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CSR, Adjustment Speed of Capital Structure, and Firm Performance: Evidence from ASEAN Nations with ESG Performance Data

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A B S T R A C T

Studies have already related corporate social responsibility (CSR) to firm performance, but with mixed results. Using ESG performance data from ASEAN countries, this paper contributes a novel channel to link the relation via the speed of adjustment (SOA) of capital structure. This study tests whether the adjustment speed of capital structure serves as a bridge between CSR and firm performance by using a series of OLS regressions and performing robustness tests with matched samples. Results showed that firms with a higher CSR performance had a higher SOA, except for Indonesia. In addition, the results support the idea that CSR can drive capital structure adjustment speed and improve firm performance as measured by Tobin's Q. Overall, the findings show that CSR is a net positive effect on firm performance.

Keywords: Capital structure, capital structure adjustment speed, corporate social responsibility, firm performance.

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1.Introduction

Harjoto (2017) found that corporate social responsibility (CSR) provided a strategic competitive advantage for some businesses. Jo and Harjoto (2011) shown that CSR can provide effective corporate governance mechanisms that increase firm value. Samet and Jarboui (2017) showed that firms with high CSR performance invest more efficiently through mitigating information asymmetry. Despite this, they also highlighted the complexity of the CSR cost-benefit equation. The agency problem leads that the CSR's cost-benefit relationship is still not fully understood. Thus, the main topic in this study builds on different perspectives concerning CSR and its influence on the speed of adjustment (SOA) of capital structure and firm performance. We test whether CSR performance drives SOA to benefit firm performance or alleviates SOA to influence firm performance.

Trade-off theory states that imperfect capital markets create a relationship between firm leverage and value and that companies enact positive actions to adjust their deviation from optimal leverage (Aflatooni & Mansori, 2019). Because external financing is costly if companies rely on outsourcing to correct deviations from a leverage target (Aflatooni & Mansori, 2019), the adjustment cost will determine the firm's SOA of capital structure. Barth et al. (2013) found that an increase in the cost of equity will widen the deviation from the optimal leverage and further increase adjustment costs. The theory concludes that companies will not adjust when the benefits of an adjustment do not exceed the cost. Furthermore, information asymmetry is the crucial factor of adjustment costs. Increases in information asymmetry would impede investor ability to find investment opportunities and reduce managerial ability to find funding, which in turn may reduce the leverage adjustment speed. Faulkender et al. (2012) revealed that the cost for an adjustment increase could reduce adjustment speed.

On the other hand, CSR represents a company's focus on producing goods and seeking profits while improving the welfare of the community in which it operates (Málovics et al., 2008). A company's social responsibility refers to all relationships between that company and its stakeholders including employees, customers, suppliers, communities, governments, and even competitors. Heal (2005) stated that conducting CSR can contribute the long-term beneficial advantages for a company. For this purpose, the company will to pay costs of CSR, which may cause the profit level to fall. Consequently, CSR implementation develops a beneficial perception if CSR's benefit exceeds its costs.

Accordingly, stakeholder theory claims that firms with higher CSR performance have a lower degree of information asymmetry and faster adjustment speed. That is, conducting CSR helps increase the speed of adjustment of capital structure by disseminating information to a broader audience, meaning that investment adjustment is more rapid for companies that have lower information asymmetries (Samet & Jarboui, 2017; Do et al., 2018). Cheng et al. (2014) also found that firms with higher reporting quality had more financial flexibility when issuing equities because of the less adverse selection problem. Dhaliwal et al. (2011) and El Ghoul et al. (2011) showed that firms with high CSR performance have a lower cost of equity (Benlemlih, 2017). In addition, Chang et al. (2015) also found that superior CSR performance associated with lower cost of bank loan. As a result, information transparency leads to improved capital structures.

Nevertheless, agency problems may distort the role of CSR in business. For example, Jian and Lee (2015) found that CEO compensation is related to corporate social responsibility. Barnea and Rubin (2010) investigated that managers over-invest in CSR to seek for their personnel reputation. Masulis and Reza (2015) showed that CEOs gain from CSR engagement. They concluded that dislocating corporate resources in CSR would reduce firm value. Similarly, Ben-Nasr and Ghouma (2018) documented that managers use employee welfare plans to reduce the likelihood of blowing the whistle on their misconduct. In addition, Yang et al. (2017) showed that CSR reporting increased transparency and reduced information asymmetry, enabling firms to maintain higher leverage in the

capital structure; creditors are straight out to allow companies to deviate from the target leverage through the CSR reports when they assess lending risks. Instead, the CSR reports would reduce the speed of capital structure adjustment, especially for over-leveraged companies. Thus, conducting CSR may be a hazardous action to firm value due to agency problems reducing adjustment speed.

Differing from previous studies focused on the relationship between CSR and the costs of capital, this study extends the field on the relatively newly discovered relationship between CSR and speed of leverage adjustment. This study tests whether the adjustment speed of capital structuring serves as a bridge between CSR and firm performance. More precisely, this study addresses the question whether CSR drives capital structure adjustment speed to affect firm performance.

This study proposes two potential relationships between CSR, SOA, and firm performance. A positive relation argues that companies with a strong CSR performance are expected to have a high speed of capital restructuring if CSR can lower information asymmetries and capital costs. Its impact on adjustment speed must be significant for companies with more resources dedicated to CSR. As a result, companies with faster SOA meeting their targets are associated with better performance than those slower in leverage adjustments. In contrast, another negative relation argues that the costs of CSR impede the SOA of the capital structure resulting in worse firm performance. Overall, results show that firms with a higher CSR performance has a higher SOA excludes Indonesia. In addition, the empirical results support the positive hypothesis that CSR can drive adjustment speed of capital structure and improve Tobin's Q.

Lastly, many studies reveal that institutional factors have an impact on firms' operating. For instance, Krishnan and Moyer (1997) have already examined the financial performance and capital structure, finding that they are strongly influenced by country origin. Öztekin and Flannery (2012) also document how different environments impose various adjustment costs and benefits on firms, which was determined partly using adjustment speeds. Because most of the existing or influential studies originate from the developed markets, the implications of current CSR research may not be generalized to businesses in ASEAN under unique institutions and culture. Accordingly, this study contributes to an emerging CSR issue for the area. In addition, this study also contributes a new version in connecting CSR with SOA to firm performance.

