JOURNAL OF
BUSINESS AND MANAGEMENT
Vol. 4, No.10, 2015: 1132-1147

FUND MANAGER CHARACTERISTICS AND THE SOCIAL PERFORMANCE OF CONVENTIONAL MUTUAL FUNDS IN INDONESIA

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Abstract – Socially responsible investment has been popular in the last decade due to the global concerns on ethical and environmental issues which cause high risk in the future. Socially responsible investment is also started to grow in Indonesia with the establishment of sustainability index, SRI-KEHATI, in 2009. Growing interests in SRI investment in Indonesia make us wonder whether conventional mutual funds also invest in companies with high social performance. Further, previous study in Indonesia mostly examines the financial performance of conventional funds or SRIs and there is no study yet which examines the social performance of conventional mutual funds and their determinants. Hence, this study aims to find the score the social performance of conventional equity mutual funds in Indonesia. We measure this using two ethical indices in Indonesia stock exchange, which are ISSI (Indonesia Sharia Stock Index) and SRI-KEHATI. This study period is only 2012 due to data availability. Further, we examine whether there is a relationship between fund manager characteristics such as gender and education background and this social performance. Our regression results show that there is no relationship between female fund managers and their asset allocation in firms with high social performance. However, we find that fund managers with master degree but not necessary from overseas university seem to invest in firms with high social performance which showing that higher degree may have provide them with higher concerns on environmental, social, and governance issues. We also find that older funds tend to hold shares that are socially responsible suggesting older funds may put higher concern on social than financial performance of their holdings due to lower market risk and the expectation of better performance in the future or in the long term.

Keywords: Socially Responsible Investment Funds, Conventional Mutual Funds, Gender, Educational Background, Behavioral Finance, Fund Manager.

Introduction

Socially responsible investment has been popular in the last decade due to the global concerns on ethical and environmental issues which cause lower risk and better performance in the future. As we can see today, overexploitation toward nature and environment cause more natural disasters occur, which lead to more damage and risk for us. In order to prevent more negative effects of our business activities, nowadays, people tend to considering ethical and natural-environment constraint to their business and investment decisions. The first SRI mutual fund was established in 1948 when the UK church investors developed their own investment portfolios considering ethical constraints (Sparkes, 2002). At the beginning of 2014, SRI mutual funds were counted for 30.2 percent of the professionally managed assets in the world (Global Sustainable Investment Alliance, 2014). The Social Investment Forum (SIF) defines Socially Responsible Investment (SRI) as "an investment process that considers the social and environmental consequences of investments, both positive and negative, within the context of rigorous financial analysis" (Global Sustainable Investment Alliance, 2014, p. 6). SRI is different to conventional investment who allocates their assets based on financial screens only such as risk and return. In Indonesia, conventional mutual funds were first introduced when the government established PT Danareksa in 1976. At that time, PT Danareksa issued first mutual fund product named "*Sertifikat Danareksa*". Currently, conventional mutual funds market in

Indonesia has grown significantly accounted for IDR 182 trillion at the beginning of 2015 from IDR 2.8 trillion in 1996 (BAPEPAMLK, 2015). Although showing growth SRI mutual funds are still new. SRI market in Indonesia only constitutes an IDR 11.1 trillion at the beginning of 2015 (BAPEPAMLK, 2015). However, there were only six SRI funds in 2010 and now there are 71 products in the beginning of 2015 (BAPEPAMLK, 2015). The interest in SRI is also supported by the establishment of ethical and SRI indices such as JII (Jakarta Islamic Index) in 2000, ISSI (Indonesia Sharia Stock Index) in 2011, and SRI-KEHATI in 2009.

Hawken (2004) finds that more than 90% of the companies in the American conventional index Fortune 500 are included in the cumulative portfolio of 399 sustainability investment funds. Therefore, the growing concerns on issues in environmental, social, and governance and increasing interests in SRI in Indonesia we wonder whether conventional mutual funds also invest in companies with high social performance. Further, previous study in Indonesia mostly examines the financial performance of conventional funds or SRIs (Desiana and Isnurhadi, 2012; Maulana, 2013) and there is no study yet which examines the social performance of conventional mutual funds and their determinants.

