## CREATING PRODUCTS FOR SUSTAINABLE PROPERTY INVESTMENT - A BLUEPRINT FOR GREEN PROPERTY INVESTMENT FUNDS FROM GERMANY

## Prof. Dr. Thomas LÜTZKENDORF<sup>1</sup>

Prof. Dr. Henry SCHÄFER<sup>2</sup>, Dipl.Ing. Christoph ROHDE<sup>1</sup>, Dr. David LORENZ<sup>1</sup>, Dipl.Ing. Christian GROMER<sup>2</sup>

- Department of Economics & Business Engineering, Sustainable Management of Housing & Real Estate, Karlsruhe University, Kaiserstraße 12, 76131 Karlsruhe, Germany, thomas.luetzkendorf@wiwi.uka.de
- Institute of Business Administration, Chair of Corporate Finance, University of Stuttgart, Kronenstr. 39, 70174 Stuttgart, Germany, finance@bwi.uni-stuttgart.de

Keywords: sustainable property investment, sustainable development, socially responsible investment

# **Summary**

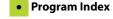
The interest in more sustainable properties has risen strongly in the recent past since the so-called business case for implementing sustainable development principles within property-related decision making processes has been powerfully made during recent years. There has been a shift from anecdotal evidence to welldocumented case studies and comparative analyses of environmental, social and economic performance of buildings from around the world clearly indicating that sustainable building is a highly profitable exercise. However, the implementation of sustainable development principles does not only serve the industry's actors to safeguard and increase competitiveness and long-term profit but is required because of the huge responsibility that the property industry is taking towards society and the environment. The development and provisioning of sustainable property investment products and related consulting services offers a major opportunity for property professionals to increase both, financial returns as well as their standing within society and the business world. Yet, this opportunity remains largely untapped due to various reasons. In response to this situation the present paper sets out a strategy for the development, implementation and widespread dissemination of sustainable investment products for the property industry. This is seen as an additional and potentially powerful approach to stimulate demand for sustainable buildings.

#### 1. Status quo & the way ahead

The growing acceptance of social responsibility by organisations, corporations and other actors across all business sectors creates a demand for investment opportunities and products that adhere to the principles of sustainable development. This demand is further strengthened by the growing body of academic research evidencing that socially responsible investing (SRI) and corporate social responsibility (CSR) programmes do not result in inferior financial performance compared to conventional investment and business practices (see: UNEP FI, 2007a). In this context the questions arise whether there are any sustainable property investment options available for institutional and private investors and whether these investment options are in line with the Principles for Responsible Investment ruled out by the UN Environment Programme Finance Initiative (PRI, 2006) as well as with the responsible investment guidelines formulated by the European Social Investment Forum (EUROSIF, 2007)? Besides the products and services offered by a small number of leaders in the field of sustainable property investment and management (see: UNEP FI, 2007b) the answer to these questions is clear: not yet.

Planners, construction firms and facility mangers are able to design, realize and operate sustainable buildings today. However, it apparently requires innovative approaches to increase the demand for buildings that are - at the same time - energy-, resource- and cost-efficient, healthy, and more resistant to obsolescence and offer higher aesthetic, urban as well as technical and functional qualities. Besides informing and taking influence on awarding authorities and clients of direct property investments, an additional approach is seen in the development of new products for indirect property investments. This is the starting point for the authors' research project on the basics of sustainable property investment. The project took place within the research initiative "Zukunft Bau" and has been funded by the German Federal Office for Building and Regional Planning. The project investigated whether, how and which property investment products are appropriate for strengthening the demand for sustainable buildings and which general framework and preconditions would favor such developments. Within this paper the authors report on selected findings.