This study is arranged as follows. Section 2 reviews existing literature and develops the key hypotheses. Section 3 introduces the methodology, and Section 4 presents the findings. Section 5 provides a discussion and conclusions.

2. Literature Review and Hypotheses

Modigliani and Miller (1958) illustrated how companies use taxation to control profitability and determine the optimal level of debt. Further, Myers (1984) stated that by balancing the tax shields of debt against the cost, firms seek an optimal debt-equity ratio to maximize firm value in imperfect markets. As a result, excessive debt levels increase the risk of bankruptcy and associated bankruptcy costs. Creditors will require a higher interest rate as compensation when the debt increases as part of the capital structure. Consequently, trade-off theory argues that firms will define target leverage and gradually shift towards this target.

Brealey and Myers (2003) argued that managers view capital structure decisions as a trade-off between tax shielding and the cost of bankruptcy. Profitable firms with secured tangible assets should have a high target debt ratio to enjoy a large amount of tax shield. Each company must always be at the target debt-equity ratio in a perfect market. They express that managers decide the optimal leverage ratio to maximize firm value. Thus, a firm's capital structure decision points to a target debt ratio, at which the tax shields are maximized, and bankruptcy costs are minimized.

However, transaction costs, referred to as an external source of financing, also play an essential role in a firm's financing behavior. Firms at an optimal capital structure in a perfect market are unrealistic. A company will comply with certain principles and decide to use external financing when the debt capacity is reached. As a result, pecking order theory states that firms prefer using internal financing methods over all others. That is, firms first use internal financing and then offer debt. They will offer equity as a last resort (Myers and Majluf 1984). The theory explains that the information problem between insiders and outside investors determines firms' financing decisions (Baskin, 1989).

Although pecking order theory concluded that a company would select the equity capital as the last option (Huang & Ritter, 2009), DeAngelo and DeAngelo (2007) addressed that optimal capital structure, payout policy, and corporate cash holdings are jointly determined. Managers think it is more beneficial to use internal financing because they have more information about their future and value. For example, Fama and French (2002) argued that debt usually increases when investment rises above retained earnings and decreases when the investments are below retained earnings. Therefore, profitability and investment expenditures are fixed. In that case, a simplified version of the model predicts lower leverage for more profitable companies in the condition of maintaining fixed investments; inversely, higher leverage for companies with more investment under given profitability.

Firms face the adjustment costs in reality. Hence, dynamic trade-off theory addresses that firms would maintain their debt ratio within an optimal range (Dudley, 2007). To maximize firm value, a firm has to adjust the capital structure to correct its target leverage once its real leverage deviates from the target leverage. However, the cost of capital restructuring is high if the firm relies on external financing to adjust capital structure toward its target. As a result, the theory suggests that firm deviated from target leverage adjusts their leverage to the target only when the adjustment benefit toward target exceeds the adjustment cost (Hovakimian et al., 2001; De Miguel & Pindado, 2001; Fama & French, 2002; Leary & Roberts, 2005; Flannery & Rangan, 2006; Faulkender et al., 2008).

Heshmati (2001) presented that in Sweden the more significant difference between the actual debt ratios and the target debt ratios, the greater the SOA, while Drobetz and Wanzenried (2006) found a negative effect of the difference between the actual debt ratio and the target debt ratio on the SOA of capital structure. This conflict may be caused by a high fixed cost of adjustment. Aybar et al. (2012) showed that firms might reduce adjustment speed as they approach the target debt ratio. Generally, Flannery and Rangan (2006) estimated a high adjustment speed of 30% per year in the US market**.** Kayhan and Titman (2007), Lemmon et al. (2008), and Huang and Ritter (2009) present an annual adjustment speed with 8% to 10%, 25%, and 11% to 23%, respectively.

Some studies in the area also discussed the adjustment patterns adjusting toward target capital structure. For example, Byoun (2008) reported that the company's tendency to adjust leverage depends on debt being over or under the target, i.e., financial deficits or surpluses. Their model shows that most adjustments occur because companies have debt exceeding the target associated with a financial surplus or debt below the target associated with a financial deficit. In addition, the company tends to retain a debt capacity for potential financing. Byoun (2008) found about 20% of speed for under-leverage firms and 33% for over-leverage firms. In addition, Hovakimian and Li (2011) found that profitable firms tended to issue debt rather than equity to attain the target debt ratio.

Moreover, Öztekin and Flannery (2012) addressed the impact of the institutional system on SOA across international countries. Their evidence shows that firms operating within weaker institutional systems are associated with financial constraints such as reduced access to finance, lower transparency, higher distress costs, and limited financial flexibility. As a result, firms in this area would face more considerable adjustment costs in financing issuance. They found a 22%-38% annual speed in Japan, 29%-34% in Hong Kong, 27%-33% in Singapore, 34%-39% in Korea; the highest speed of 39%-43%

occurs in Australia, and Chili has the lowest speed of 5%.

Existing studies have highlighted the importance of SOA, as earlier mentions. Additionally, several recent pieces of literature concern the issues of CSR. For example, CSR disclosure can improve the corporate evaluation (Francés & Tomás, 2019; Yoo & Lee, 2018), raise employee productivity (Sun & Yu, 2015), lead to successful innovation (Mendibil et al., 2007; Szutowski & Ratajczak, 2016), help differentiate companies from their competitors (Knudson, 2018), and enhance financial performance (Cho et al., 2019; Maqbool & Zameer, 2018; Mustafa et al., 2012; Wu & Shen, 2013). Gazzola (2014) showed a significant positive correlation between corporate responsibility and corporate reputation, which showed that being a more socially responsible firm increases corporate reputation. Those studies have documented that implementing CSR has indirect benefits by improving company goodwill and enhancing its image (Beurden & Gössling, 2008). Further, most of the research concluded that a good reputation improves firm performance and drives business success in the long run. For example, firms can quickly launch new products by determining consumer preferences when selecting similar products in an offered pallet of different market players (Fombrun & Riel, 2004). The firm becomes a benchmark of product quality when customers face a choice between the company and a competitor's product and gains customer loyalty (Fombrun & Riel, 2004).