Yi and Haiping (2015) examines the role of the portfolio manager in generating performance and finds that fund performance is significantly related to fund managers. They find that age and education background of fund managers significantly affect the excess returns of the funds while gender significantly influence risk of the funds. Another studies have been conduct to examine the impact of fund manager characteristics such as gender and education to fund investment. Alexandra and Stefan (2006) find that women seem to take moderately less risk thus women follow significantly less extreme investment styles while men tend to take more active bets in investing the money. Haitao et al. (2011) show that managers' education also matter to mutual fund risk and performance. Fund managers who graduated from higher-SAT (Scholastic Aptitude Test) undergraduate institutions tend to have higher raw and risk-adjusted returns, more inflows, and take fewer risks (Haitao et al., 2011). Hence, we aim to rank the social performance of conventional mutual funds in Indonesia and examine whether fund manager characteristics such as gender and education determine this performance.

To rank the social performance of conventional mutual funds, we use two ethical indices in Indonesia stock exchange. Those indices are ISSI (Indonesia Sharia Stock Index) and SRI-KEHATI. ISSI is Islamic index that select companies by employing Islamic (ethical) screens while SRI-KEHATI selects companies based on global sustainable and responsible investment principles. We choose these ethical or social indices as our alternative social performance measures because database on social ranking of Indonesian companies is not available yet. If the holdings are included in one of these indices we classify them as having high social performance and none otherwise. Further, the study period is only 2012 due to data availability. Therefore, our research is limited because of our measurement method and study period.

Theoritical Framework

At the first half of 1900s, SRI or ethical investing term was not introduced yet. The first ethical investment based that have been made was when the UK church investors established their own investment portfolios considering the ethical constraints at 1948 (Sparkes, 2002). Since then, SRI industry has continued to grow. Nowadays, the total funds under management in the world that are subjected to some kind of social screen are accounted for $21.4 trillion at the start of 2014 rising from $13.3 trillion at the outset of 2012 (Global Sustainable Investment Alliance, 2014).

Socially responsible investment has been popular in the last decade due to the global concerns on ethical and environmental issues which cause lower risk and better performance in the future. The Global Sustainable Investment Alliance define SRI as "an investment approach that considers

environmental and social impact factors of a company in and governance (ESG) in portfolio selection and management" (Global Sustainable Investment Alliance, 2014).

History of Socially Responsible Investment in Indonesia began with the issuance of Islamic Mutual Funds by PT. Danareksa Investment Management on July 3, 1997. Furthermore, the Indonesia Stock Exchange (in the past was Jakarta Stock Exchange) in cooperation with PT. Danareksa Investment Management launched the Jakarta Islamic Index (JII) on July 3, 2000 which aims to guide investors who want to invest their funds based on Sharia principles. Since then, SRI development in Indonesia having rapid growth on SRI-faith based principles. Until June 2009, Kehati Foundation in cooperation with Indonesia Stock Exchange launch SRI KEHATI index as the first SRI index which based on Sustainable and Responsible Investment principle. May 2011, Indonesia Stock Exchange launched (IDX) another index to accommodate the rapid growth of SRI-faith based funds in Indonesia. IDX launched ISSI that contain every sharia stocks that listed in IDX and also registered in List of Islamic Securities (*Daftar Efek Syariah/DES*). Different from JII that only contain of 30 sharia stocks. Recently, there are 82 active SRI funds in Indonesia (Otoritas Jasa Keuangan, 2015). In this research the author used ISSI instead of JII to measure the social performance because in fact the JII constituent are also listed in ISSI and ISSI index also contain more stocks rather than JII so we can get more precise result about the social performance score of the conventional mutual funds.

Investment Decisions and Behavioral Finance

Behavioral Finance is a financial theory that ignores the rational side of investors when making investment decision. This theory proposes that investor can make an "irrational" investment decision because investor does not always process information correctly and infer incorrect probability about future rates of return (Bodie et al., 2014). Another statement that being proposed in this theory is even the investor infer correct probability about future rates of return they often make inconsistent or systematically suboptimal decisions (Bodie et al., 2014). These are four of the important mistakes that usually happen when investors process information.

Forecasting errors, is a result from multiple experiments that have been done by Kahneman and Tversky (1974). Their experiments indicate that people give too much weight to recent experience compared to prior beliefs when making forecasts (a memory bias) and tend to make too extreme forecasts given their information. Overconfidence, is when people tend to overestimate the precision of their beliefs or forecasts, and they tend to overestimate their abilities in forecasting the stock price movements. This overconfidence phenomenon has been proved by a fact that only about 15% of the equity in the American mutual fund industry is held in indexed accounts (Bodie et al., 2014). The dominance of active management in investment strategy is consistent with a tendency to overestimate their ability in forecasting the market.

