

ASSET SELECTION IN SOCIALLY RESPONSIBLE BRAZILIAN STOCK FUNDS

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ABSTRACT

The Brazilian mutual fund industry is the fifth largest in the world. We produced a questionnaire based on well-known international methodologies to evaluate the asset selection practices of Brazilian SRI stock funds. We also compare industry allocations among funds and local stock indices. There were nine active Brazilian SRI stock funds by the end of 2011. There are more than 400 independent asset managers in Brazil but none managed a SRI fund. Asset managers employed by large financial conglomerates with vast retail clienteles manage them, suggesting that SRI funds may be part of an institutional image strategy. Brazilian SRI stock funds lack asset selection sophistication and need to improve the disclosure of their practices. SRI fund managers possibly make up for their poorer practices by informally indexing because their industry allocation is remarkably similar to a corporate sustainability stock index and across funds.

Keywords: *socially responsible investment; corporate sustainability; stock selection; Brazilian mutual funds.*

1. INTRODUCTION

Socially responsible investment (SRI) stock funds are professionally managed portfolios that consider socio and environmental issues to select its constituents. The Forum for Sustainable and Responsible Investment (2012) estimated that one in each nine dollars of assets under management (AUM) in US mutual funds considers SRI strategies.

Brazil is one of the largest countries and economies in the world, endowed with vast natural resources. The Brazilian investment fund industry amassed 1,076 billion US dollars in AUM as the fifth largest in the world at the end of the first quarter of 2014 (International Investment Funds Association, 2014). The four largest markets are the US (\$ 15,232 billion), Luxembourg (\$3,163 billion), Australia (\$1,721 billion), and the UK (\$1,201 billion). Brazil represented 3.5% of the total world AUM of \$30 840 billion in the first quarter of 2014.

Stock funds, however, represented only 8.4% of total Brazilian AUM, despite its importance as a large investment fund market (International Investment Funds Association, 2014). SRI stock funds are even less relevant. Pinto, Lemme, and Leal (2014) studied the performance of Brazilian SRI stock funds and identified only ten unique SRI stock funds managed by ten different asset managers out of 474 existing Brazilian asset managers at the time of their data collection in June 2013. The authors did not consider funds that focused on corporate governance practices and excluded funds of another SRI fund, for example, considering only the master fund in some cases. Their evidence indicates that managers associated to the largest financial conglomerates of Brazil managed all but one SRI stock fund. The lack of interest by independent asset managers led them to conjecture that large financial conglomerates use SRI stock funds to lure retail investors. On the positive side, Brazilian SRI stock funds perform as well as locally indexed stock funds, suggesting that the constraints imposed by the SRI strategy did not handicap SRI stock funds.

Our contribution to the literature is a questionnaire to gauge the quality of asset selection practices in SRI stock funds. It was derived from a survey of international rating methods and the Brazilian sustainability stock index (ISE) selection method and validated through the exam of materials produced by the ten largest international SRI stock funds. We apply the questionnaire to Brazilian SRI stock funds. Thus, the second contribution is to shed light on the asset selection practices of Brazilian SRI stock funds. Brazil boasts the largest mutual fund industry among emerging markets and our results may be suggestive of the status quo of asset selection practices in other emerging markets. Finally, a third contribution is to assess if the industry composition of Brazilian SRI stock fund portfolios is similar across asset managers, the ISE and general local stock index to appraise the uniqueness and development of asset selection processes employed by such funds.

We obtained answers to our questionnaire about the asset selection criteria of nine Brazilian SRI stock funds accessible to retail investors between March and December of 2011 from information that is publicly available. Our results suggest that there is either little sophistication in the stock selection process or insufficient disclosure about it. The industry allocation of most SRI stock funds was very similar to those of the ISE. Two of the three high scoring SRI funds according to their stock selection criteria are the oldest of such vehicles in Brazil, evincing that perhaps they developed better SRI screening criteria or possess more talented asset managers. After excluding these three top scoring funds, the industry composition of the six remaining funds was not significantly different from that of the ISE, even though they did not state that they track the ISE. The lower scoring of their SRI criteria and asset management costs possibly lead them to index informally. Yet, the nine SRI stock funds do not display industry allocations similar to that of the main Brazilian stock index (Ibovespa), indicating that they are actually employing SRI influenced strategies.