In 2007 about € 20 billion (10<sup>9</sup>) were invested in 110 public SRI funds in Germany – with a growing trend. Across Europe more than € 1 trillion (10<sup>12</sup>) is invested in this sector and in the USA assets under management in the SRI sector amount up to US\$ 2.3 trillion. However, until now property represents an almost entirely neglected asset class within the SRI sector. At the moment only a very limited number of property investment firms or funds make sustainability an explicit goal; in addition, existing SRI funds in the USA as well as across Europe do not offer investors screened and professionally managed property portfolios. If these funds exist, they are simply too hard to find. Given that property improves the risk-return ratio of any mixedasset portfolio and that an optimal share of property (direct or indirect investment) lies between 10 and 20% (see: Sirmans and Worzala, 2003; Worzala and Sirmans, 2003), the SRI market as a whole is significantly under-allocated from the perspective of optimal asset allocation. Consequently, the untapped market potential for publicly offered sustainable property investment products is immense. The authors assume that this untapped market potential still exists due to an underdeveloped market for certified sustainable buildings, information and knowledge deficits among private and institutional investors and a lack of proactive fund developers and initiators. In order to overcome this situation and for the development, implementation and widespread dissemination of sustainable investment products for the property industry the following steps are recommended of which a selection is further discussed below:

- a) Description and analysis of relevant constellations of actors;
- b) Description and analysis of the information and cash flows between these actors;
- c) Analysis of the interests and motivations on the demand side;
- d) Estimation of the market potential for sustainable property investment products;
- e) Discussion of appropriate 'designs' and types of investment products;
- f) Development of suitable assessment-, rating- and certification-approaches;
- g) Strategy development for the development of property fund products; and
- h) Development of appropriate marketing and reporting instruments.

## 2. Steps to sustainable property investment products

## 2.1 Constellations of actors, information and cash flows

The typical constellation of actors in financial markets in terms of cash flows and value creation regarding financial products can be – in principle – transferred to both, the processes of value creation regarding sustainable property investment products and the relevant groups of actors in property and construction markets. A core element in the constellation of actors is seen in the linkage between planners and construction industry on the one hand (referred to as the 'physical side') and the financial and banking industry on the other hand (referred to as the 'monetary side'). In the process of value creation the monetary side is responsible for granting the financial capital required for carrying out construction works. Identifying incentive-structures for allocating further investment capital from the financial market to the funding of sustainable buildings creates additional impulses for the construction industry. A crucial point, however, is that these impulses for the construction industry are clearly focused on property projects only that adhere to the requirements for sustainable buildings (i.e. 'additional investment capital for sustainable buildings only'). This can create an additional demand for sustainable buildings. The linkages between the physical and the monetary side are provided through financial intermediaries and service providers such product developers and suppliers, rating agencies and institutional funds that collect capital.

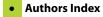
Figure 1 provides a simplified description of relevant constellations of actors. The starting point is the demand side; i.e. those institutional and private investors interested in SRI products. Actors on the demand side select an appropriate investment product (i.e. a sustainable property investment product) from one of the available suppliers/initiators in the market by relying on consulting service providers and rating results. The supplier/initiator either acts as a property developer or identifies and buys appropriate property assets in the marketplace.

Figure 1 shows a 'product-level' (left side) as well as an 'assessment/information level' (right side). It is clear that both investors (e.g. pension funds) and suppliers/initiators can be subject to so-called sustainability reporting requirements. In this regard, first labels for SRI-products as well as for 'sustainable buildings' already exist. However, approaches for the certification of sustainable property investment products are yet missing. Nonetheless, such certification schemes would be the logical consequence if property assets are to play a role within the SRI-market. Labels and certification schemes for sustainable property investment products would have to combine assessment criteria from the SRI-sector and from the sustainable building area. In addition, sustainability issues would have to be integrated into accounting and financial reporting requirements for property funds.











