SRI, FINANCIAL CRISIS AND EMERGING MARKETS,

THE BRAZILIAN MARKET DURING THE 2008 CRISIS.

Área temática: Gestão Econômica e Financeira

Raphael Acosta

PhD student
Université Paris 13-Sorbonne Paris Cité
99 Av J. B. Clément, 93430 Villetaneuse, France
raphael.acosta@yahoo.com.br

Erick Leroux

Associate Professor
Université Paris 13-Sorbonne Paris Cité, IUT Saint Denis
Place du 8 Mai 1945
93206 Saint-Denis cedex France
leroux_erick@hotmail.com

Abstract: The combination of corporate finance and sustainability has been increasingly relevant these last years. The expansion of socially responsible investing in all developed financial markets has been subjected to numerous studies for the past years. However, very few papers focus on SRI in emerging markets. The purpose of this study is twofold: a) to bring a new perspective on socially responsible investments and b) to analyze their performance during the financial crisis. We have chosen to focus on the Brazilian market for three reasons: its major regional financial hub, its early-developed SR market and its considerable scale. This paper evaluates the performance of ethical indices comparing to the conventional indices through four statistical measurements, over three different periods: before, during and after the crisis. The results of this study show that in Brazil during crisis periods, SRI funds have rather outperformed benchmarks.

List of abbreviations:

RP: portfolio return;RF: risk-free asset return; RM: market portfolio return; RB: benchmark return; $\sigma(RP)$: standard-deviation of portfolio returns; $\sigma(RP – RB)$: standard-deviation of return differences;MAR: minimum acceptable return.

Key words: Socially Responsible Investing; Bovespa; Ibovespa; Financial Performance; Corporate Social Responsibility.

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1. <u>Introduction</u>

Conventional financial theories postulate that markets are efficient and investors are rational. Their portfolio strategies are assumed to be based on specific financial parameters adapted to their own risk aversion. However, these mainstream theories are contradicted by the increase in SRI-related research while SR markets are growing, and investors include extra-financial screens in their portfolio management strategy.

Since the early 2000's, empirical research on SRI and stock performance is increasing exponentially (Revelli 2011), while the number of ethical and religious investment funds is constantly growing. Empirical research mainly compares the stock performance of these funds to that of conventional funds, with very different results.

Certain hypotheses assume that SRI could generate higher financial return than conventional funds or indices, such as stakeholder theory (Freeman, 1984), Porter's theory (1991) which assumes that optimizing environmental management favors better productivity, or information theory (Kurtz, 2002).

Other assumptions put forward a negative relation between SRI and performance, stating that SRI is a constraint to value creation and generates lower performance than conventional investing. These assumptions are based on the strict application of modern portfolio theory (Markowitz, 1952), following Friedman liberal opinions (2009). Two lines of arguments are usually quoted: the lack of portfolio diversification and an increase in transaction fees.

It is quite difficult to forecast an emerging trend on the basis of empirical studies (Revelli and Viviani 2013, Endrikat *et al*. 2014). Some studies prove that ethical finance outperforms mainstream finance (Derwall and Koedijk 2009, Galema *et al.* 2008), and others prove the contrary (Hong and Kacperczyk 2009, Jégourel and Verdié 2012). Last but not least, a group of studies concludes that SRI has little or no impact on performance (Blanchett 2010, Cortez *et al*. 2012).

For instance, we observe that most studies listed by Revelli and Viviani (2013) focus on the American market (58%), the English market (11%) and the French market (10%). Studies referenced by Allouche and Laroche (2005) are even more focused on these geographical areas, with 75 studies on the American market, 6 on the British market and 1 on

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the Canadian market. None of these meta-analyses considers specific study focused on emerging markets. All these studies focus only on North-American, European, and Australian markets, and there exist only few publications on emerging markets (Viviers *et al* 2008, Gladysek and Chipeta 2012, Maimon 2012)..