The article proceeds with a brief review of the literature followed by the sample and research design, the discussion of the results and the conclusions.

2. BRIEF LITERATURE REVIEW

The additional constraint SRI investing imposes on asset selection interferes with the fiduciary duties of asset managers and may hamper its widespread financial industry adoption (Martin, 2008). Still, some studies found a positive relationship between the use of environmental, social, and governance (ESG) asset selection criteria and performance. The success of SRI stock fund managers may be due to a reduced opportunity set that enables them to know their investees in greater depth or to companies that ignore ESG destroying shareholder value and reducing their long-term performance (Renneboog, Horst, & Zhang, 2008; Benson, Brailsford, & Humphrey, 2006; Sethi, 2005).

Asset managers need specific knowledge to gauge ESG in asset selection (Van den Bossche et al., 2010). Questionnaires addressed to companies are a common assessment instrument. Hallerbach *et al.* (2004) developed an asset selection score framework for SRI funds that includes the appraisal of the social impacts of the business. These authors sent out questionnaires to SRI fund managers to develop their framework and discuss the difficulty to aggregate the diverse information obtained by means of the questionnaire into objective metrics.

Negative screening is the exclusion of assets or industries from a portfolio based on their ESG practices. Examples of exclusion criteria are the production of alcoholic beverages, tobacco related products, and firearms or involvement in serious labor and human rights violations, environmental damages, animal experiments, pornography, and other illegal or socially questionable activities. Positive screening is the selection based on ESG best practices, possibly combined with best in class usage. The usual financial and economical asset selection criteria are applied after the ESG screening. The Triple Bottom Line, a combination of economic, social, and environmental criteria, and investor activism are additional screening criteria (Renneboog *et al.*, 2008).

Richardson and Cragg (2010) point out the need for the standardization of ESG investment criteria to assess the quality of practices of SRI stock fund managers. The authors also highlight that some of these funds may have a purely commercial motivation and possibly assess ESG superficially. Transforming ESG indicators into a rating is one possibility. SustainAbility (2010) identified over 50 kinds of ratings in the SRI industry, including those produced by well-known institutions such as Goldman Sachs and Standard & Poor's. They acknowledge that a large portion consists in questionnaires answered by asset managers. Yet, a trend to use only publicly available information to rate arose recently, as in our article.

Finally, Benson *et al.* (2006) evince that SRI stock funds differ from their regular counterparts in terms of the industry proportions in their portfolios, even though the asset selection ability of their managers do not differ. There frequently are no differences between the average performances of SRI stock funds and their counterparts (Benson *et al.*, 2006; Renneboog *et al.*, 2008; Cortez, Silva, & Areal, 2008; Pinto *et al.*, 2014).

Investors face difficulties regarding SRI in emerging markets. The opaqueness of companies and the distance between ESG practices and the corporate culture are among the pivotal difficulties (The Forum for Sustainable and Responsible Investment, 2009). Brazil is perceived as the most advanced emerging market for SRI. We hope that the instrument developed in this article contributes to ameliorate investor choice in these markets.

3. SAMPLE AND RESEARCH DESIGN

We produced a questionnaire to gauge SRI stock selection procedure after surveying international practices based on eight SRI rating methods. We review the asset selection practice of eight international SRI stock funds to validate the criteria derived from the rating methods. The SustainAbility (2011) report was used to identify the main rating methods. We considered only institutions specialized in evaluating socio and environmental issues with the purpose of investment and selected those methods mentioned at least three times in the report. We selected seven international rating methods: FTSE4Good, Trucost, Oekom, Global100, Vigeo, GS Sustain, and DJSI. The Brazilian ISE index methodology was also considered due to its local relevance.