Conservatism bias, means that investors are too slow to updating their belief when receiving new information or fact (Bodie et al., 2014). This means that the process of the stock prices to fully reflect new information will happen gradually, not by instance.Sample Size Neglect and Representativeness, the notion of representativeness bias means that usually people do not take into account the size of a sample, people tend to act that a small sample is just as representative of a population as a large one (Bodie et al., 2014). People may make a decision just based on a small sample and then they extrapolate apparent trends too far into the future.

Development of Hypotheses

Previous studies have shown that there is an association between fund manager characteristics and fund performance. Klass (2001) finds that 10 to 50% of fund performance can be attributed to the fund managers. Yi and Haiping (2015) find that gender influences the decision making of the mutual funds manager. Alexandra and Stefan (2006) find that women seem to take moderately less risk. They conclude that women follow significantly less extreme investment styles, while men tend to take more active bets in investing the money. A number of papers have been conducted to studying

the impact of gender differences in daily life. One study finds that men are more aggressive than women and this aggressiveness difference is more pronounced for physical than psychological aggression (Steffen and Eagly, 1986). Another study finds that men prefer to invest in common stocks and real estate while women are more risk averse and investing their fund in time deposit and gold (Bayyurt et al., 2013). A few papers examine gender differences in how they processing information. Barber and Odean (2000) tested the overconfidence model which would lead to a reduced estimate of the riskiness of a given investment and found that men trade 45 percent more than women and earn annual risk-adjusted net returns that are 1.4 percent less than those earned by women. Another experimental evidence on overconfidence suggest that men are more overconfident than women (Deaux and Farris, 1977; Lundeberg, Fox and Punccohar, 1994).

Socially responsible investment is considered to be less risky than conventional investment. Nofsinger and Varma (2014) provide evidence that US ethical mutual funds outperform conventional funds in times of crisis at the cost of underperformance in non-crisis times, indicating that ethical funds are "safer" investments. Supporting this, Christoffer and Brandt (2015) also find that ethical funds have a greater reaction to negative market news but a lower exposure to the systematic market risk which indicates that ethical funds reacts to a greater extent in the volatility to negative market news than in the absolute return as compared to conventional funds. Ethical funds are less exposed to small cap firms due the theoretical inferior social responsible reporting that smaller firms may exhibit. By investing less in small cap stocks, ethical funds tend to decrease market risk significantly, especially in the crisis period as compared to conventional funds and exploit benefits from global investments to a further extent (Christoffer and Brandt, 2015). Further, SRI is less risky because it invests in firms with strong social performance, while corporate social performance has a positive relationship with its financial performance (van Beurden and Gössling, 2008). Thus, as SRI is less risky than conventional investment and women tend to invest in less risky investment than men, it is expected that:

H1 = Female fund manager is positively associated with the social performance of conventional mutual fund.

Educational background of fund manager has been found to be associated with fund investment behaviour. Haitao et al. (2011) show that managers from higher-SAT (Scholastic Aptitude Test) undergraduate institutions tend to have higher raw and risk-adjusted returns, more inflows, and take fewer risks. Chevalier and Ellison (1999) also report in their research that fund manager who attended more selective undergraduate institution have higher performance than mutual fund manager who attended less selective undergraduate institution. Other study shows that GMAT score of the MBA program is positively and significantly related to fund performance, and fund managers who hold MBAs from schools ranked in the top 30 of the Business Week rankings of MBA programs exhibit performance superior to the performance of both managers without MBA degrees and managers holding MBAs from unranked programs (Gottesman and Morey, 2006). Younger managers with MBA degrees who have longer tenure also could generate better risk-adjusted performance (Golec, 1996). These studies find that there is a relationship between fund financial performance and fund manager education background.

We also expect a relationship between education background and the social performance of mutual funds because many previous studies show that better or higher level of education background may associate with their investment in firms with high social performance since there is a positive relationship between corporate social performance and financial performance (van Beurden and Gössling, 2008). Therefore, it is predicted that:

H2 = Better or higher education of fund manager is positively associated with the social performance of conventional mutual fund.

Data and Method

Data and Sample

Data on holdings; fund characteristics such as inception date, total assets, management fee, and whether the investment company is owned by government or not; and fund manager characteristics such as gender and education are collected from the mutual fund's annual report, prospectus, and fact sheets retrieved from the investment firm's website. We also collect data on the constituents of JII, SRI-KEHATI, and ISSI indices from the websites of Indonesia stock exchange regulators such as OJK (Otoritas Jasa Keuangan), BEI (Bursa Efek Indonesia), and BAPEPAM (Badan Pengawasan Pasar Modal). Data are collected for the year of 2012.

