

# THE PERFORMANCE, VOLATILITY, PERSISTENCE AND DOWNSIDE RISK CHARACTERISTICS OF SUSTAINABLE INVESTMENTS IN EMERGING MARKET

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**Abstract:** *We analyzed the performance of an emerging market SRI index, the MSCI SRI Emerging Market Index, with regard to its financial performance compared to conventional indexes between June 2011 and December 2014 based on daily returns. Our analysis suggests that the SRI index is ranked higher in terms of mean return than most of the conventional emerging market portfolios. Generally, we found relative stability in the performance and persistence for the SRI index whereby its performance is indifferent from the market benchmark and no persistence can be found. Furthermore, the results suggest that negative shocks have greater impact on the volatility of the index than positive shocks. In general, it can be concluded that the emerging markets SRI index has lower sensitivity to market return during bearish condition.*

**Keywords:** *Performance, Persistence, Volatility Downside Risk, Emerging Market, Socially Responsible Investment*

*JEL Classification: G11, P34*

## Introduction

Socially Responsible Investment (SRI) became a new investment trend. It integrates environmental, social and governance (ESG) factors into the rating and selection process of investments (Lean and Nguyen, 2014). It integrates social and environmental criteria into the set of investment indicators (Koellner, Suh, Weber, Moser and Scholz, 2007) and attempts to create a financial return outperformance compared to conventional investments that do not integrate social, environmental, or sustainability performance criteria into the investment process (Sandberg, Juravle, Hedesstrom and Hamilton, 2009). SRI includes ESG screening, exclusion, community investment, engagement, and shareholder advocacy (O'Rourke, 2003).

According to the United States Socially Responsible Investment Forum 2012 and 2014 Report, the amount of SRI asset in United States is \$3.74 trillion and \$6.57 trillion respectively (Social Investment Forum Foundation, 2013). Moreover, according to Eurosifs 2015 report, the amount of SRI assets in Europe is € 21,329 billion in 2013 with a growth of 38 percent since 2011 (Eurosif, 2015). With \$53 billion the amount of SRI asset in Asia is small compared to the amount of SRI asset in North American and European regions. However, this poses a unique opportunity for investors as the SRI industry is relatively new in Asia and in emerging markets (Global Sustainable Investment Alliance, 2015). Though SRI was initiated in the 16<sup>th</sup> century when a group of people known as Quakers from Philadelphia decided not to invest in businesses that relied on slavery (Renneborg et al. 2008a), it became only recently a popular investment strategy in emerging

markets according to Park and Kowal (2013). In the past, the investigation of SRI in emerging market is difficult to carry out due to availability of data. Many researches especially on emerging markets concentrate on Brazil, South Africa or China. Now, with the widespread of data across the world, the investigation of SRI in emerging market as a whole became possible<sup>1</sup>.

A major issue of SRI in emerging markets is the question about the connection between the corporate social performance of firms and their financial return. If both are uncorrelated SRI does not make sense from a financial point of view. Saleh, Norhayah, and Rusnah (2011) found only limited evidence of the relationship between CSR and CFP. Furthermore, in countries such as China CSR seems to be less financial market driven but rather be influenced by internal ethical values and institutional, mainly governmental, drivers (Xun, 2012; Yin, 2015). Therefore, again, SRI may be a less valuable investment strategy in the Chinese market. In addition to this CSR found entrance into the business in emerging countries later than in developed markets. Consequently, SRI as a concept that is based on corporate social performance has been introduced much later in emerging markets and still may not be that established as in other markets (Chan and Welford, 2005; D. K. K. Cheung, Welford and Hills, 2009; Studer, Welford and Hills, 2006). According to Park and Kowal (2011), however, SRI is becoming increasingly popular in emerging markets as well and a recent meta analysis suggests that SRI outperforms their conventional benchmark also in emerging markets (Friede, Busch and Bassen, 2015).

This study has four objectives which focus on SRI in emerging markets by investigating the performance, persistence, volatility and downside risk of these investments. Our first objective is to examine how SRI in emerging markets has performed after the recent global financial crisis of 2008-2009. Its performance is compared with conventional investments in emerging markets for the same period. Though some results suggest contrary findings (Milevsky, Aziz, Goss, Comeault and Wheeler, 2006), SRI is often considered a limited investment opportunity portfolio which is believed to have higher risk because it limits the portfolio to investments that achieve social, environmental, and governance thresholds (Chegut et al. 2011). Because emerging markets recover slower than established markets, we analyzed, whether SRI has been able to recover after the last financial crisis. Secondly, we investigated whether the performance of SRI in emerging markets is persisting. Moreover, emerging markets are considered a high risk market because they are not fully developed. Hence, we analyzed the volatility and downside risk of SRI in emerging markets.