We selected international SRI stock funds for validation from SRI Leaders Report (IpreoINK, 2011) list of the ten largest AUM SRI stock funds. We preferred the largest AUM fund if more than one fund from the same asset manager made the list and excluded niche funds that addressed a specific theme in the SRI fund space. The eight selected funds were: Amana Mutual Funds Trust Growth Fund, Ariel Fund, Calvert Equity Portfolio, CREF Social Choice Account, Neuberger Berman Socially Responsive Portfolio, Parnassus Equity Income Fund, Pax World Balanced Fund, and PowerSha http://www.ipreoink.com/investor-relations/item/737-ipreo_sri_leaders_report_fall_2011 res Water Resources Portfolio. We examined the website of these asset management companies, fund reports, brochures, and bylaws. The final questionnaire was also derived with the aid of the specialized literature and may be examined in the Appendix (Delmas & Blass, 2010; UNEP and Mercer, 2011).

Each question in the questionnaire was assigned one point if the answer was "yes" and zero if the answer was "no" or we could not find an answer from the publicly available information. We produced the answers to the questionnaire from our own examination of the information made public by each SRI stock fund in its own and in the Brazilian Securities Commission (Comissão de Valores Mobiliários, CVM) website in order to simulate the investor fund decision. This method has the advantage that we did not depend on access to SRI fund managers to answer questions, which is usually the case for most investors, particularly retail investors. The obvious downside is that some null answers may be due to poor fund disclosure and not to the absence of a certain practice. Nevertheless, poor disclosure in itself is a bad practice.

The sampled Brazilian SRI funds were selected from the Quantum Axis fund database that obtains its raw fund data from the Associação Brasileira das Entidades dos Mercados Financeiro e de Capitais (Anbima), the Brazilian Association of Financial and Capital Market Entities. We searched the active stock funds in the "Sustainability/Governance" Anbima category and obtained an initial set of 31 stock funds. We deleted eleven funds dedicated exclusively to corporate governance, ten funds of funds, to avoid duplication, and one fund discontinued in 2011. The final sample consists of the nine funds listed in Table 1. All funds are open to retail investors. They represented only 0,11% of total Brazilian fund AUM (\$853 billion) in the year of data collection (Anbima, 2011).

The CVM website has the portfolio of each fund on the last trading day of each month in the December of 2009 through November of 2010 period. The Legg Mason fund initiated in August 2010 and had only five portfolios. The Unibanco fund was discontinued towards the end of the period and had only eleven portfolios. The website of the Brazilian exchange (BM&FBovespa) offers the portfolios of the ISE and Ibovespa indices. The Ibovespa is rebalanced every four months at the beginning of January, May, and September and the ISE is rebalanced every year. We obtained the Ibovespa portfolios for the three four-month periods in 2010 and the November 2009 ISE portfolio, used from December 2009 through November 2010.

The BM&FBovespa industry classification was adapted. We employed 15 industry categories: (1) water, sanitation, and gas supply; (2) processed foods; (3) industrial goods and transportation materials; (4) building and engineering; (5) cyclical consumer goods; (6) non-cyclical consumer goods; (7) electricity and power; (8) wood, paper, and chemicals; (9) mining; (10) oil, gas, and biofuel; (11) assorted services; (12) financial services; (13) metals and iron; (14) telecommunications and media; (15) logistics and transportation. We computed the proportions of the portfolios of each fund and index in these 15 industries and then obtained the average proportion of each industry in each fund and index.