Research Methodology

To test our hypotheses, we employ a cross sectional regression model as follows:

$$\boldsymbol{SOCP_i = c + Female_i + EduDegree_i + EduIntl_i + Size_i + Age_i + MgtFee_i + \varepsilon_i}$$

$\boldsymbol{SOCP_i}$ is the social performance score of the conventional equity mutual fund for 2012. The social performance score of conventional mutual fund is measured by following these steps:

1. If the holding is a constituent member of ISSI (*Sharia*), SRI-KEHATI (*Kehati*), and both ISSI and SRI-KEHATI (*SRI*) indices as per 2012 the social performance of the holding is one, otherwise zero.
2. Next, the social performance of a fund will be calculated by summing up the social performance scores of their holdings and divided it by total number of holdings to get the percentage.

$\boldsymbol{Female_i}$ is one if one of the fund managers is female, and zero otherwise. Alternatively, we measure this by calculating the proportion of female fund managers managing a mutual fund.
Educational background of fund manager will be tested by two variables which are whether fund manager holds a master degree and whether fund manager holds master degree from overseas university (Chevalier et al., 1999a). $\boldsymbol{EduDegree_i}$ is one if the fund manager holds a master degree, and zero otherwise. $\boldsymbol{EduIntl_i}$ is the proportion of fund managers hold master degree from overseas university. As shown in our hypotheses, we expect to find a positive relationship between one of those fund manager characteristics and fund's social performance.

We also control for fund characteristics such as $\boldsymbol{Size_i}$, $\boldsymbol{Age_i}$, and $\boldsymbol{MgtFee_i}$ in our regression model. $\boldsymbol{Size_i}$ is the asset under management or the investment firm's log of total asset. $\boldsymbol{Age_i}$ is the life time of the mutual fund product measured by months from its inception date to Des 2011. $\boldsymbol{MgtFee_i}$ is the management fee charged by the investment firm. Since a linear regression model is not always appropriate for particular data we should assess the appropriateness of the model by defining and examining the residuals. In this research we use four methods of classical assumption test which are Multicollinearity test, Heteroskedasticity Test, Normality Test and Serial Correlation Test.

Multicollinearity is a phenomenon in which two or more predictor variables in a multiple regression model are highly correlated, meaning that variable can be linearly predicted from the others with a non-trivial degree of accuracy. In this situation the coefficient estimates of the multiple regression may change erratically in response to small changes in the model or the data. In order to detecting the multicollinearity we have to see from the coefficient correlation between variables. If there is variable that have correlation value more than 0.7 or less than -0.7 then we can conclude that multicollinearity does exist. Normality test is a statistical test used to test whether the residual are normally distributed or not. In order to detecting the residual normality we can see from the p-value of Jarque-Bera statistics result. If the p-value of Jarque-Bera statistics is less than 5 percent (0.05) we can reject null and accept the alternative hypothesis which is residuals (u) are not normally distributed.

Heteroskedasticity is a term used to describe the situation when the variance of the residuals from a model is not constant. When the variance of the residuals is constant, we call it homoscedasticity. Homoskedasticity is desirable. If residuals do not have constant variance, we call it hetersokedasticty, which is not desirable. To reject the null hypothesis we would need a prob. value (or p-value) of Obs*R-squared less than 0.05. If the p-value of Obs*R-squared less than 0.05, so the residuals do have constant variance which is desirable, meaning that residuals are homoskedastic. Serial correlation is a statistical term used to describe the situation when the residual is correlated with lagged values of itself. In other words, if residuals are correlated, we call this situation serial correlation which is not desirable. If the Prob.Chi Square of Obs*R-squared is more than 5 percent (p>0.05), we cannot reject null hypothesis meaning that residuals (u) are not serially correlated which is desirable.

Results

Outcome 1

The first objective of this research is to rank the social performance score of conventional mutual funds in Indonesia. Table 4.1 shows the results of this ranking as of 2012 using three measures which are *Sharia*, *Kehati*, and *SRI*.

