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Abstract

The paper aims at assessing economic impact of the United Nations Principles for Responsible Investment (UN PRI) on investment performance. Specifically, the authors analyze whether adherence to the UN PRI program generates higher returns for the US private equity funds or not. The article collects a dataset of 135 US private equity funds in the 2006-2011 period and run multivariate regressions on the funds' returns, employing UN PRI compliance as the key explanatory variable. Results indicate that investing responsibly pays also in economic terms, in addition to the reputational benefits it brings. The funds' returns are linearly dependent on the UN PRI compliance variable, which is one of the most explanatory variables compared to the others analyzed. The evidence can be beneficial for the long time debated issue of trade-off between disclosure and privacy needs in the industry of private equity and alternative investments.

Keywords: UN PRI, private equity, responsible investments, corporate social responsibility, venture capital.
JEL Classification: G10, G20, G24, M14.

Introduction

As from the beginning of the new millennium and with greater emphasis after the financial crisis initiated in 2008, attention paid to Corporate Social Responsibility (CSR) and consequently the redefinition of corporate value has become increasingly imperative (Berthon, 2010). According to concordant recent literature about Socially Responsible Investments (SRI) and the corporate role of environmental, social and governance (ESG) issues, traditional economic and financial criteria are not sufficient any more to express an appropriate evaluation of the soundness of investments (Hong and Kostovetsky, 2012). Actually, sustainable factors such as environmental, social and governance (ESG) issues have proved to affect the long-term sustainable growth of companies more than other economic variables (Rubaltelli et al., 2010). Both empirical contributions on CSR and ESG issues and on the profitability of financial instruments such as private equity are manifold. Nonetheless, limited in number are the contributions that analyze key drivers of the economic performance of these financial instruments, and the possible relationship with observance of specific CSR standards. The main reason for limited research in this field can be largely attributed to lack of data availability.

Study of the relationship between compliance with ESG standards and economic performance of private equity funds is particularly interesting, because of the emerging trade-off concerning these typologies of institutional investors. On the one hand, private equity companies take particular care of privacy and information protection (Chertok and Braendel, 2010); on the other hand, they feel the need to actively involve all stakeholders in the decision-making process in trying to show the largest possible disclosure (Beuselinck et al., 2008). The United Nations Principles for Responsible Investment (UN PRI) is a program established by the United Nations in 2006, that has gained more and more notoriety and diffusion. This initiative gathers different firms and well-known investors. We believe that the contribution offered by this initiative is very significant, since it includes a wide set of CSR principles within an economic and financial framework. In this perspective, the analysis of private equity is very challenging because, due to the industry features, this sector has been always reluctant to disclose and publish detailed information about companies' investment decisions.

After considering statistics about more than 1,000 private equity funds in the last three decades, we investigate observations as from 2006, some of which refer to funds that have adhered to the UN PRI scheme. The objective is to assess some key determinants of the funds' performances, with the specific purpose to find out whether higher commitment in CSR policies, such as observance of the UN PRI initiative, can drive towards generation of higher economic performances for investors or not.

The remainder of this paper is structured as follows. In the next section we provide a description of the United Nations' UN PRI scheme and its main goal. An analysis of the relationship between UN PRI and private equity and an analysis of background literature follows (section 2). In Section 3, we introduce the data and method used for the research, while in section 4 we present the results with a discussion and possible limitations of the work. The last section ends this paper with some concluding remarks.

1. The UN PRI initiative

1.1. UN PRI: an incentive initiative for responsible investments. The United Nations Principles for Responsible Investment (UN PRI) is an institutional initiative established and supported by the Organization of the United Nations. It was instituted with the purpose of applying the main guiding principles for responsible investments. These principles have been drawn up with the support and sharing of the international community between April 2005 and January 2006 and reveal the belief that the environmental, social and governance (ESG) issues can have a major role in the generation of economic value from financial investments (Margolis and Walsh, 2003), as well as in the development of countries (Cheng et al., 2012). Accordingly, to pay attention to the ESG factors would be of primary relevance for those investors who want to meet with the task of enhancing shareholders' trust (Artiach et al., 2010). The guiding principles provide a framework through which investors can incorporate ESG factors in their investment decision-making and governance processes on a voluntary basis. In this way, investors are also supposed to align their economic objectives with the wider spectrum of aims referring to the social context in which they operate. Three main categories of constituents can join the UN PRI scheme: asset owners, service providers and investment managers, the latter representing the category in which management companies of private equity funds studied in this paper belong. The principles began to be disseminated from 2006 onwards. At the end of 2011, 946 companies have subscribed to the initiative, with assets under management amounting to about $30,000 million. Of these, 543 are investment managers, 247 are asset owners, and 156 are service providers (source: www.unipri.org).