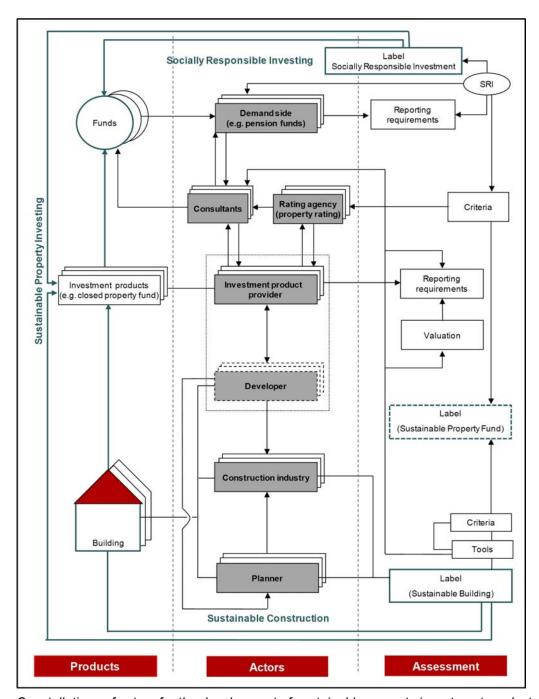


Figure 1 Constellations of actors for the development of sustainable property investment products

#### 2.2 Interests and motivations on the demand side

A major problem in property economic research is the unsatisfactory situation regarding data availability; concerning both, transaction data and information and market participants' motivations and goals. Empirical surveys investigating the interests and motivations of selected groups of actors regarding the issue of sustainable building and property investment are rare (Pivo, 2007). So it does not come as a surprise that the situation regarding sustainable property investments in Germany has not yet been subject to investigation and inquiry.

Therefore, a survey was carried out among German institutional investors in order to gain insight into their interests, motivations, and level of awareness and knowledge regarding SRI-products in general as well as sustainable property investment products in particular. During September and October 2007 a total of 848 institutional investors have been contacted within the scope of a survey; 116 of them (response rate: 13%) responded either by telephone interview or through a web-based questionnaire survey to the following topics: organization and financial structures; importance of property assets in general; importance of socially

responsible investing; importance of sustainable property investment. Among the 116 participants of the survey were 13 capital investment companies, 59 precautionary institutions (such as pension funds and life insurance companies) and 34 non-profit-organisations (including foundations, churches and charities aid organisations).

#### a) Importance of property within the portfolio

Capital investment companies usually diversify their portfolios. The survey showed that stocks, bonds and property make up for about 1/3 of assets under management each. About 69% of assets under management have a planned holding period of at least 5 years. The remaining 31% are split between assets with a medium-term (18%) and a short-term (13%) holding period. The inclusion of different asset classes with different holding periods leads to a broad diversification of investment risk, which is typically for capital investment companies. The exact share of property within the surveyed companies' portfolios is 34%.

Regarding precautionary institutions the survey revealed a risk-averse and long-term oriented investment strategy. On average, bonds have a share of about 60% of all assets under management. In the case of pension funds and life insurance companies the share of bonds is even higher: 70% due to legal requirements. About 3/4 of all assets have a planned holding period of more than 5 years. The share of property within precautionary institutions' portfolios is 13%.

Within the third group of surveyed investors, non-profit-organizations, the survey showed that they also have a longer-term oriented investment strategy. The share of property within their portfolios is 16%.

## b) Level of knowledge regarding SRI

The majority of surveyed investors judged their level of knowledge and awareness regarding socially responsible investments as 'very good' or 'good'. A particularly high level of knowledge was reported among the capital investment companies of which 45% judged their level of knowledge as 'very good' (see Figure 2). The following relationships have been identified by making use of correlation analysis of some of the survey's results: (1) The level of knowledge regarding SRI-products increases if investors already have SRIassets within their portfolios; (2) the higher the share of SRI-assets within the portfolio, the higher the level of knowledge; however, this relationship does not apply to the knowledge regarding sustainable property investments; and (3) the higher the share of property assets within the portfolio the higher the knowledge regarding sustainable property investments.

Given that the overall share of SRI-assets within the surveyed investors' portfolios is rather low (capital investment companies: 4%, precautionary institutions: 5% and non-profit-organisations: 13%), the high level of knowledge reported among investors is, indeed, remarkable.