Most listed SRI indices in developed markets have been subject to thorough analysis, mainly regarding financial return. However, there exist only a few number of similar studies regarding emerging markets, mainly focused on Asian markets (Aras *et al.* 2010, Saleh *et al.* 2011, Kolk and Muller 2011). Furthermore, there exist very few studies on SRI performance during the financial crisis of 2007-2009, also called the subprime crisis

The focus of these studies on this small number of markets can be explained by the fact that these countries were pioneers in SRI development. However, while SRI is strongly growing in Brazil, we could imagine that the scientific community would have shown much more enthusiasm for this topic. To our knowledge, only few local authors are interested in this focus.

In this context, the aim of our study is twofold: a) to provide a new approach on non-Western socially responsible investments, and b) to analyze their performance during the financial crisis. The main objective of this study contributes to the literature by considering the impact of SRI compliance on the financial performance of firms listed on the Bolsa de Valores, Mercadorias e Futuros de São Paulo (Bovespa), in the context of an emerging country. The geographical scope of study that we have chosen is Brazil for three reasons: its financial weight in the area, the early development of its SR market and its substantial scale.

2. The Brazilian context

2.1. The BM&F Bovespa

Inaugurated in 1890, the Bolsa de Valores de São Paulo (Bovespa) was the first capital market based in Brazil. In 2000, all 27 regional stock exchanges have merged, to be included in the Sao Paulo stock exchange. The Bovespa has concentrated all negotiations of the Brazilian equities, and the regional exchanges now only keep just some local activities. Since its merger with BMF (organized market derivatives), the Bovespa has become the leading

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Latin American financial center and one of the largest in the southern hemisphere. Its benchmark is the Índice

Bovespa (Ibovespa). It consists of core assets traded on the Bovespa in terms of values and liquidity (presented in Table 1), and is not limited in quantity.

Table 1 – The first 10 Bovespa capitalisations

Name	Sector	Capitalisation*
Petrobras	Oil and Gaz	318.556
Vale	Mines and Minerals	250.878
Itau Unibanco	Finance	148.444
Ambev	Food	142.904
Bradesco	Finance	106.420
Transm. Paulistas	Energy	86.827
Banco do Brasil	Finance	76.753
Santander	Finance	63.847
Ultrapar	Holding	60.317
Itausa	Finance	51.283

Source : Bovespa 2012
*In million of Reais

Like the major emerging places, we can see a very high concentration of titles around some areas. First, the mining and energy, which by itself accounts for 41 % of the weight of listed companies. This concentration is even more pronounced than the industry consists of a very small number of players. The other predominant sector of this market is the financial and banking stocks. This segment comprises 31% of the capitalization of listed companies, which indicates that non-financial and non-energy values (broadly defined) together represent less than 30% of the total capitalization.

The unique element of this market is probably the economic implication of the Federal government in the management of listed companies. Indeed, despite the economic reforms of the Cardoso government (1995-2002) who led a wave of privatizations unprecedented in Brazil, the Federal government continues to control many companies directly or indirectly, under the status of "*mixed economy companies*". Among the most important we can mention: *Petrobras, Eletrobras, Sabesp , Copel , Cesp , All America...* What makes the first player in this market.

Despite its many attractions, the Brazilian stock exchange seems far from passionate academic researchers. Indeed, to our knowledge, there are still very few studies on the integration of Bovespa in the world market, and these items are relatively recent. Oliveira and Medeiros (2009) show that the NYSE and the Bovespa are segmented however there are co-movements between the latter and the Dow Jones. However, the results also show that the practice of arbitration based on the lead-lag effect is not economically feasible because of transaction costs. Conversely, Aloy *et al* (2013) show that the Brazilian and Argentine markets are not cointegrated in pairs or with the NYSE.