The rest of the paper is organized as follows. Section II centres on the literature review. Section III explains the data. Section IV describes the methodology. Section V reports and discusses the empirical findings. Section VI presents the conclusions.

## Literature Review

This section discusses studies on the financial performance of SRI in general and in emerging markets. Results of a study of Koellner et al. (2007) suggest that between 2000 and 2004 SRI funds did outperform comparable conventional products not only in terms of environmental performance, but also with respect to financial return. The study, however, used data during a bull phase with

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<sup>1</sup> <http://www.wsi.com/articles/emerging-markets-options-for-socially-responsible-investors-1412540134>

increasing stock prices. At that time particularly environmental sectors such as the renewable energy sector performed very well (Weber, Koellner, Habegger, Steffensen, and Ohnemus, 2008). Galema, Plantinga, and Scholtens (2008) could find a significant positive impact of socially responsible investment strategies on financial stock returns as well. A study by Weber, Mansfeld, and Schirrmann (2011) demonstrated that SRI funds have outperformed their conventional counterparts in times of turmoil in both, bull and bear phases, between 2001 and 2009. The result is in-line with many other studies (Bauer, Derwall, and Otten, 2007; Callan and Thomas, 2009; Dasgupta, Laplante, Wang, and Wheeler, 2002; Dowell, Hart, and Yeung, 2000; Klassen and McLaughlin, 1996) suggesting an outperformance of SRI compared to conventional investments. In contrast to these results, other studies could not find significant differences in risk-adjusted returns between SRI funds and conventional portfolios (Bauer, Koedijk and Otten, 2005; Humphrey and Tan, 2013; Renneboog, ter Horst, and Zhang, 2008). These studies, however, did not suggest an underperformance of SRI compared to conventional investments either.

The question remains why SRI performs differently to conventional investments. Academic surveys have identified a positive correlation between environmental performance, environmental strategies, environmental management practices, as well as emissions and the financial performance of firms (Albertini, 2013; Ameer and Othman, 2012; Elsayed and Paton, 2009; Mc Guire, Sundgren and Schneeweis, 1988). Consequently, the positive relation has a positive influence on the performance of SRI investment. Other variables that may influence the financial performance of SRI could be variables, such as regions, sectors, services and regulations (Bleischwitz, 2004), market capitalization (Cerin and Dobers, 2001), price-to-book ratio (Galema et al., 2008) or other influences. Furthermore, Barnett and Salomon (2006) emphasize the heterogeneity between different SRI approaches depending on the type of social and environmental screening criteria and strategies. They suggest that the financial performance of SRI funds varies with the types of social screens applied.

Recent empirical literature that studied the performance of SRI has covered most of the regions in the world such as Europe (Ang et al. 2014; (Basso and Funari, 2014; Gangi and Trotta, 2013; Kempf and Osthoff, 2007; Kreander, Gray, Power, and Sinclair, 2005), North America (Ang et al. 2014; (Galema et al., 2008; Kempf and Osthoff, 2007), and Asia Pacific (Ang and Lean, 2013; (Jones, Frost, Loftus and Laan, 2007; Renneboog et al., 2008b). For instance, Ang et al. (2014) investigated the market timing skill of North American and European SRI funds and found that market timing skill exist in both European and North American regions. Market timing skill is the fund manager ability in anticipating the future general market trend. Lean et al. (2015) revealed that the performance in both Europe and North America are found to be persistent.

Furthermore, Ang and Lean (2013) studied the performance of SRI funds in Asia Pacific for the sample period of 2001 to 2011. They found that the performance of SRI funds in Asia Pacific is indifferent from the several market benchmarks employed. In a recent paper by Ang (2015) that study the performance of SRI in Korea, the author found that the performance of SRI in Korea has not been affected by the recent global financial crisis. Moreover, the study found that SRI in Korea has not been affected by the financial uncertainty in the United States and that the conditional volatility of SRI has been less affected during the financial crisis in Korea.