However, there are few studies to discuss the relationship between financing ability, SOA, and CSR. Even many studies agree that conducting CSR has an impact on business. Kotha et al. (2001) expressed that CSR engagement could be viewed as an investment to build a company's reputation. Not only can this investment increase revenue by decreasing the uncertainty of customer-supplier exchanges, but also a firm with a high reputation enjoys more access to finance. Dhaliwal et al. (2011) showed that firms with high CSR performance have a lower cost of equity. Accordingly, a firm can take advantage of reputation to link CSR to financing ability.

The information problem may serve as another vital channel to connect the CSR effect and financing ability. Literature shows that CSR is being reported to increase transparency and reduce information asymmetry (Akpiner et al., 2008; Beaudoin, 2008; Yang et al., 2017). Information asymmetry represents the risks and uncertainties for investors and defines the requirement for corporate transparency. Typically, information problem causes external financing more expensive because lenders asked a higher interest rate (Prommin et al., 2016; Toly et al., 2019). As a result, a firm with server information asymmetry suffers from the adjustment ability of corporate leverage (Jin et al., 2020).

Accordingly, companies can deliver information to investors by CSR reports. Sen et al. (2006) claimed that CSR could mitigate stakeholders' negative assessments. For an example, study by Chang et al. (2014) addressed firm that engage CSR will receive a high score of analyst recommendation, potentially enhancing their market value. Goss and Roberts (2011) found that companies disclosing CSR report favor their borrowing costs. Cheng et al. (2014) also stated that firms that conduct CSR activities faced lower capital constraints. Ansong (2017) documented that companies conducting CSR have more accesses to finance. Similarly, Connors & Gao (2011) claimed that CSR reduces the volatility of the firm's cash flows, lowers potential bankruptcy costs, and increases borrowing capacity. Do et al. (2018) stated that a firm with more CSR activities is associated with faster leverage adjustments speed. Xu et al. (2019) presented that CSR performance benefits debt cost, especially in long-term bank loans.

Admittedly, the effect of CSR on business may be a double-edged sword because it can have benefits and costs. Barnea and Rubin (2010) argued that the firm views CSR as an investment project that transfers corporate resources into beneficial ventures such as good reputation benefitting new product lines or more reliable skills (Sheikh, 2018). However, the agency costs may change the

consequence. Cespa and Cestone (2007) and Surroca and Tibo (2008) found that entrenched managers invest more in CSR to seek CSR benefits. Barnea and Rubin finally concluded that firms over-investing in CSR would reduce firm value.

Overall, agency theory suggests that the effect of CSR has a negative impact on firm performance (Nguyen & Nguyen, 2015). Masulis and Reza (2015) noted that CEOs gain personnel benefits from CSR engagement, but the firm value was being sacrificed. Similarly, Ben-Nasr and Ghouma (2018) support the agency argument that misconducting managers use more employee welfare. However, Yang et al. (2017) revealed that companies that deviated from target capital structure could collect more external capital proceeds by CSR disclosure because the less information asymmetry, lenders allow accessing more lending risk, specifically over-leveraged firms exposed higher default risk. Accordingly, CSR reporting reduces the financing ability instead.

In sum, this study develops two competing potential hypotheses regarding the relationship between CSR performance, SOA, and firm performance. The first hypothesis addresses a positive impact of CSR performance on SOA and firm performance: CSR is a voluntary and additional legal duty of an organization to serve the environment and society. A firm expects that not only investing in CSR can create a reputation to favor financial performance, but also CSR reporting can reduce the asymmetric information to benefit the accessibility of external financing (Ali & Ali, 2011; Gazzola, 2014). Thus, the first hypothesis is formulated as below.

H1a: firm with higher CSR performance is associated with a faster SOA.

This study then interactively analyzes the relationship between CSR performance, adjustment speed of capital structure, and firm performance. According to trade-off theory, the shorter distance between a firm's actual leverage and its target leverage, the better. That is, firms closed to an optimal debt level should perform better relative to those deviated from the optimal debt level. As a result, firms with faster SOA towards their targets should show better firm performance than those with slower SOA. Thus,

H1b: CSR performance accelerates a firm's SOA to benefit its performance.

The second hypothesis addresses a negative impact of CSR performance on SOA and firm performance: Some studies have argued that over-investing in CSR is deleterious to firm value because of dislocation (Barnea & Rubin, 2010). Besides, CSR is likely to exacerbate agency problems and increase firm risk (Nguyen & Nguyen, 2015). As a result, over-investing in CSR may increase adjustment costs in the capital structure, such as a limit of financial flexibility or an inability to attract external funding. In that case, companies with more CSR performance would have a slower SOA. Further, the impact of slower adjustment may undermine firm performance owing to suboptimal debt financing usage. Thus, the second hypothesis is formulated as below.

H2a: A firm with higher CSR performance is associated with a slower SOA.

H2b: CSR performance alleviates a firm's SOA to influent firm performance.

3. Data and Methodology

3.1 Sample Selection

This study focuses on firms in ASEAN countries, Indonesia, Malaysia, Philippines, Singapore, and Thailand. The primary source of accounting data is the Thomson Reuters Eikon Datastream database, and the dataset covered the period 2004 to 2018. All financial firms (SIC codes 6000-6999) and utilities (SIC 4900-4999) exclude from this study's initial sample. Additionally, this study retrieves the code of ESG ASSET4 data from Datastream as the CSR performance.

Since the regression specifications include lagged variables, each of the sample firms must have been capable of providing at least three consecutive years of observations. The final sample of this

study contains 1,577 firms across ASEAN in 22,369 firm-year observations. Each sample firm is being observed for consecutive years over the 2004-2018 period.