Table 1. Social Performance Score of Conventional Mutual Funds in Indonesia in 2012

Rank	Scored by SRI measure	Mutual Fund Name	Rank	Scored by Sharia measure	Mutual Fund Name	Rank	Scored by Kehati Measure	Mutual Fund Name
1	100.00%	INDO PREMIER IM - PREMIER CAMPURAN FLEKSIBEL	1	84.38%	INDO PREMIER IM - PREMIER CAMPURAN FLEKSIBEL	1	70.00%	BNI - AM DANA BERKEMBANG
2	95.35%	MANDIRI INVESTA ATRAKTIF	2	83.72%	MANDIRI INVESTA ATRAKTIF	2	65.63%	INDO PREMIER IM - PREMIER CAMPURAN FLEKSIBEL
3	91.84%	MANDIRI SAHAM ATRAKTIF	3	83.67%	MANDIRI SAHAM ATRAKTIF	3	51.28%	FIRST STATE INDOEQUITY VALUE SELECT FUND

4	91.18%	MANDIRI INVESTA UGM	4	82.86%	FIRST STATE INDOEQUITY DIVIDEND YIELD FUND	4	50.00%	CIMB - PRINCIPAL EQUITY AGGRESSIVE
5	90.00%	BNI - AM DANA BERKEMBANG	5	80.70%	MANDIRI INVESTA EKUITAS DINAMIS	5	50.00%	MANDIRI INVESTA EQUITY MOVEMENT
6	90.00%	MANDIRI INVESTA EQUITY MOVEMENT	6	80.00%	CIPTA RENCANA CERDAS	6	50.00%	PROSPERA BIJAK
7	87.88%	BATAVIA DANA SAHAM	7	79.41%	MANDIRI INVESTA UGM	7	48.48%	BATAVIA DANA SAHAM
8	85.71%	CIPTA RENCANA CERDAS	8	78.95%	BATAVIA DANA SAHAM AGRO	8	46.51%	MANDIRI INVESTA ATRAKTIF
9	85.29%	CIMB - PRINCIPAL EQUITY AGGRESSIVE	9	78.85%	MANDIRI SAHAM DINAMIS	9	44.12%	MANDIRI INVESTA UGM
10	84.62%	FIRST STATE INDOEQUITY VALUE SELECT FUND	10	78.79%	BATAVIA DANA SAHAM	10	43.48%	FIRST STATE INDOEQUITY PEKA FUND
11	84.31%	SCHRODER 90 PLUS EQUITY FUND	11	77.03%	GAP EQUITY FUND	11	42.86%	FIRST STATE INDOEQUITY SECTORAL

								FUND
12	84.13%	BNP PARIBAS PESONA	12	76.47%	SCHRODER 90 PLUS EQUITY FUND	12	41.27%	BNP PARIBAS PESONA
13	84.09%	BATAVIA DANA SAHAM OPTIMAL	13	76.36%	MANDIRI DYNAMIC EQUITY	13	40.63%	MNC DANA EKUITAS
14	83.78%	GAP EQUITY FUND	14	75.00%	BNI - AM DANA BERKEMBANG	14	40.00%	FIRST STATE INDOEQUITY HIGH CONVICTION FUND
15	83.33%	PROSPERA BIJAK	15	74.60%	BNP PARIBAS PESONA	15	38.18%	BNP PARIBAS EKUITAS
16	82.86%	FIRST STATE INDOEQUITY DIVIDEND YIELD FUND	16	74.36%	FIRST STATE INDOEQUITY VALUE SELECT FUND	16	36.73%	MANDIRI SAHAM ATRAKTIF
17	82.81%	BNP PARIBAS STAR	17	74.19%	SCHRODER DANA PRESTASI PLUS	17	36.36%	BNP PARIBAS INFRASTUKTUR PLUS
18	81.82%	SIMAS DANAMAS SAHAM	18	73.85%	MANULIFE DANA SAHAM	18	36.36%	BATAVIA DANA SAHAM OPTIMAL
19	81.63%	FIRST STATE INDOEQUITY SECTORAL FUND	19	73.53%	CIMB - PRINCIPAL EQUITY AGGRESSIVE	19	35.94%	BNP PARIBAS STAR