A study by Ortas et al. (2012) investigated the risk characteristic of SRI in Brazil as a proxy of emerging markets. Ortas et al. (2012) found that the performance of SRI is in-line with conventional investments during bullish periods. A study on the Asian emerging market suggested a positive impact of CSR activities on the financial performance of firms (Y. Cheung, Tan, Ahn and Zhang, 2010) what should lead to an outperformance of investments that integrate CSR into their investment criteria, while a study in Malaysia did not suggest positive long-term impacts of CSR on financial performance (Saleh et al., 2011). But, Hebb and Wojcik (2005) found that by

applying non-financial and financial factors in investment decision in emerging markets will led to raising the standard of CSR in these markets.

Though, previous studies have investigated SRI in several regions such as North America, Europe and Asia Pacific and some studies focused on individual emerging market countries such as Brazil and Malaysia, there are no studies on the persistence and downside risks of emerging markets' SRI. Therefore, this research contributes to the literature by investigating the performance, persistence, risk and downside risk of SRI indices in emerging markets as a whole.

## Methods

Similar to Racicot et al. (2014) we examined the risk-return trade-off of the MSCI SRI emerging market index against the market benchmarks. Therefore, we applied the extended Fama and French (1993) model by taking into account the quadratic and cubic of excess market return and size factor. Nevertheless, additionally we used Fama and French (1993) as robustness test for the performanceevaluation. The Racicot et al. (2014) model is defined as:

$$R_{it} - R_{ft} = \alpha_0 + \beta_0(R_{mt} - R_{ft}) + \beta_1(R_{mt} - R_{ft})^2 + \beta_2(R_{mt} - R_{ft})^3 + \beta_3SMB_t + \beta_4SMB_t^2 + \beta_5SMB_t^3 + \beta_6HML_t + \varepsilon_{it} \quad (1)$$

where

$R_{it}$  = Return of index at time t

$R_{ft}$  = US T-bill rate

$R_{mt}$  = Return of market benchmark

$SMB_t$  = The difference in return between small size and large size portfolios

$HML_t$  = The difference in return between value and growth portfolios

The equation is corrected for the standard error in case serial correlation and heteroscedasticity is found using the Newey-West method (Newey and West, 1986). The EGARCH model (Brandt and Jones, 2006; Nelson, 1991), is selected to accommodate the important stylized facts (asymmetric return, volatility clustering and leverage effect) of portfolio returns on the conditional volatility of financial returns because the model is applicable for most return series according to the study by Lean and Nguyen (2014) and Ang (2015). The EGARCH model has been developed by Nelson (1991) to measure the leverage effect, which exists when negative facts and news contribute more to volatility than positive facts and news. The EGARCH model is defined as:

$$\log(\sigma_t^2) = \gamma_0 + \gamma_1 \left| \frac{\varepsilon_{t-1}}{\sigma_{t-1}} \right| + \gamma_2 \frac{\varepsilon_{t-1}}{\sigma_{t-1}} + \gamma_3 \log(\sigma_{t-1}^2) \quad (2)$$

The leverage effect of the return of the SRI indices can be determined by testing the value of  $\gamma_2$ . If  $\gamma_2 < 0$ , bad news increase volatility more than good news, hence leading to leverage effects and vice versa. Ang (2015) also used an EGARCH model to test the volatility for the Dow Jones Sustainable Korean index.

For performance persistence, we employed Grinblatt's and Titman's (1992) model. Therefore, the sample period is split into two equal sub-periods. Then the return of the two sub-periods is calculated. Lastly, the return of the first sub-period is regressed against the return of the second

sub-period. A significant positive value of the slope coefficient (b) indicates that positive performance persistence exists. A negative significant coefficient indicates negative persistence. Moreover, a non-significant regression symbolizes that there is no persistence (see function 3).

$$R_1 = a + bR_2 \quad (3)$$

$R_1$  =return of first sub-period

$R_2$  =return of second sub-period

Lastly, we employ Ang et al.'s (2006) model to estimate the downside risk in order to understand how the SRI portfolio reacts when the market is in downturn. Downside risk is defined as covariance of excess fund return relative to the market return given that the market excess return is negative. Hayat and Kraeussl (2011) used this method to measure the downside risk and computed it as in Function 4.

$$\beta_0^- = \frac{cov(r_i, r_m) | r_m < 0}{var(r_m) | r_m < 0} \quad (4)$$

where  $r_m$  and  $r_i$  represent the excess returns of the SRI index and the conventional index respectively, and  $\beta_0^-$  is the sensitivity of a portfolio excess return to market's excess return given that the latter is negative. We follow Hayat and Kraeussl (2011) to compute the downside risk by removing positive excess returns of the MSCI SRI indexes, leaving only the negative returns. Subsequently, the excess return of the MSCI SRI index is regressed against the negative excess market return, expressed by the SMB and HML factors.