2.2.   *The Socially responsible investment in Brazil*

The concept of socially responsible finance has emerged in Brazil in the 1990s, with the UN Conference on Environment and Development in 1992, also known as the "*Earth Summit*" in Rio de Janeiro. On this occasion, a number of institutions concerned with social responsibility have emerged, including the Institute of Ethos[1]. Singular case among emerging economies by 2000, the publication of a non-financial report has been imposed on companies listed on Bovespa, under the theme of governance. In 2001, a new segment called "corporate governance" has been introduced to identify the companies and the index "*Índice de Ações com Governança Corporativa Diferenciada"* aggregates better evaluated.

Thus, at the end of 2001, the Brazilian bank "*Banco Real*" (owned by Dutch group ABN Amro) launched two "Ethical Funds", the first funds SR Latin America. In 2004, it was the turn of "*Banco Itau*" bank to launch its own background SR named "*Fundo Itaú Social Excelência*". Until 2006, the assets of these funds were very low, insignificant. With the commitment of Bovespa and the launch of the SR index, the number of SR funds and their assets have increased dramatically. Since 2010, about 60% of companies in the Ibovespa publish sustainability reports, and five of them include the Dow Jones Sustainability Index (DJSI).

Following the launch of the JSE SRI by the Johannesburg Stock Exchange, Bovespa was inspired by this experience to launch its own index, the "*Índice of Sustentabilidade Empresarial*" (ISE) in December 2005. The index was developed by the Centro de Estudos em Sustentabilidade (GVCES) of the School of Business Administration of São Paulo of the
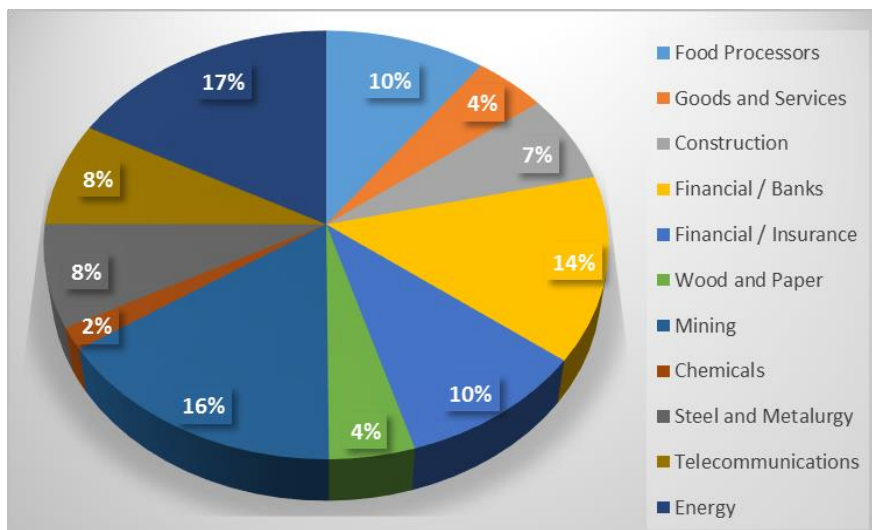
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[1] Ethos Institute is the organization of reference in the field of CSR in Brazil: www3.ethos.org.br

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Getúlio Vargas Foundation (FGV - EAESP) with the financial support of the IFC. Today, the ISE is governed by a multi-stakeholder -board including representatives from government, NGOs and investor associations collectively approve the inclusion or exclusion of companies in the portfolio (Wheeler and Sillappaa, 1997). Only 200 companies representing the largest stocks in the Brazilian market are eligible for this index. The application for this membership is voluntary and occurs in response to the GVCES questionnaire sent to the 200 eligible companies. Like the JSE SRI, the scope of the questionnaire GVCES adopts the concept of *Triple Bottom Line* and evaluates these three aspects in an integrated way, by adding three additional indicators (disclosure, product and corporate governance) .

