacular evolution applies for other renewable energy alternatives.

The flood of Initial Public Offerings in recent years has stimulated investors' interest in the renewable energy sector. The performance of Vestas Wind Systems A/S since its IPO in April 1998 is a good example of the attractiveness of the wind power energy sector from an investor's point of view.

Therefore, there is an increasing interest in environmental and social issues among the general public. On the other hand, local and supranational authorities have developed policies responding to environmental issues. These factors, combined with the impact of new technology, have led to an Eco-Industrial Revolution creating investment opportunities in the financial markets for institutional and private investors.

Table 1. Production costs of electricity with different technologies.

	Production costs cents/kWh
Coal imported	3.29
Coal domestic, with subsidies	4.20
Gas (Combined cycle gas turbines)	3.18
Nuclear	4.51
With subsidies	4.46

Source: Commission of the European Communities COM (2000) 769 Final Green Paper "Towards a European strategy for security of energy supply."

Green investments

How do investment managers react to this development? The concept of ethical investment appeared in the USA in the 1980s, when investment managers began screening investments according to environmental and socio-political criteria.

Ethical investing was exclusively about excluding certain companies or industries on the basis of activities which were regarded as being unethical. The Socially Responsible Investments are heavily based on ethics and exclude companies that belong to certain sectors of the economy such as armament manufacturing, production of tobacco, genetic engineering, nuclear energy, manufacturing of ozone-destroying substances, and so on.

By the end of the 1980s, Socially Responsible Investments became global and investors world-wide took ethical criteria into account to avoid investing in companies whose values conflicted with their own. Although there is still no consensus regarding the best way to approach these socio-environmental investments, the socially responsible vision has evolved over the years into eco-efficiency or the wider term, sustainability. Eco-efficiency, for instance, is defined as the capacity to create shareholder value with lower levels of environmental risk.

The sustainability approach differs sharply from the "ethical" approach as it uses the best-of-class theory. This means that investments are made in

leading companies of all sectors. This approach focuses on finding those companies that are technologically, economically, but also environmentally well positioned for the future. The quality of corporate management is evaluated on the company's ability to combine economic, ecological and social performance in the long run.

Cumulative wind energy installed capacity MW

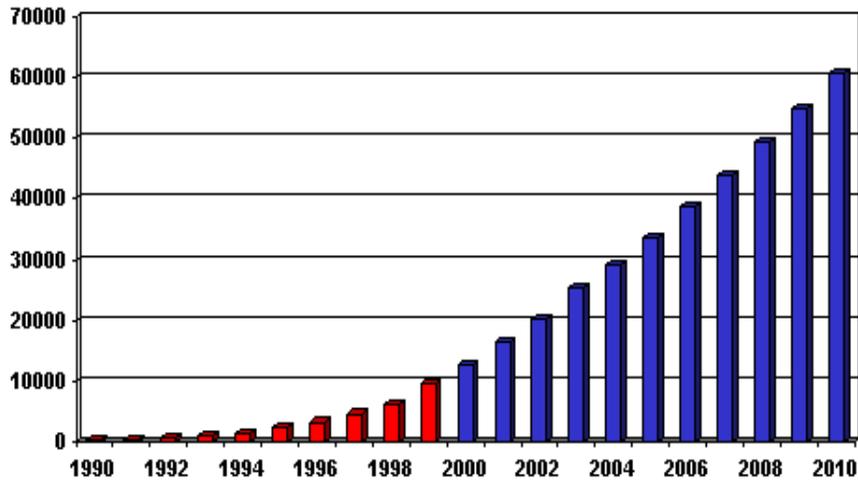


Figure 2. Renewable energy installed capacity expected to continue growing in Europe. *Source: European Wind Energy Information Network*

The integration of sustainability variables in corporate strategy has permitted companies to cut costs, differentiate their products from their competitors and hence charge higher prices, reduce the risk of accidents and avoid expensive lawsuits, as well as stakeholder boycotts. Sustainability has become a parameter for financial analysis. Since sustainability is a catalyst for well managed and healthy companies, these companies have superior performance and favourable risk/return profiles, and should outdistance their peers in the long run.

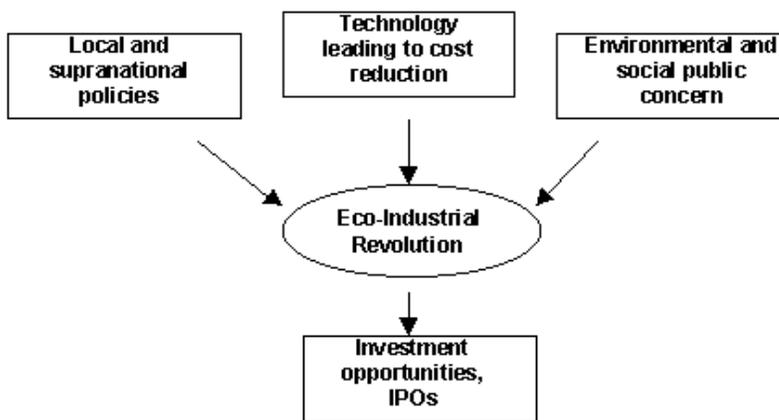


Figure 3. Investment opportunities.