#### c) Importance of Sustainable Property Investments

About 50% of the surveyed investors showed a moderate interest in sustainability-oriented open- or closedend property funds. Among the surveyed investors the group of capital investment companies showed the largest interest. The remaining half of the surveyed investors stated that sustainable property investment funds are not on their 'radar' or that they are not considering this type of investment respectively. Further survey results are as follows:

- The different groups of institutional investors have different perceptions on what product forms would be of interest for sustainable property investment. The preferred forms are direct property investment and closed-end property funds. Capitals investment companies also showed an interest in property stock corporations and real estate investment trusts (REITs). Non-profit-organisations show a tendency to prefer open-end property funds.
- The majority of surveyed investors expect that the rates of return from sustainable property investments are comparable to those of conventional property investments.
- In addition to sustainability certificates for the property assets in guestion almost all investors argued that continuous sustainability reporting of fund companies and/or initiators would be an important characteristic of a sustainable property investment product. In this context it is interesting to note that 31% of the surveyed investors are already subject to sustainability reporting requirements; this means that if those investors would like to engage in sustainable property investments, the availability of sustainability performance information would be a precondition for such engagement.
- Compared to the level of knowledge regarding SRI products and issues in general the level of knowledge regarding sustainable property investments is judged considerably lower (see Figure 2).



www.sb08.org

From the Proceedings of the World Conference SB08 - ISBN 978-0-646-50372-1

Contents

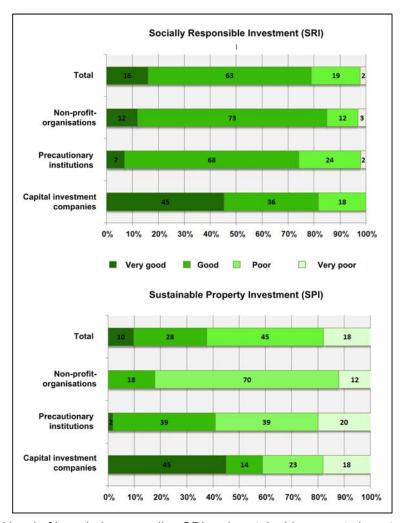


Figure 2 Investors' level of knowledge regarding SRI and sustainable property investment issues

In summary, there is moderate interest among institutional investors regarding sustainable property investment options in Germany. Clearly, this interest is greatest among those investors that are already engaged in SRI and that already have larger shares of property assets within their portfolios. However, these investors must be intensively advised and actively provided with detailed information on new SRI options and products in the property sector. This requires the development of appropriate marketing and reporting instruments.

#### 2.3 Market potential for sustainable property investment products in Germany

The untapped market potential for sustainable property investment products can be estimated by using two different approaches: (1) estimation based on the share of SRI in the total investment universe; and (2) estimation based on optimal asset allocation considerations within the SRI market.

At the moment the share of SRI in total assets under professional management in Germany is roughly 1% (see also: Schäfer, 2005). In 2006 the total volume of property assets under professional management of institutional investors in Germany has been on the order of  $\in$  394.8 billion. Consequently, it can be argued that the market potential for sustainable property investment products is about 1% of the volume of property assets of institutional investors; this corresponds with a market potential of about  $\in$  4 billion in Germany.

The second approach for calculating the market potential is based on the consideration that from the view-point of optimal asset allocation the share of property within a mixed-asset portfolio is somewhere between 10% and 20% (Sirmans and Worzala, 2003; Worzala and Sirmans, 2003). In 2007 about € 20 billion were invested in 110 public SRI funds in Germany (Imug, 2007). As result, the market potential for sustainable properties within the public SRI sector is between € 2 and 4 billion.

The figure of € 4 billion market potential translates into a floor area of about 3 million square metres of office space; this estimate is based on an average price for gross floor area of about 1,400 €/m² for office buildings in average quality (see: BKI, 2007).