3.2 Measuring the partial SOA

First, the study measured the SOA for each firm, country, and the total sample. Following Flannery and Rangan (2006) and Faulkender et al. (2012), the SOA was estimated by the partial adjustment speed model below.

$$\Delta LEV_{i,t} \equiv LEV_{i,t} - LEV_{i,t-1} = \delta\,(LEV^*_{i,t} - LEV_{i,t-1}) + \varepsilon_{i,t} \quad (1)$$

where $LEV_{i,t}$ denotes the book leverage ratio of firm i at the end of period t, and $LEV_{i,t} - LEV_{i,t-1}$ is the adjustment in leverage between periods t-1 and t. Note that $LEV^*_{i,t} - LEV_{i,t-1}$ is the deviation from the target leverage ratio, and $\varepsilon_{i,t}$ is an error term uncorrelated with the regressors. Here, δ captures the fraction of leverage deviation, and this estimated coefficient is measuring as the SOA. δ=1 indicates that the adjustment is instant, while δ=0 implies no adjustment toward the desired leverage ratio. The target leverage ratio, $LEV^*_{i,t}$, is not directly observed but is typically modeled as a function of a firm's specific factors as follows:

$$LEV^*_{i,t} = \beta X_{i,t-1} \quad (2)$$

where β is a coefficient vector. Following Drobetz and Wanzenried (2006), $X_{i,t-1}$ is a vector of firm characteristics related to the costs and benefits of operating with various leverage ratios, including market to book ratio (MBR), firm size (SIZE), and tangible assets (TANG), return on assets (ROA) and industry median leverage (MEDLEV). Model (1) can then be rewritten as:

$$LEV_{i,t} = \delta\beta X_{i,t-1} + (1-\delta)\,LEV_{i,t-1} + \varepsilon_{i,t} \quad (3)$$

Eq. (3) will be implemented by a pooled ordinary least squares (OLS) approach. The equation considers industry fixed effects when estimating adjustments for a specific country and total sample and country fixed effects when examining for the entire sample. This study then extracts the fitted value of Eq. (3) as a proxy for the target leverage ratio, $LEV^*_{i,t}$, and subsequently obtains the deviation from the target leverage, $LEV_{i,t} = LEV^*_{i,t} - LEV_{i,t-1}$. The empirical framework for the critical examination of the capital structure determinants and the SOA to the target capital ratio will be constructed from those equation.

3.3 Effect of CSR on SOA and firm performance

After obtaining the estimated value of the adjustment speed, this study begins to test the effect of CSR on SOA by Eq. (4):

$$SOA_i = \beta_0 + \beta_1 CSR_{i,t-1} + \beta_k Z_{i,t-1} + \varepsilon_{i,t} \quad (4)$$

where SOA_i is the SOA obtained from Eq. (3), $CSR_{i,t-1}$ is CSR performance and $Z_{i,t-1}$ is a vector of several relevant firm-level determinants of the firm's capital structure adjustment speed, including market to book ratio (MBR), firm size (SIZE), tangible assets (TANG), return on assets (ROA) industry median leverage (MEDLEV) and leverage ratio (LEV). The argument of H1a predicts a positive significance of β_1. In contrast, if β_1 is significantly negative, the result will support H2a.

Further, Eq. (5) and (6) observe whether SOA and CSR impact performance, respectively. By constructing an interaction item of SOA and CSR, Eq. (7) tests H2a / H2b to explore whether SOA serves as a bridge between CSR performance and firm performance.

$$Performance_{i,t} = \beta_0 + \beta_1\, SOA_i + \beta_k Z_{i,t-1} + \varepsilon_{it} \quad (5)$$

$$Performance_{i,t} = \beta_0 + \beta_1\, CSR_{i,t-1} + \beta_k Z_{i,t-1} + \varepsilon_{it} \quad (6)$$

$$\text{Performance}_{i,t} = \beta_0 + \beta_1 SOA_i * CSR_{i,t-1} + \beta_k Z_{i,t-1} + \varepsilon_{it} \quad (7)$$

where performance is the return on equity (ROE) and Tobin's Q for a given year, SOA_i is the firm's capital SOA obtained from Eq. (3), $CSR_{i,t}$ is the measure of the firm's CSR performance, and $Z_{i,t-1}$ is control variables including market to book ratio (MBR), firm size (SIZE), tangible assets (TANG), return on assets (ROA) industry median leverage (MEDLEV), and leverage ratio (LEV). The definition of the variables is given in Table 1.

Table 1. Variable Definition

Variables	Definition
LEV	= is the ratio of total debt at year t divided by the total assets at year t-1.
SOA	= is the SOA of a capital structure estimated by Equation (3) at the firm level.
CSR	= is an ESG score at t obtained from Thompson Reuters DataStream.
ROE	= is the ratio of the net income at t scaled by the total equity at t-1.
Tobin's Q	= is the ratio of the market value at t plus total debt at year t scaled by the total assets at t-1.
SIZE	= is the log value of the total assets at t.
MBR	= is the ratio of the market value at t scaled by the total assets minus total debt at t-1.
TANG	= is the ratio of the fixed assets at t scaled by the total assets at t—1.
ROA	= is the ratio of the net income at t scaled by the total assets at t-1.
MEDLEV	= the median industry leverage by SIC code, country, and year; the industry is defined at the four-digit SIC code level.

4. Empirical Results

4.1 Descriptive statistic

Table 2 provides the sample distributions from this study. The percentage of observations from each country are Indonesia, 16.3 %; Malaysia, 37.1%; The Philippines, 7.3%; Singapore, 18.8%; Thailand, 20.5%, and represent a large proportion of the ASEAN nations. The number of non-CSR reporting firms are more significant than those reporting. Only 1,186 firm-year observations, or 5.28%, reported CSR activities. There were 382 and 312 CSR firms in Singapore and Malaysia, respectively, 197 CSR firms in Indonesia, 176 CSR firms in Thailand, and 119 CSR firms in The Philippines. Most firms report their CSR in 2004, particularly in Singapore, whereas others started around 2008. The number of CSR reporting firms increased in the following years, in line with increased CSR awareness.

Table 3 provides descriptive statistics of the variables observed. Firms in ASEAN countries had the leverage of adjustment speed of 54.2%, and each firm has an SOA between 51% to 56%. This result gives evidence that the SOA overall is moderate for ASEAN firms. Indonesian firms show a relatively high mean debt ratio compared to other countries; 28.5% of the capital structure came from debt capital; conversely, The Philippines has the lowest debt ratio of 17%. Overall, ASEAN countries have a debt ratio of around 22.1%. US firms have a debt ratio of 20% for 1992-2014 (Do et al., 2018), which is lower than that of the ASEAN nations.

The mean of the CSR performance of the ASEAN countries is 38.88. This outcome is lower than US firms and European firms, which were 50.78 and 56.72 respectively for 2004 to 2011 (Bannier et al., 2019). Companies in Thailand, Indonesia, and the Philippines have a higher CSR performance than the average of all ASEAN firms. In Malaysia and Singapore, companies' CSR performance below the average of total ASEAN firms.