4. RESULTS

4.1 Questionnaire analysis

The Appendix shows the questionnaire, some details about how the answers were obtained, and the count of affirmative answers for each question for the nine SRI stock funds. More details about the answering criteria are available with the authors. Regarding question 1.b, Santander was the only asset manager to say it counts with in-house ESG specialists. Itaú, HSBC, and Votorantim, in addition to Santander, suggest the possibility of using an external team of specialists to oversee the stock selection process, while Santander, Votorantim, and HSBC mention they use proprietary methods to select SRI stocks. The remaining five asset managers say nothing about their expertise in ESG investment analysis and it is also not clear whether the professional deciding about SRI also serves as the main investment decision maker in other stock funds of the same asset manager. None of the nine SRI stock fund managers evaluate the participation of investees in ESG causes and initiatives (question 1.c). The set of questions addressing SRI practices (2.a through 2.e) reveals that the positive screening expressions we searched for, such as "best in class", are not used by all funds, even though some of them employed related but more generic expressions, hampering the search for information by the investors familiar with SRI practices. The very low scores in this set of questions indicate opaqueness about the SRI practices of asset managers. Only four asset managers reveal their sources of ESG information in question set 3, contributing to our opaqueness notion. Virtually all funds score in set 4, which deals with investee ESG evaluation themes. Brazilian SRI stock funds seem to be consistent with their investment goal but do not provide substantial details about the evaluation process. Set 5 tackles the nature of investee ESG evaluation criteria. Six asset managers do not bring forth information about how they evaluate ESG, conveying, once more, that either the techniques applied are not well developed or that asset managers are opaque about what they actually do. Santander, Itaú, and Votorantim are the only ones to offer more details. No asset manager seems to avail themselves of methods specific to industries or less developed countries.

Finally, set 6 attends to scoring and portfolio revision and shows that Brazilian SRI asset managers do not apply ratings and scores. Solely Santander and HSBC inform that they submit their portfolio to external validation whereas Votorantim is the only one to inform the frequency of their portfolio revision.

Table 1 displays the overall questionnaire score by SRI stock fund. Detailed scores per fund are available upon request. The questionnaire contains 23 questions that could be potentially answered affirmatively. As the preceding analysis indicated, Votorantim, Itaú, and Santander are the best scoring asset managers, boasting 52, 48, and 48% of the maximum possible score, respectively. The questionnaire analysis clearly indicates that Brazilian SRI stock funds need to improve the sophistication of their ESG screening techniques or, at the very least, reduce their opaqueness in the matter of stock selection.

4.2 Industry proportions analysis

We compare SRI stock funds industry proportions to verify the uniqueness of their asset management. We collate funds among themselves and with the ISE and Ibovespa portfolios. We obtained twelve end of the month portfolios for each SRI stock funds in the December 2009 through November 2010 period from the CVM website. We proceeded to compute the average proportion of each industry and SRI stock fund across the twelve portfolios to represent the observed industry frequency. We collected twelve portfolios for seven funds, but only five portfolios for the Legg Mason fund, initiated in August 2010, and eleven for the Unibanco fund, incorporated before the end of period. We also obtained the three Ibovespa index portfolios formed during 2010, as the index is rebalanced every four months, and averaged the proportion of each industry across the three portfolios to represent the observed industry frequency. The ISE index is rebalanced annually and we took the November 2009 portfolio.

Equation 1 depicts the traditional form of the Pearson's chi-squared statistics for each industry i . The average observed proportions of industry i across the portfolios obtained for fund (or index) j ($\bar{o}_{i,j}$) represents the observed frequencies. The expected frequency for industry i in fund (or index) j (e_i) is the average of the observed frequencies for all funds (or indices). N is the number of funds and indices considered in each test. N varied between 6 and 10, depending on the test performed.