The methodology of this index has the distinction of associating a quantitative approach based on the analysis of questionnaires sent by companies who want to integrate the index and qualitative, based on public information. Once the questionnaires are completed, statistical analysis is used to evaluate and classify the most successful companies. In a second step, the board qualitatively analyzes each company eligible to distinguish companies that make up the index.

Graphic 1 – The ISE Index Composition

Source : Bolsa de Valores de São Paulo

The capitalization of the ISE index is dominated by the financial sector (Graphic 1), with a quarter of the total capitalization. This concentration is similar to that of the benchmark - Ibovespa. The mining sector is also well represented, with 16 % of the capitalization, which is higher than the concentration of the sector in the benchmark (12%). Finally, the areas of

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water and energy and food represent 16% and 10% of the capitalization of the ISE, which corresponds to twice the concentration in the Ibovespa.

We note that three major companies comprising the Ibovespa were not included in the ISE, *Petrobras, Embraer and AmBev*. Petrobras is a petroleum company - South American first capitalization - which was excluded from the index for reasons related to the marketing of a fuel type, however, authorized by the Federal government. *AmBev* and *Embraer* are respectively Latin American leaders in the markets for alcoholic beverages and aerospace, and non- integration is related to the nature of their activities.

3. Empirical data and methodological approach

3.1. The Data

Research on emerging capital markets is not easy. Indeed, the foundations of international financial data are often incomplete with regard to emerging companies and scholarships are not always willing to cooperate with academic research markets. This problem is even more pronounced for information about SRI in these markets. Thus, access to these data can sometimes be complicated, time-consuming , if not impossible in many cases.

 For this study, we use two types of data: indices administered by the Bovespa and the SRI funds managed by independent companies. The indices were all provided by local exchange companies in a daily frequency. We selected socially responsible index, the benchmark and the representative of small and mid-cap indices.

As we explained above, access to information has been very difficult as far as SRI investment funds are concerned. No SR strategy has been communicated to us, and ANBIMA[2] Association sent us over the main SR funds of the Brazilian market. Table 2 presents funds and socially responsible indexes studied and their benchmarks.

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[2] Associação Brasileira das Entidades dos Mercados Financeiro e de Capitais

Table 2 – List of funds and indices studied

Indices		Investments Funds	
Name	Symbol	Name	Symbol
Ibovespa	BovR	*Banco do Brasil Ações ISE Jovem FIC*	Bov1
Índice de Sustentabilidade Empresarial	BovI	*ITAU Perso Ações Excelencia Social*	Bov2
Small Cap	BovS	*ITAU Ações Excelencia Social FICFI*	Bov3
Mid-Large Cap	BovM	*Bradesco Prime FIC FIA ISE*	Bov4
FTSE 100	Ftse	*HSBC FICFI de Ações Sustentabilidade*	Bov5
Euro Stoxx 50	Euro	*Santander FIC FI Ethical Ações*	Bov6
S&P 500	S&P		

The period runs from 01/01/2006 to 31/12/2012. The courses will be studied in local currency for internal comparisons. To test the relations with foreign markets we have selected 3 benchmarks and tests will be in U.S. dollars[3].

3.2. *Performance measures*

Performance measurements are mainly differentiated by the method of risk assessment. The methods using variance (and its extensions) as well as the Value at Risk approach do not require particular conditions in terms of returns distribution. They are easily exploited, whatever the nature of the temporal series analyzed.

Risk assessment based on the β of the Capital Asset Pricing Model (CAPM) presupposes the Efficient-market hypothesis (EMH), as well as the right diversification of the funds assessed. Many studies analyzed the EMH in Brazil. Mishra (2011), Ely (2011) and Simões *and al*. (2012) all rejected this hypothesis whatever the nature of the test used.

Eventually, in order to avoid these potential biases, we have not used any measurements based on the β of the CAPM for the assessment of the series analyzed. Indeed, we will rather use performance measures assessing portfolio-related risk via the variance and

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[3] Converted with exchange rates from the World Bank.