20	81.58%	BATAVIA DANA SAHAM AGRO	20	73.47%	FIRST STATE INDOEQUITY SECTORAL FUND	20	35.29%	SCHRODER 90 PLUS EQUITY FUND
21	81.54%	MANULIFE DANA SAHAM	21	73.44%	BNP PARIBAS STAR	21	33.85%	MANULIFE DANA SAHAM
22	81.25%	MNC DANA EKUITAS	22	73.33%	MANDIRI INVESTA EQUITY MOVEMENT	22	32.43%	GAP EQUITY FUND
23	80.70%	MANDIRI INVESTA EKUITAS DINAMIS	23	72.73%	BATAVIA DANA SAHAM OPTIMAL	23	31.58%	BATAVIA DANA SAHAM AGRO
24	80.65%	MAYBANK DANA EKUITAS	24	72.73%	SIMAS DANAMAS SAHAM	24	31.48%	SCHRODER DANA ISTIMEWA
25	80.65%	SCHRODER DANA PRESTASI PLUS	25	72.22%	SCHRODER DANA ISTIMEWA	25	30.11%	SCHRODER DANA PRESTASI PLUS
26	80.43%	FIRST STATE INDOEQUITY PEKA FUND	26	71.74%	FIRST STATE INDOEQUITY PEKA FUND	26	28.57%	FIRST STATE INDOEQUITY DIVIDEND YIELD FUND
27	80.00%	BNP PARIBAS EKUITAS	27	70.97%	MAYBANK DANA EKUITAS	27	25.53%	MANULIFE SAHAM ANDALAN
28	79.63%	SCHRODER DANA	28	70.91%	BNP PARIBAS	28	25.00%	MANULIFE INSTITU

		ISTIMEWA			EKUITAS			TIONAL EQUITY FUND
29	79.17%	MANULIFE INSTITUTIONAL EQUITY FUND	29	70.83%	MANULIFE INSTITUTIONAL EQUITY FUND	29	22.86%	TRIM KAPITAL
30	78.85%	MANDIRI SAHAM DINAMIS	30	68.75%	MNC DANA EKUITAS	30	22.73%	SIMAS DANAMAS SAHAM
31	77.27%	BNP PARIBAS INFRASTUKTUR PLUS	31	68.57%	TRIM KAPITAL	31	22.58%	MAYBANK DANA EKUITAS
32	77.14%	TRIM KAPITAL	32	68.09%	MANULIFE SAHAM ANDALAN	32	20.00%	CIPTA RENCANA CERDAS
33	76.60%	MANULIFE SAHAM ANDALAN	33	68.00%	FIRST STATE INDOEQUITY HIGH CONVICTION FUND	33	18.18%	MANDIRI DYNAMIC EQUITY
34	76.36%	MANDIRI DYNAMIC EQUITY	34	66.67%	PROSPERA BIJAK	34	17.54%	MANDIRI INVESTA EKUITAS DINAMIS
35	76.00%	FIRST STATE INDOEQUITY HIGH CONVICTION FUND	35	65.91%	BNP PARIBAS INFRASTUKTUR PLUS	35	17.31%	MANDIRI SAHAM DINAMIS

36	54.55%	PACIFIC BALANCE FUND	36	54.55%	PACIFIC BALANCE FUND	36	0.00%	PACIFIC BALANCE FUND

From Table 4.1 we can see that the top 5 best social performance scores of conventional mutual funds are mostly occupied by mutual funds product that have been operating more than three years or we can say older the mutual funds product mean higher score of social performance. This applies for top 5 worst social performance of conventional mutual funds, most of them are occupied by funds product that only have been operating less than three years. It could be sign that the age of the product influence the social performance of conventional mutual funds.

Outcome 2

Tables 2 provide summary statistics of our dependent and independent variables used in the regression.

Table 2. Descriptive Statistics

Variable	Mean	Median	SD	Minimum	Maximum
Dependent Variable					
The Social Performance Score					
SRI	0.83	0.82	0.07	0.55	1
Sharia	0.74	0.74	0.06	0.55	0.84
Kehati	0.36	0.36	0.134	0	0.7
Independent Variable					
Manager Characteristics					
Female	0.24	0.25	0.20	0	0.5
EduDegree	0.97	1	0.17	0	1
EduIntl	0.51	0.5	0.34	0	1
Mutual Fund Characteristics					
Size	26.57	26.53	1.73	23.71	29.81
Age	61.91	50.43	55.35	1.87	183
MgtFee	0.03	0.02	0.01	0.02	0.05

Table 2 shows that the average social performance score of the mutual fund as measured by *SRI* is above 80% percent suggesting that conventional mutual funds have a tendency to invest in companies with high social or ethical performance. Using *Sharia* as the measurement also provides similar results. However, using *Kehati* the average score is lower (mean of 36%) due to this index only had 28 constituents in 2012 while ISSI covered more than 300 companies. In Table 2 we can see that for the manager characteristics, we find that female proportion in fund manager team is on average only about 24% or of about one female manager out of three male managers. This may due to in Indonesia female tend not to work in financial industry relative to men. However, there are 90% of fund managers with master degree and about half of them were graduated from overseas university.