The best proof of the increasing interest in sustainable investments is the growing number of equity indexes that are being established for both purposes of benchmarking socially responsible funds and stock-picking. The Dow Jones Sustainability Group Index is already widely used and FTSE is planning to launch its FTSE 4 Good Index this summer.

This is a clear sign that investment managers are aware of growing market opportunities. The Dow Jones Sustainability Group Index consists of more than 200 companies that represent the top 10% in a sustainability ranking of over 2000 companies in 64 industry groups in the 33 countries covered by the Dow Jones Global Index.

A corporate sustainability assessment developed by SAM Group is annually applied to the member companies of the Global Index. SAM evaluates the companies on three main axes. The industry axis includes the relevance of sustainability in the industry. The second axis is the opportunities axis which takes into account the company business strategy and its success in managing sustainability opportunities. Finally, the risks axis stands for the strategic sustainability risks, as well as the management of sustainability risks.

The Dow Jones Sustainability Group Index is a widely diversified index which includes small, medium and large companies from every industry, even industries which would have been excluded by the so-called "ethical" approach. But, do sustainable" companies outperform the broad stock market? The Social Investment Forum is a US non-profit association dedicated to promoting the concept, practice and growth of socially and environmentally responsible investing. Of the 16 funds with more than US\$ 100 million in assets screened by the Social Investment Forum, 14 funds (or 88%) received top ratings from either Lipper or Morningstar, based on one and/or three-year total returns in their investment categories. In addition, Wiesenberger placed 11 of the 16 largest social funds in the top quartile of their investment categories based on three-year performance. Lipper, Morningstar and Wiesenberger are well-known investment fund rating agencies.

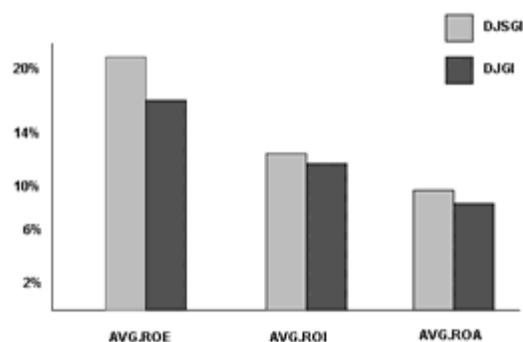


Figure 4. The Dow Jones Sustainability Group Index. Higher volatility: DJSI biased by large cap growth companies. Medium term opportunities with active management within the index.

The five-year average return on equity, return on investment and return on assets of the 236 companies represented in the Dow Jones Sustainability Index were superior to those of the Dow Jones Global Index. Internal financial performance of those companies is good. However, the fact is that the Dow Jones Sustainability Index under-performed the broad market in the year 2000.

The higher volatility of the Dow Jones Sustainability Index compared with the Global Index, explains this trend in a difficult year 2000 for stock markets world-wide. The Sustainability Index is obviously less diversified than the Global Index. But there is another reason to explain the higher volatility: as the index composition is focused on sustainable companies, the stock selection tends to be biased towards large cap growth companies which are slightly more volatile than the average stock, and especially towards information technology oriented companies, many of which had a very difficult year in 2000.

The out-performance of sustainable indexes is likely over the long run, as the best managed companies are included. In the medium term, however, active management based on pure financial criteria within those indexes will be the key to assure above average performance.

Conclusion

In summary, in the short term, investing in socially responsible companies offers neither shelter from stock market tempest nor guarantees of superior performance. However, in the long run, sustainable companies will receive the fruits of its present efforts.

We all know that finance is about anticipating the changes in the market and identifying those companies that will be the leaders in the future. From this point of view, the investment or the diversification through sustainable or socially responsible companies is financially consistent and rational for the investment manager, and, at the same time, it responds to a rapidly increasing demand from private and institutional investors.

Roland Werdel holds a degree in economic science from the Catholic University of Louvain, Belgium, and is a chartered financial analyst. He received his training at financial institutions in Luxembourg, New York, London, Frankfurt and Munich. In the last ten years, he has held senior

positions with major banking groups, including Credit Suisse (Luxembourg), where he was Senior Portfolio Manager and, later, Vice Chairman of the bank's Investment Committee. In 1998 he was appointed Head of Institutional Asset Management for Banque et Caisse d'Epargne de l'Etat, in charge of marketing, research and asset management activities for inhouse and external institutional clients.