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the Value at Risk approaches. Four ratios will be used to assess these performances through three risk assessment methods: Sharpe; Sortino; Sharpe Var and eSDAR.

Sharpe ratio

The *Reward-to-variability ratio* presented by Sharpe in 1966 is the excess return minus the risk-free rate, to the total portfolio risk. Later called the Sharpe Ratio, it considers the total portfolio risk and not the Beta coefficient. In other words, it is the ratio of a risk premium to the free-risk asset. The risk-free assets chosen for this study are the average treasury bills rates. For an ex-post measure, the ratio has been formulated as follows:

$$Sp = \frac{R_P - R_F}{\sigma(R_P)}$$

The main limit to the analysis of the Sharpe ratio is that it is based on the standard deviation of the portfolio returns, however the measure of this last element does not take into account the possibility that the deviations assessed may be higher or lower than the average. The impossibility to determine the sign of the deviations might then equivocate the interpretation of the results.

In this study, the risk-free asset selected is the 10-year treasury bills[4].

SharpeVaR

Dowd's *Excess Return on Value-at-Risk* (VaR) (2000), also called SharpeVaR suggests to replace the standard deviation of the portfolio returns by the VaR to measure portfolios performance, in order to limit the risk incurred. It would be formulated as such:

$$S_{VaR} = \frac{R_P - R_F}{VaR_P}$$

The VaR is negative by nature, thus we draw your attention to the fact that ShareVaR must be interpreted differently from the conventional Sharpe ratio, since the performance is changing in inverse proportion to this ratio. In other words, the more negative the ratio, the more performant the asset. Likewise, a positive ratio would indicate that the considered return

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[4] D'après les données ouvertes de la Banque Mondiale

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is lower than the risk-free asset. In order to circumvent this difficulty, we will use the absolute value of the VaR to calculate this ratio:

$$S_{VaR} = \frac{R_P - R_F}{|VaR_p|}$$

Sortino Ratio

The ratio defined by Sortino and Price (1994) is structured similarly to the Sharpe Ratio, but the risk-free asset is replaced by a rate called Minimum Acceptable Return (MAR). If we assume that investors are relatively adverse to risk, the MAR gives the return rate below which investors refuse to go. Contrary to the Sharpe ratio which takes into account volatilities, the Sortino ratio only considers the standard deviation of returns that are lower than the MAR. Therefore this ratio does not take into account the portfolio downward movements, i.e. the *Downside Risk*.

$$Sortino = \frac{Rp - MAR}{\sqrt{\frac{1}{T}\sum_{\substack{t=0 \\ Pour\ Rpt < MAR}}^{T}(Rpt - MAR)^2}}$$

This method is different from conventional measures as it defines performance based upon investors' risk aversion and not upon the market. The notion of minimum acceptable return is not defined in an absolute way by Sortino and Price, it can be interpreted differently depending on the case studied.

We consider here that the local inflation[5] corresponds to the level of MAR.

eSDAR

The Excess standard-deviation-adjusted return (eSDAR) measure is well appreciated by academic researchers that study SRI performance. It was introduced by Statman (1987, 2000), in two studies on SR funds' performance. The eSDAR of a portfolio is the excess return to the benchmark portfolio's return. We calculate the eSDAR as follows:

$$eSDAR = R_F + \left(\frac{R_P - R_F}{\sigma_P}\right)\sigma_M - R_M$$

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[5] According to the World Bank's available data de la Banque Mondiale

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In this study, we represent the market portfolio R_M through the benchmark index.

4. Empirical Applications

4.1. *Descriptive statistics*

Table 4 reports various return and risk measurements. Overall, we see two distinct sets, respectively composed of Bovespa indices (including the ethical index) and of SRI funds. These measurements have been carried out on a daily basis from 01/01/06 to 31/12/2012.