Regarding the control variables, the firms' SIZE among ASEAN countries is relative to the same in the range of 11. Singapore shows a higher SIZE of 12. The variable of tangible assets (TANG) shows that most ASEAN firms were in the range of 0.4 to 0.5; however, Malaysia, Singapore, and Thailand all have tangible assets as over 50% of their total assets.

All ASEAN firms have a market value higher than the book value of their equity, with the average value being 2.8. The Philippines' companies have the highest MBR value of 3.5. Firms in Singapore have the lowest ROA at just 3.4%, whereas firms in Thailand have the highest at 6%. The total ASEAN sample set mean of ROA is 4.5%. The final variable, MEDLEV, covered a wide range of values from 15% to 28%.

Tobin's Q shows the ratio of market value to book value. The number includes a mean value of 1.25 in ASEAN. This Tobin's Q for the ASEAN firms is lower than that of 1.9 in the US from 2009 to 2018 (Alareeni & Hamdan, 2020). ROE is an alternative measurement of performance variable in the study; it allows a mean value range of 4% to 8% for the ASEAN nations. For the set ROE is 5.8%. This ratio is below the ROE of US firms which is approximately 18.8% for 2009 to 2018 (Alareeni & Hamdan, 2020).

Table 4 provides the descriptive statistics and tests for determining CSR compliant/non-CSR compliant firms. CSR firms have a greater SIZE than non-CSR compliant counterparts, and the mean difference here is significant. Larger firms have to overcome the pressure of political risk to be more socially responsible than smaller firms (Putri et al., 2017). Udayasankar (2008) demonstrated that CSR is also more critical the more visible the firm is. Larger firms conduct CSR because of increased public attention caused by their size. Firms that engage in CSR exhibit lower tangible assets in their asset composition. Khan et al. (2018) claimed that the company simultaneously emphasizes investing in intangible resources over tangible or physical assets, focusing on meeting the expectations of multiple stakeholders rather than just shareholders. For instance, companies cultivate a substantial interest in CSR and intellectual capital, strengthening their financial capabilities. As CSR investment grows and draws social attention, their intangible assets such as reputation also grow, which increases the firm's marginal benefit of CSR investment (Orlitzky, 2005).

Consistent with Skinner and Sloan (2002) and Chih et al. (2008), the MBR of a firm with participating in CSR is higher than that of a firm without engaging in CSR. This result address that firm conducting CSR have more significant growth opportunities. Furthermore, firms engaging in CSR also have a higher ROA and ROE response to the reputation hypothesis. Lastly, Tobin's Q for firms engaging in CSR is higher than for those that do not. Heal (2005) already asserted that superior environmental performance was correlated with higher Tobin's Q values. Overall, CSR firms are more prominent with more growth opportunities, better earnings performance and higher firm value.

Table 2. Sample Distribution

Year	ASEAN			Indonesia			Malaysia			Philippine			Singapore			Thailand		
	CSR firm	Non-CSR firm	Total	CSR- firm	Non-CSR firm	Total	CSR firm	Non-CSR firm	Total	CSR firm	Non-CSR firm	Total	CSR firm	Non-CSR firm	Total	CSR firm	Non-CSR firm	Total
2004	12	1,240	1,252	0	180	180	0	466	466	0	98	98	12	219	231	0	277	277
2005	16	1,294	1,310	0	188	188	0	502	502	0	97	97	16	221	237	0	286	286
2006	16	1,350	1,366	0	201	201	0	518	518	0	99	99	16	238	254	0	294	294
2007	20	1,406	1,426	0	216	216	0	541	541	0	107	107	18	251	269	2	291	293
2008	39	1,446	1,485	3	238	241	7	551	558	1	106	107	24	256	280	4	295	299
2009	54	1,482	1,536	5	253	258	9	563	572	4	108	112	29	261	290	7	297	304
2010	88	1,461	1,549	16	242	258	26	549	575	8	104	112	29	267	296	9	299	308
2011	97	1,465	1,562	16	245	261	30	547	577	11	102	113	30	264	294	10	307	317
2012	103	1,452	1,555	17	245	262	31	544	575	11	98	109	30	264	294	14	301	315
2013	111	1,451	1,562	20	241	261	32	546	578	12	100	112	30	265	295	17	299	316
2014	119	1,440	1,559	22	240	262	32	543	575	14	97	111	30	265	295	21	295	316
2015	124	1,430	1,554	24	237	261	34	541	575	15	97	112	30	261	291	21	294	315
2016	128	1,428	1,556	25	234	259	35	543	578	15	96	111	30	262	292	23	293	316
2017	133	1,417	1,550	26	233	259	38	536	574	15	96	111	30	262	292	24	290	314
2018	126	1,421	1,547	23	236	259	38	533	571	13	97	110	28	265	293	24	290	314
N	1,186	21,183	22,369	197	3,429	3,626	312	8,023	8,335	119	1,502	1,621	382	3,821	4,203	176	4,408	4,584
%	5.3%	94.7%	100.0%			16.2%			37.3%			7.2%			18.8%			20.5%

Table 3. Descriptive Statistic

This table reports descriptive statistics for all variables used in the regressions. The sample comprises 22,369 firm-year observations from ASEAN countries over the period 2004–2018. Table 1 provides definitions for all variables.

Variables	ASEAN		Indonesia		Malaysia		Philippines		Singapore		Thailand	
	Mean	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.
SOA	0.542	0.375	0.515	0.398	0.546	0.356	0.561	0.354	0.541	0.368	0.552	0.403
LEV	0.221	0.199	0.285	0.239	0.195	0.171	0.170	0.176	0.209	0.191	0.246	0.212
CSR	38.880	20.752	41.737	20.265	38.479	18.239	39.418	22.048	32.179	20.617	50.574	19.143
SIZE	11.652	1.874	11.987	1.730	11.340	1.756	11.751	2.096	12.045	2.251	11.556	1.598
TANG	0.538	0.402	0.436	0.438	0.597	0.319	0.476	0.767	0.535	0.362	0.538	0.330
MBR	2.085	16.273	2.414	19.331	1.362	3.263	3.457	27.724	1.986	11.104	2.745	24.302
ROA	4.540	11.538	5.750	11.335	3.839	10.507	4.192	12.456	3.424	14.702	6.001	9.434
MEDLEV	0.215	0.160	0.284	0.209	0.185	0.122	0.158	0.141	0.201	0.151	0.245	0.166
TOBINS'Q	1.254	3.178	1.254	2.012	0.934	0.998	1.777	5.362	1.268	3.707	1.636	4.594
ROE	5.887	19.720	7.708	24.076	4.748	14.999	5.635	14.323	4.174	25.227	8.177	19.013
Observations	22,369		3,626		8,335		1,621		4,203		4,584	