For reasons of comparison the following data is worthwhile mentioning: the market for office space in Frankfurt currently has a size of about 12 million square metres; in Germany the overall volume for construction works was ca. € 237 billion by 2004 and about € 5 billion of this sum have been spent for the construction of new office buildings.

### 2.4 Existing market & discussion of appropriate types of investment products

Although a negligible number of sustainability-oriented developments (closed-end property funds with very small volume only) could have been identified within the scope of the research project, the market for sustainable property investment products is virtually non-existent in Germany. Regarding the market in the USA the Responsible Property Investment Center (see: http://www.responsibleproperty.net) provides an overview on existing products and firms. Additional outstanding examples can be found in a recent publication of the UNEP FI's Property Working Group (UNEP FI, 2007b). For the German property market the following types of investment products are recommend (given that the basic framework for the development and establishment of REITs in Germany are not yet fully sorted, the development of a 'green' REIT appears unrealistic at the moment):

a) Development of smaller closed-end property funds for private investors

An appropriate strategy for new fund initiators is seen in the development of closed-end funds. These can comprise one or more property assets which have been certified with the national sustainable building certification scheme. As this certification scheme is still under development at the moment the idea of developing and marketing 'hot-topic-funds' appears attractive: possibilities are 'climate-protection property funds' and 'energy-efficiency property funds' comprised of net-zero-emission-buildings. The typical fund volume for closed-end property funds in Germany is between € 5 and 250 million; the duration usually is between 10 and 20 years.

b) Development of special open-end property funds for institutional investors

Due to distinct reporting requirements towards investors and possibilities for active portfolio management the investment type of special open-end property funds particularly lends itself for the development of sustainable property investment products. With this type of investment the number of investors, duration and volume is unlimited; typically the volume is at least € 250 million. Given the lack of comparability between different sustainability assessment and certification schemes it is recommend to select properties from regions within the coverage of one certification system only (questions concerning comparability and acceptance of different certification systems are currently intensively discussed in Europe).

## 2.5 Investment strategies

Sometimes it is argued that one problem for the development and establishment of sustainable property investment products lies in the difficulty of identifying an appropriate number of property assets that would qualify for such treatment. However, the following investment strategies can be applied:

a) "Build, Operate (and sell)" – Project development

If there is a shortage of sustainable buildings in the marketplace fund developers/initiators can act as a project developer and guarantee this way that the property assets are designed, constructed and subsequently managed according to the requirements of sustainable building.

b) "Modernisation & Refurbishment" - Improving sustainability performance of the existing stock

Investments into the existing building stock can extend or restart the life-cycle of buildings and improve the buildings' environmental and social performance. In particular in Europe carrying out extensive revitalisation works is partly regarded superior than building new.

c) Cause-based investment - Fostering more sustainable communities and cities

This strategy comprises investments into community projects such as affordable housing and urban revitalisation in order to foster a more sustainability society.

Pursuing the aforementioned strategies leads to additional demand for more sustainable planning and construction works. An additional investment strategy without this effect is:

d) "Screening & Selection" - Portfolio optimisation

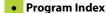
Comprises the purchase and/or disposal of property assets (e.g. for portfolio selection or portfolio optimization purposes) that meet / don't meet preset minimum environmental and social performance requirements.











It also includes active portfolio management in order to develop the existing stock towards a more sustainable asset. Almost certainly the quality of the applied management practice will become – besides the quality of the buildings within the portfolio – a criteria for assessing and certifying sustainable property investment products.

#### 2.6 Reporting: Requirements & Possibilities

An essential feature of a sustainable property investment product is the availability and regular updating of a sustainability report. This is because many institutional investors (in particular, pension funds) are already subject to sustainability reporting requirements. For example, in their statement of investment principles trustees in the UK must give (according to the Occupational Pension Schemes Regulations) information about (a) the extent (if at all) to which social, environmental or ethical considerations are taken into account in the selection, retention and realisation of investments, and (b) their policy (if any) in relation to the exercise of the rights (including voting rights) attaching to investments. Similar reporting requirements apply in Germany.