Table 4 – Return and risk measurements on the JSE

	Return	Standard-deviation	Semi-Standard-deviation	VaR
BovR	79,0%	8,93%	5,76%	-3,07%
BovS	80,6%	10,29%	5,24%	-2,80%
BovM	23,4%	8,60%	4,89%	-2,93%
BovI	104,2%	8,46%	5,27%	-2,77%
Bov1	102,3%	8,42%	5,10%	-3,03%
Bov2	94,7%	8,76%	5,56%	-3,27%
Bov3	90,3%	8,79%	5,64%	-3,27%

Over the selected period, we see that SRI funds and indices show slightly greater return. However, the risk measurements relating to investment funds are equivalent or higher than those relating to the indices. We also note that the BovI shows the lowest VaR risk level in this sample. This observation is all the more surprising than the small cap segment is usually riskier.

Moreover, we didn't note significant differences between the risk levels of SRI funds and the others indices studied over the 2006-2012 period. This observation does not goes in line with the risk reducing theory of the SRI (Freeman, 1984; Porter, 1991; Kurtz, 2002…).

4.2. Performance analysis

In terms of financial performance, Table 5 shows that some funds and indices movements are uniform, with very little significant spreads. The performance of the BovI
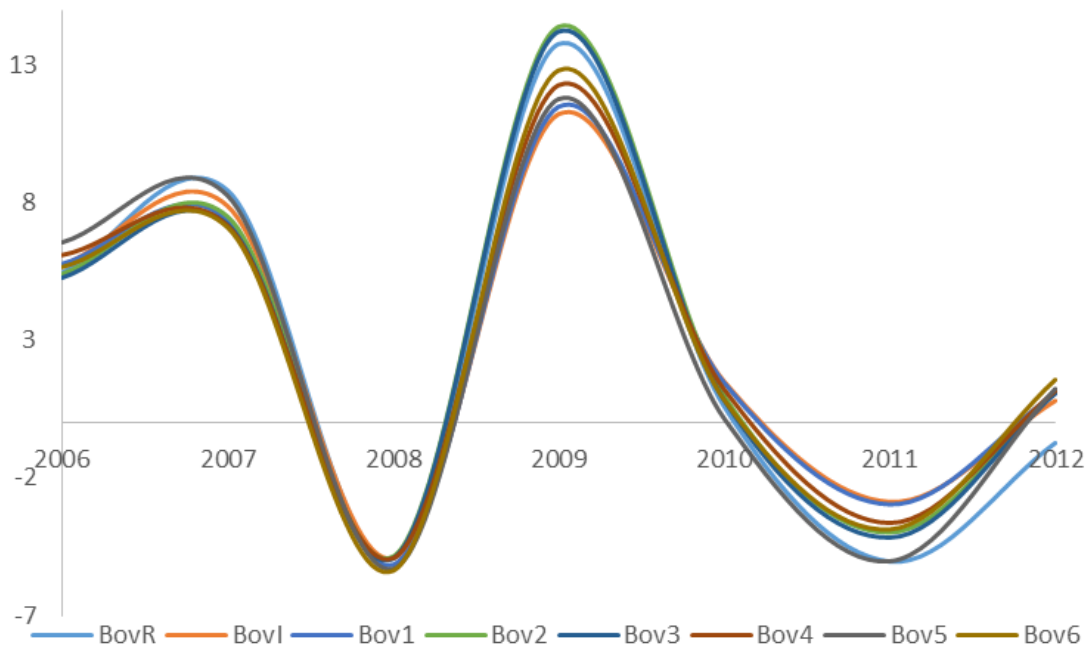
index and that of the Bov1 and Bov4 funds are slightly higher than that of the compared assets. Due to their low yields and their high risk levels, the small and medium caps outperform the whole sample.