The involved companies can take advantage of different benefits by joining the UN PRI scheme. First, they acquire competencies that allow them to improve the understanding of issues, risks and opportunities linked to responsible investments. Second, they can access the international best practices in terms of ESG policies, so reducing research and implementation costs of an investment decision plan able to incorporate CSR requirements. The companies that take part in the UN PRI enter an international investors' network and achieve a considerable reputational benefit arising from the commitment they can attest to by supplementing their task with the observance to ESG needs. Finally, investors can contribute to carrying out an investment decision that is better managed, transparent, sustainable and long-term oriented, with the opportunity to enhance the future corporate guidelines and investment policies.

1.2. Guiding principles for responsible investment. The term "responsible investing" is often improperly used in business, thus accurate directions and standards must be delineated in order to define its boundaries. The United Nations have established six guiding principles in order to identify a responsible investment.

1. *Inclusion of ESG criteria.* Companies are asked to make explicit reference of the inclusion of ESG criteria in their investment policies; develop analysis and measurement models − economic and financial ones − that incorporate ESG issues; encourage research about ESG; promote continuing workforce training as regards ESG issues.
2. *Active investment management*. Companies have to design policies, rules and standards to enhance ESG criteria and manage shareholders' decision consistently with the ESG policies adopted.
3. *ESG disclosure*. Companies are required to adopt standardized reporting, namely the Global Reporting Initiative (GRI); endorse ESG topic integration within the annual financial reports; assess and support implementation of rules and codes of conduct of international relevance, such as the UN Global Compact.
4. *Principles support at a global level*. Companies are asked to include the guiding principles in their request for proposal and align their investment mandates, investment control systems, performance indicators, compensation and remuneration systems with those included in the UN PRI scheme.
5. *Improve effectiveness of CSR polices*. This objective is supported by allowing companies to join a shared network to exchange information and tools, to share resources, to solve key issues or to develop collaboration projects.
6. *Reporting disclosure*. Companies are required to reveal how ESG issues are integrated into their investment activities; disclose active ownership policies in their investment management process; communicate the expectations versus the counterparts with which they work.

2. ESG, CSR and private equity

Even though the number of socially responsible private equity funds has grown dramatically in the past ten years, with the introduction of specific criteria to select target companies that accomplish ESG principles, we still lack a consistent body of literature on this topic.

More specifically, a considerable number of studies have been already produced on the relationship between ESG criteria and equity returns (Schröder, 2007; Balios and Livieratos, 2007), and some con-

tributions have investigated the relationship between the SRI approach and mutual funds' returns (Derwall and Koedijk, 2009; Ferruz et al., 2007). Nevertheless, to our knowledge no published contribution can be found on the specific relationship between ESG principles and private equity returns. In the following we outline the relevant contributions on the topic that the literature has recently produced.

Peiris and Evans (2010) give evidence of a significant positive relationship between ESG criteria and both return on assets and market-to-book value measures in the US stock market, supporting the theory that corporate social performance is beneficial for corporate financial performance. Manescu (2011) finds that certain ESG indicators, such as community relations, protection of human rights and safety at the workplace, are value relevant, and thus can explain stock returns, but this is due more to mispricing than a compensation for the higher risk supported. Lee et al. (2010) investigate the impact of the higher number of attributes (defined as "screens" by the authors) imposed by socially responsible principles on the mutual fund performance, finding that increased screening results in lower systematic risk. Therefore, the authors suggest that socially responsible principles seem to guide fund managers to pick stocks with lower beta and minimise overall risk of the invested portfolio. Gil-Bazo et al. (2010) find that US SRI mutual funds have better before and after fee performance than conventional funds with similar characteristics. Moreover, they do not find significant differences in fees between SRI and conventional funds, except in the case of SRI funds run by the same management company of conventional funds. Contrary to this evidence, Humprey and Lee (2011) do not identify any significant difference between performance of SRI funds and conventional funds in the Australian stock market, showing that a relationship between funds with more screens (i.e. SRI funds) and better risk-adjusted performance cannot be identified.