Sustainability reporting is a critical area as there exists a general 'ethical, social and environmental reporting-performance portrayal gap'. This gap has been identified by Adams (2004) and by Hummels and Timmer (2004). It is argued that current ethical and social reporting practice does not provide investors and other stakeholders with appropriate information to assess the material consequences of company activities and behaviour in socially or politically sensitive areas. "Until reports that compare sustainability performance are freely available, as ubiquitous as financial reports, we will remain lost in the quagmire of intriguing anecdotes, unable to determine who performs better [...]. In a world with comparable reports, sustainability reporting can fulfil its true potential: providing concise, transparent information that clearly reflects the reality of environmental and social issues, allows for benchmarking, highlights long-term risk and opportunities, and contributes to improved levels of public and investor confidence. [...] Otherwise sustainability reporting will remain an exercise in creative writing ..." (Rogers, 2005, p. 39).

In fact, the reporting requirements for an innovative product with which the market is unfamiliar with are even harder as for already established investment products. In this regard, it is important to realise that acceptance of and trust in new property investment products will only be achieved by striving for the highest degree of transparency possible and, in doing so, not only delivering attractive products to investors but also the information necessary to meet investors' reporting requirements. Thus, a sustainability report for sustainable property investment products should, at least, contain information on the following issues:

- Impacts on the environment through emissions; expressed through the CO2-equivalent;
- Energetic quality / energy efficiency;
- Amount of drinking and waste water during occupation;
- Waste volume;
- User satisfaction; based on post-occupancy evaluations;
- Existence of local risks through flooding, extreme weather, large-scale catastrophes in adjunct industries, etc.; and
- > Extent and manner of regular inspection and maintenance works.

It has to be note that this information refers to the property assets only; more general reporting requirements for the fund companies/initiators are laid down in detail here: AccountAbility, 2003 and GRI, 2006. The information on the property-related issues should be expressed (1) in absolute values, (2) as a trend, (3) in comparison to selected benchmarks, and (4) by indicating appropriate reference values (such as m², m³, number of occupants/employees, etc.). The annual sustainability report of the UK-based fund company Hermes serves as an outstanding example in this regard (see: Hermes, 2007).

## 3. Conclusion & Outlook

The interest in socially responsible investment and corporate governance issues has risen dramatically in recent years; and so has the availability of SRI products. However, this trend has not yet led to comparable developments within the property industry. This assertion applies to both, the demand side (investors) and the supply side (fund developers and initiators). As a consequence, the current challenge lies in aligning the goals and motivations of socially responsible investing with efforts to increase the share of property assets within investment portfolios. This will create a demand for sustainable property investment products and thus, strengthen the demand for sustainable buildings in general. Coping with this challenge requires (1) increasing the awareness level of such investment products through systematic marketing; (2) delivering more scientifically robust evidence regarding the economic advantageousness of sustainable property investments; and (3) purposefully serving investors' existing sustainability reporting requirements.







www.sb08.org

The research carried out on the situation in Germany revealed that institutional investors which are already engaged in the SRI market represent a most promising target group for sustainable property investment products. But even though there is market demand and the untapped market potential can be estimated most existing property fund providers/initiators are reluctant in developing appropriate investment products. As a result, there are opportunities for both, fund initiators aiming to enter the property sector as well as for established property fund initiators to successfully extend their product range. These opportunities are major, but they have to be taken, now.

## Acknowledgement

The authors thank the German Federal Ministry of Transport, Building & Urban Affairs as well as the Federal Office for Building & Regional Planning for funding the research project. The authors thank also Dr. Neligan (IW Consult, Germany), Mr. Friesenbichler (Friesenbichler Consulting, Austria) and Dr. Scholand (WestLB AG) for their cooperation within the scope of the research project and in the preparation of this paper.