Table 5 – Financial performance measurements on the Bovespa

	Sharpe	Sortino Ratio	SharpeVaR	eSDAR
BovR	9,07	6,5	26,21	
BovS	7,73	7,0	28,37	-10,28%
BovM	2,61	-2,1	7,65	-57,59%
BovI	12,38	10,6	37,67	28,77%
Bov1	12,23	11,0	33,86	27,43%
Bov2	10,95	8,9	29,18	16,53%
Bov3	10,42	8,1	27,81	11,81%
Bov4	12,35	10,5	33,37	28,26%
Bov5	9,69	7,4	27,11	5,19%
Bov6	11,63	9,7	30,80	21,69%

The performance spreads observed between the SRI and the rest of the market can be mainly explained by the high return level and for an equivalent risk level offered by these funds. In every cases the 4 performances measures states that the Brazilian's SRI overperform their local benchmark .

Graph 2 – Bovespa Sharpe Ratio

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Graphically, we note that indices tend to jointly change, with relatively close Sharpe ratios, particularly for SRI. The outperformance of Bov1 and Bov4 funds is clearly illustrated by Graph 2, where we observe the preponderance of these two funds compared to the sample over the selected period.

5. <u>Conclusions</u>

This paper aimed to be an exploratory study, focusing a topic that is still little tackled: SRI funds trading on the Brazilian Stock Exchange. We specifically focused on comparing SR funds and indices performance to that of conventional finance during the recent financial crises, in order to define the impact they might have on these different asset classes. To our knowledge, the subject of this research (SRI during financial crises) and its scope of application (emerging markets) remain little studied in scientific literature, which is surprising considering its conceptual stake.

This study shows that in Brazil during crisis periods, SRI funds slightly outperformed benchmarks. Similarly, for all periods studied, ethical funds have outperformed market indices overall.

Statistically, such good performance can be explained mainly by the ability of these funds to offer higher returns levels than market standards, while they provide risk close to the benchmarks. These results didn't confirm assumptions that better social practices tend to

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reduce risks while they affect returns only slightly, but it demonstrate a really high return's levels of this funds during the crises.

To go further than this exploratory study, it would be relevant to widen the scope of this analysis to other emerging markets in order to build even more accurate conclusions. Similarly, an analysis on the financial index composition could turn out to be opportune, by adding a qualitative component to this exploratory study.

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REFERENCES

Allouche, J., Laroche, P. (2005). A Meta-Analytical Investigation of The Relationship between Corporate Social and Financial Performance. *Revue de Gestion des Ressources Humaines*, vol. 57, juillet-septembre.

Aras G., Aybars A., & Kutlu O., (2010). Investigating the relationship between corporate social responsibility and financial performance in emerging markets. *International Journal of Productivity and Performance Management*, Vol. 59 Iss: 3

Aregbeshola A. & Radebe S. (2012). The impact of corporate social responsibility on the profitability of listed retailers: Indication from the Johannesburg Security Exchange (JSE). *African Journal of Business Management* Vol. 6(4), pp. 1694-1701, 1

Blanchett, D. M. (2010). Exploring the cost of investing in socially responsible mutual funds: An empirical study. *The Journal of Investing*, *19*(3), 93-103.

Bryant, R. C. (1994). Global change: Increasing economic integration and eroding political sovereignty. *The Brookings Review*, *12*(4), 42.

Cortez, M. C., Silva, F., & Areal, N. (2012). Socially responsible investing in the global market: The performance of US and European funds. *International Journal of Finance & Economics*, *17*(3), 254-271.

Derwall, J., & Koedijk, K. (2009). Socially responsible fixed-income funds.*Journal of Business Finance & Accounting*, *36*(1-2), 210-229.

Dowd, K. (2000). Adjusting for risk:: An improved Sharpe ratio. *International review of economics & finance*, *9*(3), 209-222.

Ely, R. A. (2011). Returns predictability and stock market efficiency in Brazil.*Brazilian Review of Finance,* 9(4), 571-584.

Endrikat, J., Guenther, E., & Hoppe, H. (2014). Making sense of conflicting empirical findings: A meta-analytic review of the relationship between corporate environmental and financial performance. *European Management Journal*,*32*(5), 735-751.