Table 4. Descriptive Statistic and Univariate Test

Variables	CSR Firm		Non-CSR Firm		Differences Test	
	Mean	Std. Dev.	Mean	Std. Dev.	T-statistic	
LEV	0.270	0.162	0.218	0.201	8.676	***
SIZE	15.347	1.303	11.445	1.675	78.890	***
TANG	0.456	0.198	0.543	0.410	-7.230	***
MBR	4.927	13.670	1.926	16.392	6.185	***
ROA	9.268	9.008	4.275	11.607	14.571	***
MEDLEV	0.249	0.118	0.213	0.162	7.617	***
Tobin's Q	1.902	2.270	1.217	3.218	7.233	***
ROE	12.772	12.906	5.501	19.964	12.397	***
Observations		1,186		21,183		

This table displays descriptive statistics for the 1,186 firm-year CSR firm observation and 21,183 firm years of Non-CSR firm observation from 2004 to 2018. Differences in mean (t-statistic) are reported. Table 1 provides the definitions of all variables. ***, **, * indicates statistically significant at the 1%, 5%, and 10% levels respectively.

Table 5 shows the correlation matrix of all variables tested. SOA has a significant negative correlation with SIZE, MBR, and ROE. Nevertheless, it positively correlates with LEV and MEDLEV. The negative correlation between SOA and SIZE is in line with Chua et al. (2020), where it was discovered that larger firms adjusted more slowly toward their target debt level.

Fitzgerald and Ryan (2019) found that higher deviation costs from optimal capital structure caused an increased risk of financial distress. Increased opacity makes smaller companies more adaptable than large firms. Higher growth firms showed mixed results, adjusting more quickly to total debt but a slower response to long-term debt. It is claimed that the costs of debt relief and associated investor-creditor conflicts are higher for firms with higher growth opportunities. As a result, the trade-off model predicts that firms with more investment opportunities carry less debt than those with fewer investment opportunities. They have more substantial incentives to prove that they do not engage in underinvestment and substitution of assets (Drobetz et al., 2014). Moreover, highly profitable firms reduce the need for external finance. Thus they have a lower SOA.

Table 5. Correlation Matrix

Correlation	SOA	LEV	CSR	SIZE	TANG	MBR	ROA	MEDLEV	TOBINSQ	ROE
SOA	1.000									
LEV	0.066 **	1.000								
CSR	0.021	0.069 **	1.000							
SIZE	-0.116 ***	0.141 ***	0.014	1.000						
TANG	0.036	-0.696 ***	-0.052 *	-0.196 ***	1.000					
MBR	-0.079 ***	-0.013	0.130 ***	-0.232 ***	-0.224 ***	1.000				
ROA	-0.046	-0.263 ***	0.096 ***	-0.406 ***	0.105 ***	0.476 ***	1.000			
MEDLEV	0.081 ***	0.676 ***	0.075 **	0.137 ***	-0.391 ***	-0.077 ***	-0.188 ***	1.000		
TOBINSQ	-0.045	-0.177 ***	0.151 ***	-0.436 ***	-0.003	0.561 ***	0.800 ***	-0.186 ***	1.000	
ROE	-0.053 *	0.031	0.079 ***	-0.370 ***	-0.114 ***	0.439 ***	0.827 ***	-0.016	0.697 ***	1.000

This table reports the simple correlations of variables that have been chosen from ASEAN countries for 2004 to 2018. Table 1 defines all variables. ***, **, * indicates statistically significant at the 1%, 5%, and 10% levels respectively

4.2 SOA toward target leverage

This study begin by identifying SOA through various leverage models. Table 6 reports the results for the baseline model using a pool of ASEAN firms. Columns (2) through (6) show each country's results for the whole dataset.

The OLS results indicate that the lagged leverage coefficient under all specifications was positive and significant. All coefficients are between 0 and 1 across the six different samples, showing a dynamic capital structure for these ASEAN firms. Further, SOA is defined as one minus the value of the estimated coefficient (λ) for the lag leverage variable in the dynamic model of capital structure, i.e., δ=1-λ. The ASEAN coefficient in Table 6 is 0.793, thus annual SOA in the ASEAN area is 20.7% (=1- 0.793=0.207), is equivalent to 2.987 (=ln(0.5)/ln(1-0.207)) years to move halfway toward their target leverage following Huang and Ritter (2009). Indonesia exhibits the fastest SOA of the dataset (1-0.720=0.28). Singapore's SOA is toward the target of 23.3%, and Philippines is 20.2%. Malaysia and Thailand come with similar SOA of around 18% and 16%.

Overall, the SOA in ASEAN are slower than those in developed markets. The primary reason is that most ASEAN nations belong to developing capital markets with a relatively undeveloped financing framework. Remarkably, Zen and Regan (2013) exhibited two pitfalls of infrastructure finance in the area: sovereign credit drops in value, and international and local interest rate settings change for the worse.

Table 6. The SOA by Country

Variable	ASEAN	Indonesia	Malaysia	Philippine	Singapore	Thailand
LEV(t-1)	0.793 ***	0.720 ***	0.821 ***	0.798 ***	0.767 ***	0.840 ***
	(144.895)	(49.935)	(104.629)	(41.416)	(50.782)	(70.291)
SIZE(t-1)	0.003 ***	0.009 ***	-0.001	0.007 ***	0.000	0.008 ***
	(5.406)	(4.776)	(-0.703)	(4.498)	(0.304)	(5.025)
TANG(t-1)	-0.004	0.017 ***	-0.017 ***	-0.002	-0.013 **	0.004
	(-1.548)	(2.675)	(-4.869)	(-0.381)	(-2.180)	(0.664)
MBR(t-1)	0.000 **	0.000	0.000	0.000	0.000 *	0.000
	(2.253)	(0.567) ***	(0.942)	(1.120)	(1.787)	(1.514)
ROA(t-1)	0.000 ***	-0.001 ***	0.000	0.000	0.000	0.000
	(-3.103)	(-5.972)	(-0.270)	(0.669)	(-0.237)	(-0.513)
MEDLEV(t-1)	-0.136 ***	-0.092 ***	-0.092 ***	-0.060 **	-0.196 **	-0.178 ***
	(-16.519)	(-4.753)	(-7.000)	(-2.044)	(-8.842)	(-9.974)
Adjusted R^2	74%	70%	78%	78%	67%	77%
Number of firms	1,576	265	582	113	299	317
Observations	20,792	3,361	7,752	1,508	3,904	4,267
Country fixed effect	Yes	No	No	No	No	No
Industry fixed effect	Yes	Yes	Yes	Yes	Yes	Yes