## Data

As mentioned by Schroder (2007) the use of indices to study the financial performance of markets has several advantages compared to analyzing mutual funds or single stocks. The first advantage is that investors use indices as guidelines and benchmarks for their investments and the second advantage is SRI indices use similar methods to screen and select the constituents. The third advantage is that indices are often more transparent with regard to performance and members than mutual funds. We followed Schroeder's argument and used an index for our study as well. Other examples for using indices to analyze SRI performance are Hammoudeh et al. (2014) and Ajmi et al. (2014).

Therefore, we used data from the price series of the Morgan Stanley Capital Investment (MSCI) SRI Emerging Market and the conventional Emerging Market index from the MSCI website.<sup>2</sup> MSCI Emerging Market (Asia) Index, MSCI Emerging Market (Europe) Index and MSCI Emerging Market (Latin America) Index are used as market benchmarks for robustness tests. We analyzed data between June 2011 to December 2014 based on daily returns. As the risk free rate the US treasury bill is used. The data is taken from Datastream. In-line with Leite et al. (2009) MSCI Emerging Market Small, Large, Value and Growth indices are used to construct the size and value factors that are needed for SMB and HML factors.

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<sup>2</sup><http://www.msci.com/>

## Results

Table 1 presents the descriptive statistics of daily returns of the MSCI Emerging Market SRI index and the conventional indices. Table 1 indicates that the returns of the SRI index are lower than those of the conventional indices with the exception of the MSCI Emerging Market (Asia) Index. The standard deviation of the SRI index is lower than for the conventional indexes except of the MSCI Emerging Market Index. The Sharpe ratio is higher for the SRI index than for the rest of the conventional indices but the MSCI Emerging Market Asia Index. All the return series exhibit negative skewness and excess kurtosis. It means that their probability distributions are skewed to the left and show a leptokurtic behaviour with the tails being fatter than those of the corresponding normal distributions. These signs clearly reject the normality of the return series in the sample, which is confirmed by the Jarque-Bera test for normality where the p-value is 0.0000.

Table 1: Descriptive Statistic

Index	Mean	Standard deviation	Skewness	Kurtosis	Sharpe Ratio	JB
MSCI Emerging Market SRI Index	-4.66E-05	0.0096	-0.3800	6.9675	-0.0257	636.4095+ (0.0000)
MSCI Emerging Market Index	-0.0002	0.0002	-0.3941	6.8790	-2.0000	611.0321+ (0.0000)
MSCI Emerging Market (Asia) Index	-5.70 E-05	0.0106	-0.2097	6.3641	-0.0242	448.2287+ (0.0000)
MSCI Emerging Market (Europe) Index	-0.0007	0.0158	-0.5371	7.1824	-0.0570	727.2058+ (0.0000)
MSCI Emerging Market (Latin America) Index	-0.0005	0.0138	-0.3546	6.0632	-0.0507	385.5586+ (0.0000)

Note: Value in the parentheses indicates p-value

The correlation among the considered indices over the whole period, reported in Table 2, indicates that the returns of the SRI index and the conventional indices are highly positively correlated. Furthermore, the conventional indices are highly correlated as well with the exception of the Latin American Index.

Table 2: Correlation among indices

Index	MSCI Emerging Market SRI Index	MSCI Emerging Market Index	MSCI Emerging Market (Europe) Index	MSCI Emerging Market (Latin America) Index	MSCI Emerging Market (Asia) Index
MSCI Emerging Market SRI Index	1				
MSCI Emerging Market Index	0.9686 (0.0000)	1			
MSCI Emerging Market (Europe) Index	0.7185 (0.0000)	0.7496 (0.0000)	1		
MSCI Emerging Market (Latin America) Index	0.7175 (0.0000)	0.7471 (0.0000)	0.6742 (0.0000)	1	
MSCI Emerging Market (Asia) Index	0.8686 (0.0000)	0.9008 (0.0000)	0.4876 (0.0000)	0.4304 (0.0000)	1