$$\chi^2_i = \sum_{j=1}^N \frac{(\bar{o}_{i,j} - e_i)^2}{e_i} \quad (1)$$

We designed 12 different tests, considering the exclusion of some or all of the three best scoring SRI stock funds in Table 1, and the inclusion of one of the indices (ISE or Ibovespa), resulting in 180 tests (12 different tests for 15 industries). Table 2 presents a summary of the tests indicating the exclusions and indices used and the industries

with significantly different proportions at the five percent level. The null hypothesis in all tests was that the proportions for industry i was the same for all funds and indices. Detailed test results are available from the authors. Test 1 in Table 2 suggests that industry proportions in all funds do not differ drastically because only two industries had significantly different allocations across funds. However, if the three best scoring funds in Table 1 are excluded, there were no significant industry allocation differences among the six remaining funds (test 8). The results for tests 9 and 10, with the ISE, are the same as in tests 1 and 8, without the ISE, respectively. The results in Table 2 reveal that the ISE portfolio is relevant for stock selection in these SRI stock funds. However, when we replace the ISE with the Ibovespa, there are more industry proportion differences. The Ibovespa is not the main benchmark for stock selection in Brazilian SRI stock funds.

5. CONCLUSIONS

We investigated the stock selection criteria of nine Brazilian SRI stock funds. The small number of SRI stock funds we found after searching the full universe of Brazilian mutual funds are all, but one, managed by largest Brazilian financial conglomerates, that possess a vast retail clientele and distribute their financial products through their banking platforms, suggesting that this investment style may be an institutional image strategy to appeal to these investors. Even though there were more than 400 different asset managers in Brazil, only nine managed SRI stock funds and none of them was independent from a relatively large banking institution.

Our main contribution was to develop a questionnaire to assess and score SRI stock selection criteria. We answered its 23 questions from information that would be publicly available to interested investors about the nine Brazilian SRI stock funds sampled. The results pointed out to a lack of sophistication and a certain degree of opaqueness. Asset managers either do not use many of the potential ESG tools to screen stocks or do not report enough details publicly to assure a higher score in our questionnaire. We also tested the industry allocations of the funds and conclude that they do not differ much among themselves and to the sustainability index produced by the Brazilian stock exchange (ISE). It is noticeable that there are no industry allocation differences among funds when the two older SRI stock funds are excluded from the comparison, suggesting that maybe these funds follow a more unique asset selection process. The lack of sophistication in stock selection methods and the adherence to the ISE industry composition point out to a possible informal ISE indexation by most funds. SRI stock funds, however, do not conform to the industry composition of the most widely followed Brazilian stock index (Ibovespa), which does not follow ESG stock selection principles. Brazilian SRI funds need to improve their ESG stock selection criteria and their disclosure practices. Future research could improve the analysis in this paper with insights from in-depth interviews with SRI stock fund managers.

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Appendix: SRI stock funds scoring questionnaire and sampled funds scores

No.	Question	Details	"Yes" count
1	SRI involvement and promotion:		
1.a	Is the Brazilian asset management parent company a signatory of the principles for responsible investing (PRI)?	Verify the signatories in the PRI website.	5
1.b	Does the asset manager mentions expertise in environmental, social and governance (ESG) issues in their investment analysis?	Verify if the company employs ESG specialized professionals, uses the supervision of outside ESG specialized professionals, has a sustainability research team, or developed proprietary methods to evaluate ESG issues.	4
1.c	Does the asset manager evaluate the participation of investees in ESG initiatives and causes?	–	0
2	SRI practices:		
2.a	Does the asset manager mention the use of selected major stock screening criteria?	The selected criteria are verifying if the company belongs: to a liquidity or sustainability index; to one of the premium corporate governance listing segments of the exchange; to a list of the largest companies in terms of employees, revenues, or profits.	0
2.b	Does the asset manager mention the use of negative screening?	Negative screening is the explicit use in its material of the following words or derivative expressions: filter; exclusion; r negative screening.	1
2.c	Does the asset manager mention the use of positive screening?	Positive screening is the explicit use in its material of the following words or derivative expressions: best in class or positive screening.	0
2.d	Does the asset manager mention shareholder activism?	Shareholder activism means that the asset manager voting policy includes ESG vote guidance, that they actively promote ESG disclosure, or advocate ESG discussion with investees.	1
2.e	Does the asset manager mention community investment initiatives with the AUM of the fund?	–	0
3	Sources of ESG information:		
3.a	Does the asset manager use official company information publicized by the investee, such as reports, websites, etc.?	–	2
3.b	Does the asset manager send questionnaires to potential and current investees?	–	2
3.c	Does the asset manager use external information sources such as reports from specialized ESG institutions, paid or not?	–	4
4	Investee evaluation themes:		