Freeman R. E. (1984). Strategic management: A stakeholder approach, Marshfield, Massachussets, Pitman Publishing, Inc

Friedman, M. (2009). Capitalism and freedom. *University of Chicago press*.

Galema, R., Plantinga, A., Scholtens, B. (2008). The Stocks at Stake : Return and Risk in Socially Responsible Investment. *Journal of Banking and Finance*, vol. 32, iss.12

Gladysek, O., & Chipeta, C. (2012). The impact of Socially Responsible Investment Index constituent announcements on firm price: evidence from the JSE. *South African Journal of Economic and Management Sciences*, *15*(4), 429-439.

Hong, H., et Kacperczyk, M. (2009). The price of sin: The effects of social norms on markets. *Journal of Financial Economics*, *93*(1), 15-36.

Jégourel, Y., & Verdié, J. F. (2012). La responsabilité sociale et environnementale en finance: réalité, performance et stratégie des fonds d 'investissement éthiques. *La revue du financier*, *193*, 20-29.

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Kolk A. and Muller A. (2011). CSR Performance in Emerging Markets Evidence from Mexico. *Journal of Business Ethics* - Volume 104 / 2011

Kurtz, L. (2002). Studies in the Field of SRI Investing.

Maimon, D. (2012). An assessment of Brazilian SRI funds. *VIII Congresso nacional de excelência em gestão,* 8 e 9 de junho de 2012

Markowitz, H. (1952). Portfolio selection. The journal of finance, 7(1), 77-91.

Mishra, P. K. (2011). Weak form market efficiency: evidence from emerging and developed world. *The Journal of Commerce*, 3(2), 26.

Porter, M.E. (1991) "Towards a Dynamic Theory of Strategy", *Strategic Management Journal*, n°12, pp. 95–117

Revelli, C. (2011). La performance financière de l'investissement socialement responsable (ISR) : approche méta-analytique. *Thèse de doctorat* Université Montpellier 1

Revelli, C., & Viviani, J. L. (2013). The Link Between SRI and Financial Performance: Effects and Moderators. *Management international*, 17(2), 105-122.

Saleh M., Zulkifli N., Muhamad R., (2011). Looking for evidence of the relationship between corporate social responsibility and corporate financial performance in an emerging market. *Asia-Pacific Journal of Business Administration*, Vol. 3 Iss: 2

Sharpe, W. F. (1966). Mutual fund performance. *Journal of business*, 119-138.

Simões, M. D., Macedo-Soares, T. D. L., Klotzle, M. C., & Pinto, A. C. F. (2012). Assessment of market efficiency in Argentina, Brazil and Chile: an event study of mergers and acquisitions. *BAR-Brazilian Administration Review,*9(2), 229-245.

Sortino, F. A., & Price, L. N. (1994). Performance measurement in a downside risk framework. *the Journal of Investing*, *3*(3), 59-64.

Statman M. (2000). Socially responsible mutual funds. *Financial Analysts Journal,* 56, 30-38.

Statman, M. (2006). Socially responsible indexes. *Journal of Portfolio Management* 32 (3), 100–109.

Viviers, S., Bosch, J., Smit, E., & Buijs, A. (2008). The risk adjusted performance of responsible investment funds in South Africa. *Investment Analysts Journal*, 68, 39-56.

Viviers, S., Bosch, J., Smit, E., & Buijs, A. (2009). Responsible investing in South Africa. *Investment Analysts Journal*, 69, 3-16.

Viviers, S. & Eccles, N.S. 2012. 35 Years of SRI research - General trends over time. *South African Journal of Business Management*, 43(4):15-31

Wheeler D., & Sillappaa M. (1997), The Stakeholder Corporation , FT Press, 320 p.

Zaouati, P. (2009). Investir responsable: en quête de nouvelles valeurs pour la finance. *Lignes de repères*.