Note: Value in the parentheses indicates p-value

Table 3 presents the performance evaluated by applying Racicot et al.'s (2014) model. At a first glance, the performance of the SRI index is insignificantly different from the market index. There

is no significant difference  $\alpha$  of the conventional indices and the SRI index. This result is consistent with Ang and Lean (2013a), Lean et al. (2014) and Ang (2015) but contradicts with Ang and Lean (2013b) who found Luxembourg SRI funds underperforming the market benchmark. All  $\beta_1$  (sensitivity of the MSCI SRI Emerging Market returns to the conventional indices) are significant and less than one, suggesting that the MSCI SRI Emerging Market index has a marginally lower systematic risk than conventional indices. The fluctuation of the MSCI SRI Emerging Market index is slightly less than for all the conventional indices shown by  $\beta_0$ . A size effect exists ( $\beta_3$ ) except when the MSCI Emerging Market (Asia) Index is used as market benchmark. A value effect ( $\beta_6$ ) exists when MSCI Emerging Market (Europe) Index is used as market benchmark but a growth effect ( $\beta_6$ ) exist for the MSCI Emerging Market Index and the MSCI Emerging Market (Latin America) index. The coefficients  $\beta_1$ ,  $\beta_2$ ,  $\beta_4$  and  $\beta_5$  are not reported here as they are not significant.

Table 3: Performance Evaluation by Racicot (2014) model

Index	$\alpha$	$\beta_0$	$\beta_3$	$\beta_6$	Adj-R <sup>2</sup>
MSCI Emerging Market Index	6.80E-05 (0.4724)	0.9250*** (0.0000)	0.0428* (0.0588)	-0.1744*** (0.0000)	0.9403
MSCI Emerging Market (Asia) Index	-6.92E-05 (0.6816)	0.7680*** (0.0000)	0.0178 (0.6748)	-0.0329 (0.4075)	0.7453
MSCI Emerging Market (Europe) Index	2.18E-05 (0.8826)	0.8305*** (0.0000)	0.0926*** (0.0000)	0.5366*** (0.0000)	0.8271
MSCI Emerging Market (Latin America) Index	5.01E-05 (0.8247)	0.4925*** (0.0000)	0.2277*** (0.0000)	-0.1922*** (0.0000)	0.5462

Note: \*\*\*,\*\* and \* denotes significant at 1%,5% and 10%

In addition, we employed the Fama-French model (1993) as robustness test suggesting that the performance of the SRI index is indifferent from the conventional indices (see Table 4).

Table 4: Performance Evaluation by Fama-French (1993) model

Index	$\alpha$	Adj-R <sup>2</sup>
MSCI Emerging Market Index	0.0001 (0.1522)	0.9403
MSCI Emerging Market (Asia) Index	-4.76E-05 (0.7601)	0.7548
MSCI Emerging Market (Europe) Index	0.0002 (0.1653)	0.8248
MSCI Emerging Market (Latin America) Index	0.0001 (0.6192)	0.5453

Note: \*\*\*,\*\* and \* denotes significant at 1%,5% and 10%

In the following section, we present the analysis of the conditional volatility of the SRI index using an EGARCH model as the conditional mean equation (see Table 5). The results indicate that the EGARCH model successfully captures the dynamics of conditional volatility of the SRI index as all the ARCH and GARCH coefficients are significant regardless of all the market benchmarks. The significance of ARCH and GARCH coefficients is consistent with Ang (2015), suggesting that the EGARCH model successfully explains the volatility patterns of the SRI index returns. With regard to the volatility leverage effect, it is worth noting that for all market benchmarks but the MSCI Emerging Market index negative shocks have a greater impact on the conditional volatility than positive shocks. The result on the leverage effect is similar to that of Ang (2015), who reported a leverage effect in a Korean SRI index.

Table 5: Estimation results of EGARCH model

Index	$\omega_0$	$\omega_1$	$\omega_2$	$\omega_3$
MSCI Emerging Market Index	-2.4449	0.0504	-0.0451	0.8016***
MSCI Emerging Market (Asia) Index	-0.3314***	0.1107***	-0.0901***	0.9772***
MSCI Emerging Market (Europe) Index	-1.2750***	0.2054***	-0.0681***	0.8995***
MSCI Emerging Market (Latin America) Index	-0.1905***	0.0848***	-0.0857***	0.9877***

Note: \*\*\*,\*\* and \* denotes significant at 1%,5% and 10%

Our result regarding the persistence suggests that the performance of SRI and conventional investment in emerging markets is not persistent over the sample period (see Table 6). The  $b$  is insignificant where there is no persistence can be found between both first and second sub-period.