The only study, still not published, on the relationship between ESG and private equity funds has been performed by Amankwah and Abonge (2011). In this study, the authors show an increasing level of ESG compliance of venture capital and private equity funds in the UK and in the US, but they do not investigate the impact of adoption of socially responsible practice on funds' performance.

The analysis of the impact of ESG principles' adoption and private equity funds' performance is of particular interest to researchers in the field of economics of socially responsible investments. Specifically, compliance with ESG requirements in general, and with the UN PRI framework in particular, requires adoption of higher standards of transparency and disclosure that seem to be in contrast with established management practice of private equity funds. These funds commonly limit their disclosure level in order to protect relevant and sensitive information that may grant superior investment performance (Beuselinck et al., 2008; Acharya et al., 2007). The UN PRI program has a specific work stream for the private equity market, with the purpose to join limited partners (LPs), general partners (GPs), advisors, and fund of funds, to enhance awareness and support scheme development and implementation of principles for this asset class. As of June 2011 the United Nations have issued the second edition of a handbook (UN PRI, 2011) that emphasises how all involved subjects must play an important role in supporting a better and more consistent integration of ESG factors in private equity investment decisions.

3. Data and method

3.1. Preliminary data analysis. An initial database including 1,048 pension funds represented by 381 management companies, on average nearly 3 funds each, is first analyzed. 25 out of 381 management companies have signed the UN PRI between 2007 and 2011: 3 in 2007 − that is just one year after the program launch − 3 in 2008, 8 in 2009, 7 in 2010 and 4 in 2011 (Source: www.unipri.org).

Then, in order to assess single investments made by funds in the 2006-2011 period, the ThomsonOne database has been used to collect relevant standard data: period intervening between capital raising and the first known investment; number of limited partners (LPs) that have subscribed fund shares; number of tranches of the fundraising: number of investments and number of write-offs for each fund; state, year and belonging industry of each investment. Following this methodology 1,137 single investments corresponding to 278 funds between 2006 and 2011 have been first considered.

3.2. Sample adjusting. Based on the abovementioned dataset, analysis has been conducted on all funds with vintage year from 2006 that have adhered to the UN PRI and also in the years after establishment of the UN PRI initiative. Many management companies already paid attention to CSR issues, thus their subsequent adherence to the UN PRI program should have not caused sensible variations in their investment, reporting and disclosure policies towards investors and other stakeholders. To build the regression model, impact of all variables collected on performance of funds has been assessed. *IRR net of fees*, *investment*

multiples provided by the funds, and *cash multiples* calculated as a ratio between cash out – distribution made by funds managers – and cash in – capital call committed by LPs – have been first considered as dependent variables. After some test regressions conducted on different purpose-built samples, we have decided to use solely *cash multiple* as dependent variable, as it is always significant in all regressions carried out.

The following explanatory variables have been analyzed in the study:

- *Compliance to UN-PRI program*, measured by a dummy variable that assumes a value equal to 1 if funds are managed by companies that have adhered to the UN PRI initiative and 0 if managed by non-compliant companies.
- *Fund maturity*, as difference between vintage year and beginning of reference period (2006), to discriminate possible differences between newly established and more mature funds.
- *Time intervening between vintage year and first investment*, assessed to discriminate between funds with immediate investment opportunities with regard to launching date and those with a more fence-sitting investment strategy.
- *Number of LPs*, that can be explained with regard to investors' interest in a specific fund, and to history, attractiveness and track record of the management company.
- *Number of fundraising tranches*, to assess investment distribution according to its size, and resulting risk that must be supported by limited partners.
- *Number of investments*, to evaluate whether or not a connection between amount of investments made and final performance of funds can be identified.
- *Number of write-offs*, indicating number of investments with no value that are written-off. By its nature, this is a variable that can have a substantial impact on fund performance.

3.3. Sample statistics. Final dataset is made up of 135 funds, corresponding to almost 50 per cent of overall population of funds over the examined period; of these, 25 are UN PRI compliant funds, and the remaining are non-compliant ones. Main statistics about the sample built up are shown in Table 1. This table also informs about typology of funds constituting the dataset; it can be noticed that buyouts (33.33%), mid-market instruments (30.37%), and to a lower extent venture capital (17.04%), are the most represented typologies of funds.