4.a	Does the asset manager evaluate the environment dimension?	–	8
4.b	Does the asset manager evaluate the social dimension?	–	9
4.c	Does the asset manager evaluate the financial and economic dimensions?	–	9
4.d	Does the asset manager evaluate the corporate governance dimension?	–	8
5	Nature of investee ESG evaluation criteria:		
5.a	Do the ESG evaluation criteria of asset managers include investee strategy and policy?	Verify if it mentions the evaluation of ESG alignment with corporate strategy, policies and codes of conduct, or sustainability targets.	3
5.b	Do the ESG evaluation criteria of asset managers include investee management and performance?	Verify if it mentions the evaluation of operational practices or ESG performance.	3
5.c	Do the ESG evaluation criteria of asset managers evaluate investee disclosure methods?	Verify if it mentions the evaluation of the ESG information quality or adherence to well-known methodologies.	3
5.d	Do the ESG evaluation criteria of asset managers differ by investee industry?	Verify if it mentions different criteria or weighing according to industry or within-industry comparisons.	0
5.e	Are the ESG evaluation criteria of asset managers specific to investee exposure to less developed countries?	Verify if criteria and rigor differ if there is exposure to less developed countries or if there are restrictions for conducting business in certain areas.	0
6	Scoring and portfolio revision:		
6.a	Does the asset manager produce an objective scoring of investees?	Objective scores include ratings, classifications, or point scores.	0
6.b	Does the asset manager submit its portfolio to external validation?	Verify if an external or independent entity evaluates the SRI criteria or portfolio.	2
6.c	Does the asset manager clearly inform the frequency of portfolio revisions or rebalancing?	–	1

Note. Questions are answered as "yes" or "no" from publicly available information disclosed by nine asset managers to investors.

Table 1

Total SRI stock fund questionnaire score

SRI stock fund	Asset manager	Fund total score	Percentage of total possible score
Votorantim Sustentabilidade FIA	Banco Votorantim	12	52
Itaú Excelência Social Ações	Banco Itaú Unibanco	11	48
Santander Ethical II	Banco Santander Brasil	11	48
HSBC FIA SRI	HSBC Bank Brasil	8	35
Bradesco FIA ISI	Banco Bradesco	6	26
Unibanco Sustentabilidade FIA	Banco Itaú Unibanco	6	26
BB Top Ações ISE FIA	Banco do Brasil	5	22
Caixa FIA ISE	Caixa Econômica Federal	4	17
Legg Mason Master Sustentabilidade Empresarial FIA	Western Asset Management Company	2	9

Note. The score of each fund is the sum of affirmative answers for the questions in the questionnaire in the Appendix. There are 23 possible affirmative answers and the percentages in the rightmost column are relative to this figure.

Table 2

Differences in industry proportions

Test #	Exclusions	Index	Industries with significantly different allocations at the 5% level
1	None	None	Mining and financial services
2	Votorantim	None	Mining
3	Itaú	None	Mining and financial services
4	Santander	None	Mining and financial services
5	Votorantim, Itaú	None	Mining
6	Votorantim, Santander	None	Mining
7	Itaú, Santander	None	Financial services
8	Votorantim, Itaú, Santander	None	None
9	None	ISE	Mining and financial services
10	Votorantim, Itaú, Santander	ISE	None
11	None	Ibovespa	Building and engineering, cyclical consumer goods, mining, financial services, telecommunications and media, logistics and transportation
12	Votorantim, Itaú, Santander	Ibovespa	Building and engineering, mining, oil, gas, and biofuel, logistics and transportation.