#### References

AccountAbility, 2003, *AA1000 Assurance Standard* [online], Published by: Institute of Social and Ethical AccountAbility, Available at: <URL: http://www.accountability21.net/publications.aspx?id=288>, [Accessed at: 14 April 2006].

Adams, C.A., 2004, *The ethical, social and environmental reporting-performance portrayal gap*, Accounting, Auditing & Accountability Journal, Vol. 17, No. 5, 2004, pp. 731-757.

BKI, 2007, Baukosten, Published by: Baukosteninformationszentrum Dt. Architektenkammern.

EUROSIF, 2007, *Real Estate – Sector Report 7th in a series* [online], Published by: EUROSIF, Available at: <URL: http://www.eurosif.org/publications/sector\_reports/real\_estate>, [Accessed at: 25 March 2008].

GRI, 2006, *G3 – Global Reporting Guidelines* [online], Published by: Global Reporting Initiative, Available at: <URL: http://www.globalreporting.org/ReportingFramework/G3Guidelines/>, [Accessed at: 30 March 2008].

Hermes, 2007, Responsible Property Investment Annual Report 2007, Available at: <URL:

http://www.hermes.co.uk/pdf/publications/RPI\_annual\_report\_2007\_web.pdf>, [Accessed at: 5 March 2008].

Hummels, H. and Timmer, D., 2004, *Investors in Need of Social, Ethical, and Environmental Information*, Journal of Business Ethics, Vol. 52, 2004, pp. 73–84.

Imug, 2007, *Nachhaltiges Investment - Aktuelle Zahlen und Vergleiche* [online], Published by: imug Beratungsgesellschaft für sozial-ökologische Innovationen, Available at: <URL:

<a href="http://www.imug.de/pdfs/investment/hp\_imug\_Marktzahlen\_SRI\_Oktober\_2007.pdf">http://www.imug.de/pdfs/investment/hp\_imug\_Marktzahlen\_SRI\_Oktober\_2007.pdf</a>, [Accessed at: 4 March 2008].

Pivo, G. 2007, Responsible Property Investing: A Survey of American Executives [online], Available at: http://www.irei.com/uploads/marketresearch/90/marketResearchFile/RPI\_Survey\_Brief.pdf, [Accessed at: 21 February 2008].

PRI, 2006, *Principles for Responsible Investment* [online], Published by: UN Environment Programme Finance Initiative in cooperation with UN Global Compact, Available at: <URL:

http://www.unpri.org/files/pri.pdf>, [Accessed at: 28 April 2006].

Rogers, J., 2005, We have financial fundamentals, so why not sustainability fundamentals?, In: Ethical Corporation Magazine, No. 2, February 2005, pp. 38-39.

Schäfer, H., 2005, Wie nachhaltig ist die Geldanlage in Deutschland?, Zeitschrift für das gesamte Kreditwesen, 58. Jg., Heft 11, S. 558-562.

Sirmans, C. F. and Worzala, E., 2003, *International Direct Real Estate Investment: A Review of the Literature*, Urban Studies, Vol. 40, No. 5–6, pp. 1081–1114.

UNEP FI, 2007a, *Demystifying Responsible Investment Performance – A review of key academic and broker research on ESG factors* [online], Published by: United Nations Environment Programme Finance Initiative, Available at: <URL:

http://www.unepfi.org/fileadmin/documents/Demystifying\_Responsible\_Investment\_Performance\_01.pdf>, [Accessed at: 08 December 2007].

UNEP FI, 2007b, *Responsible Property Investing – What the leaders are doing* [online], Published by: United Nations Environment Programme Finance Initiative, Property Working Group, Available at: <URL:

http://www.unepfi.org/fileadmin/documents/ceo\_briefing\_property\_01.pdf>, [Accessed at: 12 March 2008].

Worzala, E. and Sirmans, C.F., 2003, *Investing in International real Estate Stocks: A Review of the Literature*, Urban Studies, Vol. 40, No. 5-6, pp. 1115-1149.