Table 1. Statistics of investigated sample

		%	Min	Max
Total funds	135			
Buyout	45	33.33		
Midmarket	41	30.37		
Venture	23	17.04		
Distressed	12	8.89		
Special situations	6	4.44		
Real estate	2	1.48		
Fund of funds	2	1.48		
Mezzanine	2	1.48		
Secondary	2	1.48		
UN PRI compliant	21	15.56		
Mean cash multiple	0.20		0.00	1.32
Time between vintage year/1st investment (mean)	0.59		0	5
LPs number (mean)	5.10		1	20
Fundraising tranche number (mean)	1.96		1	6
Investment number (mean)	8.50		1	79
Write-off number (mean)	0.11		0	1

Cash multiple was the only variable available for all examined funds, therefore it has been taken as dependent variable. Fund maturity, time intervening between vintage year and first investment, number of limited partners (LPs), number of fundraising tranches, number of investments and number of write-offs have been taken as independent variables, as their significance was identified in previous test regressions conducted on different samples. Relationship between described variables can be explained by the following equation.

$$Cash\ multiple = \alpha + \beta_0\,(UN\ PRI) + \beta_1\,(Maturity) + \beta_2\,(Intervening\ Time) + \beta_3\,(LPs\ Number) + \beta_4\,(Fundraising\ tranches\ Number) + \beta_5\,(Investments\ Number) + \beta_6\,(Write\text{-}offs\ Number)$$

4. Results and discussion

Main results of the analysis are exhibited in Table 2.

Table 2. Results of multiple regression on private equity returns

	Cash multiple	
Variables	Beta	t-stat
Constant		6.562
UN PRI compliance	0.211***	2.730
Maturity	-0.522***	-6.556
Time between vintage year and 1st investment	-0.187***	-2.587
LPs number	0.095	1.322
Fundraising tranches number	0.097	1.368
Investments number	-0.173**	-2.339
Write-offs number	0.081	1.109
Adjusted R^2		0.412

Note: ** significance at the 95% confidence level. *** significance at the 99% confidence level.

Key output of our analysis is represented by significance of the UN PRI compliance. Results are satisfactory, since compliance with the UN PRI program is statistically significant with reference to dependent variable. Coefficient value is positive and significant at the 99% confidence level, supporting the tenet that companies that pay higher attention to environmental, social and governance (ESG) requirements can benefit from higher economic performances. The result is particularly revealing as the dataset was built with the aim to assure the lowest possible imbalance between number of compliant and non-compliant funds, discarding all other samples that were not able to guarantee this condition. From a statistical point of view, a sample heavily overbalanced towards a value of one of the variables would bias validity of the model within the limits of that specific variable. Therefore, results obtained with reference to the UN PRI compliance variable are meaningful, since the dataset was built – as mentioned – with the purpose to include the highest possible number of funds adhering to CSR principles, at the cost of sacrificing other variables that did not show up to be extremely significant in test regressions conducted on other samples.

Adjusted R^2 of the model is 41.2%; not an extremely high coefficient of determination, but sufficient to express some indicatory observations. Incidentally, adjusted R^2 of dataset analyzed is the highest of all other datasets used in test-regressions, so supporting non-exceptionality of results obtained from the analysis.

Perhaps, even more important than the result of UN PRI compliance itself on private equity performances is identification of higher significance of ESG commitment variable, approximated by compliance with UN PRI scheme, compared to all other features investigated. The only exceptions are variables related to maturity and time intervening between vintage year and first investment, that have a strong negative connection to private equity performance, also at the 99% level. This finding was intuitively imaginable, since "younger" funds have recorded lower performances than "older" funds. As regards all other factors examined, the relationship is not as clear as that found for UN PRI compliance. As Table 2 shows, most variables, and precisely number of LPs, number of fundraising tranches and number of write-offs, have a nonexistent explanatory effect on performance. Instead, number of investments shows a slight negative influence on performance of funds, with a level of significance of 95%. This influence is, in any case, inferior in absolute value to that observed for commitment to ESG issues approximated by UN PRI compliance adherence.

For the sake of analysis, in Table 3 we present values of correlation analysis among examined variables. This table shows substantial absence of correlation between each independent variable.