This table reports pooled OLS estimation results of the following leverage of the speed adjustment model equation (3). LEV is a dependent variable, measured by book leverage ratio at year t. Leverage SOA is one minus the coefficient of lagged leverage. Table 1 defines all variables. T-statistic reported in parentheses. ***, **, * indicates statistically significant at the 1%, 5%, and 10% levels respectively.

4.3 Effects of CSR on SOA

The first model shows the impact of CSR on leverage SOA, considering specific control variables, national fixed effects, and industry level fixed effects. Table 7 reports the results for the baseline model

and shows that CSR positively affects ASEAN SOA at the 1% significance level.

Table 7. The Effect of CSR on SOA

Variable	ASEAN	Indonesia	Malaysia	Philippine	Singapore	Thailand
CSR(t-1)	0.001 ***	0.001	0.001 *	0.002 ***	0.001 **	0.001 **
	(4.319)	(1.344)	(1.831)	(3.165)	(2.445)	(2.056)
SIZE(t-1)	-0.001	0.001	0.003	-0.003	0.000	-0.017 ***
	(-0.744)	(0.285)	(1.262)	(-0.630)	(-0.140)	-(3.609)
TANG(t-1)	-0.013 *	-0.047 ***	-0.008	-0.014	-0.012	0.029 *
	(-1.942)	(-2.962)	(-0.660)	(-0.842)	(-0.888)	(1.703)
MBR(t-1)	0.000 *	0.000	0.000	0.001	0.000	0.000 **
	(1.651)	(-0.543)	(0.298)	(0.687)	(-0.487)	(2.363)
ROA(t-1)	0.001 ***	0.001	0.001 **	0.001 *	0.000	0.002 ***
	(5.158)	(1.141)	(3.967)	(1.710)	(1.224)	(3.870)
MEDLEV(t-1)	-0.001	-0.089 *	0.023	-0.015	-0.111 **	0.130 **
	(-0.0453)	(-1.895)	(0.505)	(-0.156)	(-2.197)	(2.553)
LEV(t-1)	-0.012	0.065 *	-0.064 **	-0.049	0.128 ***	-0.079 **
	(-0.757)	(1.856)	(-2.338)	(-0.801)	(3.721)	-(2.307)
Constant	0.434 ***	1.013 ***	0.372 ***	0.873 ***	0.417 ***	1.147 ***
	(10.301)	(10.268)	(9.819)	(12.295)	(5.559)	(12.379)
Adjusted R2	44%	40%	39%	47%	53%	48%
Observations of CSR firms	1,186	197	312	119	382	176
Observations of Non-CSR firms	21,183	3,429	8,023	4,203	4,584	4,267
Country fixed effect	Yes	No	No	No	No	No
Industry fixed effect	Yes	Yes	Yes	Yes	Yes	Yes

This table shows the result for estimating the relationship between CSR and leverage of speed adjustment following equation (4). $SOA_{i,}$ is a dependent variable, measured by estimation in Table 6. Table 1 defines all variables. T-statistic reported in parentheses. ***, **, * indicates statistically significant at the 1%, 5%, and 10% levels respectively.

This study also examines each country's results, and in those cases, CSR is still positively related to SOA in Malaysia, The Philippines, Singapore, and Thailand, at the significance levels of 10%, 1%, and 5%, respectively. This result supports hypothesis H1a; a firm with higher CSR performance is associated with a faster SOA. While CSR performance helps speed up SOA, the effect is insignificant in Indonesia.

In unreported results, the CSR performance is used to divide the dataset into two tiers, high-CSR performance and low-CSR performance. This division permits to evaluate whether the degree of CSR affects leverage SOA. We adopt a dummy variable to define firm-year observations. High-CSR is equal to one if the firm-year observation has a score over the median for the country and 0 otherwise. However, our result shows there is no difference in CSR effect on SOA.

4.4 Effects of CSR and SOA on firm performance

Table 8 reports the results of the estimation in Eq. (5), (6), and (7). There is no sole effect of SOA on performance in the ASEAN area because most coefficients of SOA in the table are insignificant. CSR firms in ASEAN affect firm performance measured by Tobin's Q. However, the table shows that the interaction between SOA and CSR is positively related to firm performance. This consequence expresses that the impact of SOA on performance only show for firm engaging in CSR. Hence, it supports H1b that CSR performance accelerates a firm's SOA to benefit its performance. The evidence

in Thailand also strongly supports this hypothesis. In other words, CSR performance help accelerates SOA, and firms that converge towards their targets faster outperform those who are slower in their leverage adjustment.

Notably, an interesting case occurs in Indonesia. The coefficient of Indonesian SOA is a negative significance, meaning that a faster SOA drives a worse firm performance. Nevertheless, the interaction between CSR and SOA in the Indonesian model is still positively related to firm performance. The result reveals that the impact of SOA on performance for firms with conducting CSR differs from that for firms without conducting CSR. This outcome further reflects that the interactive effect of CSR and SOA favors firm performance. For Singapore, there are no significant results under any of the three models. The first hypotheses only supports Singapore.

Furthermore, there is no evidence in the previous discussions regarding the insignificant or even negative effects of SOA on firm performance. According to Abuhommous (2019), the study showed that over-leveraged firm uses trade credits to adjust leverage toward target level. Although those take advantage of a lower cost of trade credit than short-term bank loans, the bankruptcy cost increases. For example, Hoang et al. (2019) posited that trade credit positively correlated with firm profitability at lower trade-credit levels, but this association becomes negative at higher levels. As a result, a faster SOA may not benefit firm performance.