For mutual fund characteristics, the mean of fund *age* is about 61 months suggesting that Indonesian mutual funds on average are young. The mean of fund *size* is about 26.57 billion rupiah. The management fee that being charged to investors is range from the lowest of 1.5% to the highest of 5% with average of 2.7%. Table 3 shows multicollinearity test result of our independent variables used in the regression.

Table 3. Coefficient Correlations among Independent Variables

	Female	*EduDegree*	*EduIntl*	*Size*	*Age*	*MgtFee*
Female	1	0.20	0.23	0.19	-0.33	-0.21
EduDegree		1	0.09	-0.04	-0.36	-0.48
EduIntl			1	0.59	0.09	-0.23
Size				1	0.11	-0.21
Age					1	0.12
MgtFee						1

From Table 3, we can see that there are no variables that have correlation coefficient more than 0.7 or less than -0.7, so it can be concluded that multicollinearity does not exist in our independent variables. Table 4 shows Heteroskedasticity Test result for our regression model.

Table 4. Heteroskedasticity Test: Breusch-Pagan-Godfrey of *SRI*, *Sharia* and *Kehati*

SRI			
F-statistic	1.48	**Prob. F(8,27)**	0.22
Obs*R-squared	8.44	**Prob. Chi-Square(8)**	0.21
Scaled explained SS	18.36	**Prob. Chi-Square(8)**	0.01
Sharia			
F-statistic	1.16	**Prob. F(8,27)**	0.35
Obs*R-squared	6.97	**Prob. Chi-Square(8)**	0.32
Scaled explained SS	6.75	**Prob. Chi-Square(8)**	0.34
Kehati			
F-statistic	3.81	**Prob. F(8,27)**	0.01
Obs*R-squared	15.87	**Prob. Chi-Square(8)**	0.01
Scaled explained SS	9.75	**Prob. Chi-Square(8)**	0.14

Table 4 reports that heteroskedasticity is not a problem in our regression model except for *Kehati* model. In order to reject the null hypothesis and assume homokesdasticity we would need a p-value

of Obs*R-squared less than 0.05. From the test report we can see *Kehati* regression model has p-value of Obs*R-squared less than 0.05. In other words, heteroskedacity does seem to be a problem in *Kehati* model.

Table 5. Normality Test of *SRI, Sharia* and *Kehati* regression models

SRI		*Sharia*		Kehati	
Jarque-Bera	36.95673	**Jarque-Bera**	2.07443	**Jarque-Bera**	0.33008
Probability	0.00000	**Probability**	0.35444	**Probability**	0.84786

To determine whether the assumption of normal distributed errors are good or not, we have to see the p-value of these models. In Table 5 we can see the p-value or the probability of *Sharia* and *Kehati* models turns out to more than 5 percent, and as a result, we accept the null hypothesis and conclude that the errors are normally distributed which fulfills the assumption of a good regression line. However, the result also show that the *p*-value of *SRI* model turns out to be nearly as 0, and as a result, we reject the null hypothesis and accept that the errors are not normally distributed.

Table 4.5 shows Serial Correlation Test result for our regression models.

TABLE 6
Breusch-Godfrey Serial Correlation LM Test of *SRI, Sharia* and *Kehati*

SRI			
F-statistic	1.05	**Prob. F(8,27)**	0.37
Obs*R-squared	2.59	**Prob. Chi-Square(8)**	0.27
Sharia			
F-statistic	0.95	**Prob. F(8,27)**	0.40
Obs*R-squared	2.36	**Prob. Chi-Square(8)**	0.31
Kehati			
F-statistic	0.53	**Prob. F(8,27)**	0.59
Obs*R-squared	1.37	**Prob. Chi-Square(8)**	0.50

Tabel 6 presents the serial correlation test result of *SRI, Sharia* and *Kehati*. We can see that the Chi Square probability from these tests are more than 5 percent therefore we could not reject the null hypothesis and conclude that the residuals are not serially correlated in all of our regression models. The four tests above show that *SRI* could not pass the normality test. Running the same tests, we find that *Kehati* could not pass heteroskedasticity test while *Sharia* could pass all the tests. Therefore we will treat this problem in EViews software using White heteroskedasticity-consistent standard errors & covariance. Table 7 shows Regression result for all our regression models.