Table 3. Correlation analysis matrix of explanatory variables

	Write-off	Fundraising tranches number	LPs number	UN PRI compliance	Intervening time	Investments number	Maturity
Write-off	1						
Fundraising tranches number	-0.035	1					
LPs number	0.165	-0.032	1				
UN PRI compliance	**-0.101**	**0.047**	**-0.201**	1			
Intervening time	0.117	0.038	0.209	**0.067**	1		
Investments number	-0.250	-0.014	-0.091	**0.116**	0.250	1	
Maturity	0.125	-0.277	-0.204	**0.446**	0.125	0.219	1

Based on results obtained from our analysis, the tenet in favor of adoption of ESG criteria by private equity investors would be supported, thus confirming some preliminary conclusions achieved by other authors (Amankwah and Abonge, 2011). Use of a socially responsible approach when conducting equity investments seems to be beneficial, since it probably introduces a more disciplined managerial action upon invested companies. Accordingly, these are likely to reduce exposure to those risks that may affect corporate performance in the long run and undermine private equity returns. Towards our conclusion, if a positive relationship between ESG criteria commitment and private equity returns was further confirmed, we might then underline the particular relevance of this practice in the private equity industry in order to attract more investors and financial resources. Notwithstanding this important implication, the inclusion of ESG principles in the decision-making process within the private equity industry encounters a number of technical obstacles and limitations that need to be considered (Blanc et al., 2009). One reason that could hinder introduction or improvement of ESG criteria by private equity investors is the relative impossibility to set ESG guidelines that can be generally applied to the universe of invested companies, that are by nature characterized by strong diversity (sector, country,

development stage, etc.). Moreover, invested companies that are participated by an ESG-compliant private equity fund have to allocate more human and capital resources to enhance their disclosure extent and to comply with more rigid transparency standards and corporate control. On the one hand, we can expect that some companies may be prepared to set up higher structured reporting procedures, such as large industrial groups or delisted companies following LBOs; yet, on the other hand, young and high growth ventures financed by private equity and venture capital are usually unfamiliar, unprepared or unwilling to allocate considerable resources and make concerted efforts to adopt stricter reporting standards. Another opposing argument to establishment of socially responsible practices by private equity funds is limited presence of "ESG rating" companies that can specifically assess and monitor invested companies and constantly provide an updated evaluation of their ESG performance, then helping funds in their decision-making process and monitoring activities.

From an opposite point of view, a number of positive implications arising from application of socially responsible standards, that would be able to offset limitations previously discussed, are often reported. The first concerns concentration of capital in companies participated by private equity funds that act as favorable condition to enhance the communication process between investors and entrepreneurs/managers; this factor would also facilitate application of ESG practice, i.e. not requiring consensus of a wide audience of shareholders, as in a public company with a vast shareholder base. Second, adoption of corporate socially responsible criteria may improve the quality of corporate governance standards required by private equity investors through the compulsory inclusion of disclosure practices (Wang et al., 2011). Furthermore, ESG principles may align the interests of entrepreneurs/managers with those of investors, in order to pursue development of the company with a long-term view and to promote a dedicated policy to increase value of human capital. Moreover, extra-financial measures brought in by a ESG framework may be also helpful to monitor those intangible and "soft power" risk factors that may affect corporate performance (such as image and reputation on the market, fairness in the relationship with labor-force), and to mitigate potential tensions that may arise when a private equity investor puts pressure to improve financial performance of the invested company. Finally, adoption of socially responsible standards can satisfy sustainable development standards increasingly demanded by listed corporations and public authorities. Whereas, in the case of young and innovative firms participated by private equity investors, adherence to such requirements may be critical to obtain contracts with key clients.

For the sake of completeness, part of the literature has shown some concerns on the overall role and effectiveness of CSR policies in light of unfair business practices sometimes perpetuated by the same companies worldwide. This thinking claims that CSR practices serve mostly to distract attention from practices implemented by companies in their business and would basically represent a marketing and communication tool in order to attract investors, rather than to effectively implement sound ESG principles. The case of British Petroleum (BP) is well-known: BP publishes sustainable reports every year to communicate its commitment in environmental issues, but some presumed abuses were reported also by non-academic sources (Palast, 2011). "Greenwashing" practices have been widely denounced, especially when implemented by companies that are then accused of alleged improper practices in poorest countries (Sachs, 2008). Based on these arguments, validity of adherence to the UN PRI could be also challenged.

The UN PRI is a non-state organization which does not derive its rule-making authority from nation-state sovereignty, but from civil society and market forces. Such authority is dependent on the organization's degree of social legitimacy, which is a "generalized perception or assumption that the actions of a entity are desirable, proper, or appropriate within some socially constructed system of norms, values, beliefs and definitions" (Suchman, 1995, p. 574). A non-state organization, indeed, gains legitimacy on how the organization is perceived by concerned external audiences (Suchman, 1995). It is also true that commonly international organizations benefit from a high degree of uncritical success and they can stray from their declared goals (Barnett and Finnemore, 1999). Standards are a central mechanism in this kind of organization, even though the democratic establishment of many standards is questionable (Kerwer, 2005).