Table 6: Performance Persistence

Index	MSCI Emerging Market	SRI Market Index	MSCI Emerging Market (Asia) Index	MSCI Emerging Market (Europe) Index	MSCI Emerging Market (Latin America) Index
$b$	0.0773 (0.9894)	0.0759 (0.6735)	0.0475 (0.7453)	0.0386 (0.6915)	0.0479 (0.6544)

Note: \*\*\*,\*\* and \* denotes significant at 1%,5% and 10%

Finally, Table 7 illustrates the downside risk of the SRI Index against its corresponding conventional indices. In general, the SRI index has lower a sensitivity to market return during bearish conditions. Our result are consistent to Hayat and Kraeussl (2011) who found that North American Islamic funds have lower downside risk compared to Asia Pacific funds. Furthermore, the results of the EGARCH model suggest that, negative shocks have a greater impact on the conditional volatility than positive shocks, suggesting that when the market return is negative, the performance of SRI investments is higher than for conventional investments. Therefore, SRI in emerging markets could be an alternative investment in bearish markets.

Table 7: Downside risk

Index	MSCI Emerging Market Index	MSCI Emerging Market (Asia) Index	MSCI Emerging Market (Europe) Index	MSCI Emerging Market (Latin America) Index
$\beta$	0.0020*** (0.0000)	0.0032*** (0.0000)	0.0012*** (0.0005)	0.0001** (0.0133)

Note: \*\*\*,\*\* and \* denotes significant at 1%, 5% and 10%

## Conclusion

This study has been the first analyzing performance, persistence, risk and downside risk for SRI in emerging markets by employing the MSCI SRI Emerging Market Index against several conventional emerging market indices over the period of June 2011 to December 2014 by using daily return. Our result shows that the performance of the SRI Index is actually indifferent from the conventional emerging market indices. There is no evidence suggesting that the performance of the SRI index is not persistent over the period. This result is consistent with Lean et al. (2014) who found that the performance of SRI in Asia Pacific has not been persistent at all. However, Lean et al. (2015) found as well that the performance of North America and European SRI has been persistence. The non-persistence of performance may be caused by the newness of SRI as an investment strategy in Emerging Markets as the total amount of SRI asset is relatively small. Furthermore, the study found that negative shocks have a greater impact on conditional volatility



than positive shocks for most of the employed market benchmark except MSCI Emerging Market Index. In general, the SRI index has lower sensitivity to market returns during bearish condition and therefore can be used to mitigate financial risks in bearish market phases. This result is in-line with a study by (Weber et al., 2011) on global SRI funds. This study found a small outperformance of SRI funds compared to a general market index that is mainly caused by SRI funds having a lower sensitivity in downward phases, such as the 2008 financial crisis. Consequently, this study reconfirms results for SRI investment behavior in bearish markets.

Also other authors that included the Asia-Pacific region in their analyses found that SRI does not significantly underperform conventional investments (Ang and Lean, 2013 a; Lean et al. 2014; Humphrey and Tan, 2013; Mill, 2006; Renneboog et al., 2008). A recent meta study even suggests that the majority of analyses show that SRI investments outperform conventional investments also in emerging markets (Friede et al., 2015). Consequently, our results suggest that SRI in emerging markets is similar SRI in developed markets. Because corporate social responsibility is increasingly rewarded by financial markets also in emerging countries (Weber, 2014), socially responsible investors can expect about the same financial returns as for comparable conventional investments. Thus, it seems that it pays to be green (Hart and Ahuja, 1996) in emerging markets or at least that being green does not have a negative effect on financial return of firms in emerging markets. Thus, main contributions of this study to the literature are that SRI financial returns in emerging markets are very similar to those in developed markets and that corporate social performance does not negatively influence corporate financial performance. As a consequence, investors can have both, the benefits of emerging market investments and investments that are socially responsible. Both are not a trade-off but are positively correlated even in emerging markets. Thus, SRI is able to guarantee sustainable development in these markets.

For future research, we suggest investigating the performance of SRI in developing countries. Because, for instance, the economies of African countries demonstrate one of the highest growth globally, these countries become attractive for investors. However, there is little research on whether SRI in these countries has similar returns as conventional investments. Nevertheless, a positive correlation between financial performance and social performance of investments in developing countries would have a positive impact on both economic growth and the environment and society.

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