Table 7. Regression Results of Social Performance of Mutual Funds and Fund Manager Characteristics

Test Equation:

Number of Observation : 36

White heteroskedasticity-consistent standard errors & covariance

SRI	**Coefficient**	**P-Value**	***Sharia***	**Coefficient**	**P-Value**	***Kehati***	**Coefficient**	**P-Value**
C	0.68	0.09	*C*	0.50	0.09	*C*	0.59	0.31
Female	0.01	0.91	*Female*	0.03	0.60	*Female*	0.04	0.77
EduDegree	0.13	0.01*	*EduDegree*	0.13	0.00*	*EduDegree*	0.19	0.07***
EduIntl	0.01	0.88	*EduIntl*	-0.01	0.91	*EduIntl*	0.08	0.43
Size	0.00	0.88	*Size*	0.00	0.91	*Size*	-0.02	0.30
Age	0.00	0.08***	*Age*	0.00	0.16	*Age*	0.00	0.09***
MgtFee	1.48	0.50	*MgtFee*	2.34	0.15	*MgtFee*	-0.93	0.83
Adjusted R-Square :	-0.0850		**Adjusted R-Square :**	-0.0530		**Adjusted R-Square :**	0.0147	

White heteroskedasticity-consistent standard errors & covariance
*Significant at a 1% level, **Significant at a 5% level, ***Significant at a 10% level

Table 4.6 presents the regression results of the relationship between the social performance of conventional mutual funds and fund manager characteristics. We could not find enough evidence to support our H1 that *Female* is positively associated with the social performance of mutual funds. This result may due to there are not many females in fund investment team thus we find an insignificant result. This is consistent with the study by Victoria et al. (2004) who find that female is not significantly associated with investment decision toward high social performance companies.

Interestingly, we find that *EduDegree* is positively associated with fund social performance (at 1% level) supporting H2. The coefficient is 0.13 which implying that every one point increase in *EduDegree* variable it will also increase 13% of the social performance of mutual funds. This is indicating that higher education background of fund managers may influence the social performance of conventional mutual funds in Indonesia. However, *EduIntl* is not statistically significant.

Therefore, fund managers with master degree but not necessary graduated from overseas university tend to allocate the investors' funds in companies with high social performance indicating higher education of fund manager is positively associated with the social performance of conventional mutual fund. This is supporting the study by Yi and Haiping (2015) who found that higher education background of fund manager is significantly associated with a fund manager's better stock-picking ability, higher risk-adjusted excess returns and better comprehensive performance which can be achieved by investing in high social performance companies.

Using other measures of social performance which are the religious measure, *Sharia*, we find supporting evidence that *EduDegree* is positively associated with fund social performance (at 1% level). We also find same evidence using *Kehati* as the measure of social performance (at 10% level). On control variables, we only find a positive relationship between *Age* and the social performance of conventional mutual funds as is shown by the regression results of *SRI* and *Kehati*. This is suggesting that older mutual funds seem to be more concerned on the social performance of their holdings which can give lower market risk than those that are younger who may tend to aim for high financial performance which significantly more exposed to the market risk (Bauer et al., 2005).

Conclusion

Growing concerns on issues in environmental, social, and governance and increasing interests in SRI in Indonesia make us wonder whether conventional mutual funds also invest in companies with high social performance. Further, previous study in Indonesia mostly examines the financial performance of conventional funds or SRIs and there is no study yet which examines the social performance of conventional mutual funds and their determinants. Hence, this study aims to find the score the social performance of conventional equity mutual funds in Indonesia. We measure this using two ethical indices in Indonesia stock exchange, which are ISSI (Indonesia Sharia Stock Index) and SRI-KEHATI. Further, we examine whether there is a relationship between fund manager characteristics such as gender and education background and this social performance. Because in many previous studies show that fund manager characteristics proven influence the fund's investment decision and financial performance.

We find that the best 5 funds with high social performance are mostly occupied by mutual funds product that have been operating more than three years and the low ones are mostly occupied by funds product that only have been operating less than three years. Our regression results show that there is no relationship between female fund managers and their asset allocation in firms with high social performance. This may due to the lacking of female managers or that gender does not matter to fund performance in Indonesia. However, we find that fund managers with master degree but not necessary from overseas university seem to invest in firms with high social performance which showing that higher degree may have provide them with higher concerns on environmental, social, and governance issues.

We also find that older funds tend to hold shares that are socially responsible suggesting older funds may put higher concern on social than financial performance of their holdings due to lower market risk and the expectation of better performance in the future or in the long term. This study provides recommendations to investors who are attracted to invest in conventional mutual funds but still have high social performance and provide empirical evidence of determinant of social performance of mutual funds to the investment firm's management. Further research could use more reliable measures of social performance of mutual fund holdings. Finally, we suggest that future research could examine other countries with high proportion of female in fund managers to find significant evidence of a relationship between gender and the social performance of conventional funds.

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