As affirmed in the first section of this work, the term *responsible investment* is difficult to define; the UN PRI has a desire to have a common globally accepted ideology about this topic; however, responsibility is a too subjective value, which is embedded in normative and cultural institutions. Thus, a worldwide accepted definition is impossible. Implicitness of responsible investment allows more actors to participate without being constrained by an explicit definition with which they may not fully agree.

Accordingly, some scholars state that the UN PRI is less an agent of change and more a means to obtain legitimacy, averting social criticism and/or gaining a competitive advantage by adopting a more 'responsible' image (Gray, 2009). Therefore, the results obtained in our work should be assessed considering the partial inability of the UN PRI tool to fully recognize implementation of responsible investment practices.

Conclusions

Our research aimed at investigating the relationship between corporate socially responsible standards and private equity returns, by analyzing the impact of the UN PRI principles on US private equity funds' performances. According to our results, US private equity funds that adhered to the UN PRI program in the period from 2006 to 2011 seem to benefit in terms of higher returns, measured by the cash multiple realized in every single investment. Our evidence confirms the positive impact of the ESG screens in the investment decision process and neglects common criticism that non-financial screens restrict investment opportunities and worsen investment performance. However, we also point out the main limits of our work in order to set the avenue for future research and to provide some suggestions for further investigation on this subject. First, our results are affected by the limited time horizon of the analysis and by the relatively limited size of sample. Future studies may extend this empirical work by employing a larger timeframe and wider samples. Second, in our sample there are just 25 UN PRI compliant funds out of a total 135 funds analyzed. Even if we consider the portion of UN PRI compliant funds on the total sample as satisfactory in this first research attempt, we could expect more significant findings on the UN PRI economic impact and whether the number of UN PRI funds should soar in future. According to available data, application of SRI investment schemes to the activity of private equity funds sharply increased. The US SIF Foundation reported a 16 per cent growth in private equity and other alternative investments (such as property investments and hedge funds) that adhered to ESG criteria in year 2011, compared to year 2010. Moreover, the same source reported a total of 223 ESG-compliant private equity and venture capital funds active on the US market in 2011 with $33.9 billion of assets under management, equal to 41.9 per cent of the overall ESG alternative investment market. Incentive for private equity funds to comply with SRI principles is enhanced by a mounting new category of investors, like socially responsible pension funds, philanthropic and faith-based funds, that are particularly sensitive to ESG rules when selecting investment vehicles or assets in which to invest. Thus, we foresee a great need to enhance assessment and review of metrics used to evaluate alternative financial investments. This would permit better characterization of the SRI approach to equity investments. In addition, it would also satisfy a strong and regular necessity to produce and update knowledge on performance of ESG-compliant private equity funds and the role of ESG principles in explaining their returns.

References

1. Acharya, V.V., Franks, J. and Servaes, H. (2007). "Private Equity: Boom and Bust?", *Journal of Applied Corporate Finance*, Vol. 19, Issue 4, pp. 44-53.
2. Amankwah G. and Abonge H.V. (2011). "Investigating Environmental, Social and Governance (ESG) Considerations in Venture Capital and Private Equity Firms. A Study in US and UK Venture Capital Industry", Umea School of Business, Unpublished Master thesis.
3. Artiach, T., Lee, D., Nelson, D. and Walker, J. (2010). "The Determinants of Corporate Sustainability Performance", *Accounting & Finance*, Vol. 50, Issue 1, pp. 31-51.
4. Balios, D. and Livieratos, A. (2007). "Ethical Investing and Volatility: a Theoretical Perspective", *International Research Journal of Finance & Economics*, Issue 9, pp. 105-110.
5. Barnett, M.N. and Finnemore, M. (1999). "The politics, power, and pathologies of international organizations", *International Organizations*, Vol. 53, Issue 4, pp. 699-732.
6. Berthon, B. (2010). "Responding to the Crisis: Redefining Corporate Value", *Corporate Governance*, Vol. 10, Issue 4, pp. 354-359.
7. Beuselinck, C., Deloof, M. and Manigart, S. (2008). "Private Equity Investments and Disclosure Policy", *European Accounting Review*, Vol. 17, Issue 4, pp. 607-639.
8. Blanc D., Goldet B., Hobeika S. (2009). "Where Do Private Equity Businesses Stand on the Integration of ESG Issues?", *Working Paper*, Novethic SRI Research Center.
9. Cheng, W., Song, Y., Liu, J., Yu, H., Xing, Y. and Berlyn G. (2012). "Environment and Development: the Prospective for Early- and Late-Developed Countries", *Environmental Economics*, 1.
10. Chertok, S. and Braendel, A.D. (2010). "Closed-end Private Equity Funds: a Detailed Overview of Fund Business Terms", *Journal of Private Equity*, Vol. 13, Issue 2, pp. 33-54.
11. Derwall, J. and Koedijk, K. (2009). "Socially Responsible Fixed-Income Funds", *Journal of Business Finance & Accounting*, Vol. 36, Issue 1/2, pp. 210-229.

12. Ferruz, L. Marco, I. and Ortiz, C. (2007). "Socially Responsible Investment: Mutual Funds. Global and Local Trends", *International Journal of Applied Economics & Finance*, Vol. 1, Issue 2, pp. 120-125.
13. Gil-Bazo J., Ruiz-Verdù P., Santos A.A.P. (2010). "The Performance of Socially Responsible Mutual Funds: the Role of Fees and Management Companies", *Journal of Business Ethics*, Vol. 94, Issue 2, pp. 243-263.
14. Gray, G. (2009). "Investing for the Environment? The Limits of the UN Principles of Responsible Investment", University of Oxford, *Working paper series.*
15. Hong, H. and Kostovetsky, L. (2012). "Red and blue investing: Values and finance", *Journal of Financial Economics*, Vol. 103, Issue 1, pp. 1-19.
16. Humprey J.E., Lee D.D. (2011). "Australian Socially Responsible Funds: Performance, Risk and Screening Intensity", *Journal of Business Ethics*, Vol. 102, Issue 4, pp. 519-535.
17. Lee D.D., Humprey J.E., Benson K.L., Ahn J.Y.K. (2010). "Socially Responsible Investment Fund Performance: The Impact of Screening Intensity", *Accounting and Finance*, Vol. 50, Issue 2, pp. 351-370.
18. Kerwer, D. (2005). "Rules that many use: standards and global regulation", *Governance: An International Journal of Policy, Administration, and Institutions*, Vol. 18, Issue 4, pp. 611-632.
19. Manescu C. (2011). "Stock Returns in Relation to Environmental, Social and Governance Performance: Mispricing or Compensation for Risk?", *Sustainable Development*, Vol. 19, Issue 2, pp. 95-118.
20. Margolis, J.D. and Walsh, J.P. (2003), "Misery Loves Companies: Rethinking Social Initiatives by Business", *Administrative Science Quarterly*, Vol. 48, Issue 2, pp. 268-305.
21. Palast, G. (2011). *Vulture's Picnic: in Pursuit of Petroleum Pigs, Power Pirates and High-Finance Carnivor*, New York: Dutton.
22. Peiris D. and Evans J. (2010). "The Relationship Between Environmental Social Governance Factors and U.S. Stock Performance", *The Journal of Investing*, Vol. 19, No. 3, pp. 104-112.
23. Rubaltelli, E., Pasini, G., Rumiati, R., Olsen, R. and Slovic, P. (2010). "The Influence of Affective Reactions on Investment Decisions", *Journal of Behavioral Finance*, Vol. 11, Issue 3, pp. 168-176.
24. Sachs, J.D. (2008). *Common Wealth: Economics for a Crowded Planet*, Penguin Press.
25. Schröder, M. (2007). "Is There a Difference? The Performance Characteristics of SRI Equity Indices", *Journal of Business Finance & Accounting*, Vol. 34, Issue 1/2, pp. 331-348.
26. Suchman, M.C. (1995). "Managing legitimacy: strategic and institutional approaches", *Academy of Management Review*, Vol. 20, Issue 3, pp. 571-610.
27. UN PRI (2011). *Responsible investment in private equity. A guide for limited partners*, UNEP Finance Initiative and UN Global Compact.
28. Wang, J.L., Sheu, H.J. and Chung, H. (2011). "Corporate Governance Reform and Earnings Management", *Investment Management and Financial Innovations*, Vol. 8, Issue 4, pp. 109-118.