When ROE is used to measuring firm performance, the complete sample result supports the hypothesis of H1b. The direct effect of CSR and the interaction of both variables resulted in positive coefficients that were significant at 10% and 5%, respectively. The independent variables are insignificant with regard to ROE for the Philippines and Singapore. This result may be caused by firms being at or near their optimal debt, short-term to long-term debt ratio, or the total debt to total asset ratio being weakly related to ROE (Khan, 2012). Moreover, the result where the effect of CSR on ROE is insignificant follows similar findings to Zulfiquar (2016), where the author discovered that the shareholders' return remained unaffected by spending on corporate philanthropy because of its capacity to continue paying shareholders. Seifert et al. (2003) found that CSR performance had no significant effect on ROE. Also, many other critical primary factors influence stock valuation. The result for Malaysia reveals that CSR indirectly determines firm performance through SOA.

The positive coefficient generally supports the hypotheses stated; however, the result for Thailand shows a negative impact of CSR on ROE. Servaes and Tamayo (2013) stated that ROE is a short-term measure of firm performance, whereas Tobin's Q is a long-term measure based on firm market value. Moreover, Shirasu and Kawakita (2020) study that CSR performance had a positive impact on long-term stock investments in the Japanese market. In conclusion, it is possible that firms deliberately sacrifice some profitability in the present to improve CSR activities for the firm's long-term interest.

Table 8. The Effects of CSR and SOA on Firm Performance

	ASEAN			Indonesia			Malaysia			Philippine			Singapore			Thailand		
Panel A: The dependent variable is Tobin's Q																		
SOA	0.092			-0.184 *			0.024			-0.307			-0.191			0.735 ***		
	(1.553)			(-1.863)			(0.872)			(-0.864)			(-1.134)			(3.935)		
CSR(t-1)		0.017 ***			0.015 ***			0.013 ***			0.028 ***			0.002			0.018 **	
		(7.991)			(4.340)			(10.745)			(2.935)			(0.437)			(2.418)	
SOA*CSR (t-1)			0.020 ***			0.012 ***			0.015 **			0.032 ***			0.008			0.023 **
			(6.438)			(2.727)			(7.785)			(2.664)			(1.025)			(2.037)
Constant	2.430 ***	3.637 ***	4.286 ***	2.527 ***	3.578 ***	3.369 ***	1.968 ***	1.110 ***	1.037 ***	4.780 ***	5.354 ***	5.211 ***	2.842 ***	4.054 ***	2.978 ***	2.579 **	10.549 ***	4.149 ***
	(4.766)	(5.612)	(6.514)	(5.264)	(6.465)	(6.113)	(10.012)	(12.354)	(11.557)	(4.952)	(5.573)	(5.462)	(3.712)	(9.478)	(3.771)	(2.281)	(6.726)	(3.752)
Adjusted R^2	42%	42%	42%	30%	30%	30%	56%	57%	56%	46%	47%	47%	54%	54%	54%	39%	39%	39%
Panel B: The dependent variable is ROE																		
SOA	0.438			-0.978			0.969 *			0.922			-0.250			1.070		
	(0.984)			(-0.766)			(1.927)			(0.774)			(-0.159)			(1.194)		
CSR(t-1)		0.027 *			0.121 ***			-0.001			-0.013			-0.001			-0.011 *	
		(1.666)			(2.636)			(-0.059)			(-0.061)			(-0.018)			(-0.312)	
SOA*CSR (t-1)			0.060 **			0.156 ***			0.017			0.002			0.034			0.009
			(2.533)			(2.668)			(0.473)			(0.054)			(0.459)			(0.172)
Constant	2.905	10.114 **	10.296 **	4.346	13.274 *	12.594 ***	-2.340	-0.869	-0.714	9.941 ***	10.743 **	10.732 **	11.283	11.164	12.062	0.775	-1.102	-0.730
	(0.757)	(2.071)	(2.111)	(0.700)	(1.853)	(1.768)	(-0.653)	(-0.526)	(-0.434)	(3.070)	(3.324)	(3.345)	(1.582)	(1.549)	(1.640)	(0.143)	(-0.207)	(-0.138)
Adjusted R^2	16%	16%	16%	12%	12%	12%	26%	26%	26%	31%	31%	31%	11%	11%	11%	18%	18%	18%
Number of firms	1,576	1,576	1,576	265	265	265	582	582	582	113	113	113	113	299	299	317	317	317
Observations	20,792	20,792	20,792	3,361	3,361	3,361	7,752	7,752	7,752	1,508	1,508	1,508	1,508	3,904	3,904	4,267	4,267	4,267
Control variables	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Country effect	Yes	Yes	Yes	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No
Industry effect	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

This table shows the result for estimating the relationship between corporate social responsibility (CSR), leverage of speed adjustment (SOA), and firm performance follow the model in equations (5), (6), and (7). Performance $_{i, t}$ is a dependent variable, measured by Tobin's Q reported in Panel A, and ROE reported in Panel B. Table 1 defines all variables. T-statistic reported in parentheses. ***, **, * indicates statistically significant at the 1%, 5%, and 10% levels respectively.

4.5 Robustness Check

In the previous section, an unequal sample distribution in CSR and non-CSR groups may bias results. Hence, this study uses matching procedures following Boubakri et al. (2012) to select an equal sample of CSR and Non-CSR firms for robust results. The matched candidate firm should be first from the same country, industry class, and fiscal year as given treated CSR firm. Second, the closest firm size (total assets) among the potential control sample firms to any given treated CSR firm was identified as the optimally matched sample. Finally, the robustness test contains the same amount of sample in both groups, including 2,372 ASEAN firm-year observations representing different 266 firms, and the sample firm is observed for consecutive years over the 2004-2018 period. The chosen sample will be re-estimated to our model from equation (3) to (7). The OLS estimator model in Table 9 shows that the lagged leverage coefficients in all specifications were positive and significantly different from zero.

Table 9. Robustness for the SOA by Country

Variable	ASEAN	Indonesia	Malaysia	Philippine	Singapore	Thailand
LEV(t-1)	0.705 ***	0.730 ***	0.406 ***	0.747 ***	0.662 ***	0.862 ***
	(34.789)	(7.949)	(9.099)	(12.934)	(19.819)	(15.906)
SIZE(t-1)	0.007 ***	0.010	0.009 **	0.000	0.003	0.012 ***
	(3.692)	(1.566)	(2.176)	(0.116)	(1.333)	(2.677)
TANG(t-1)	-0.027 ***	-0.002	-0.374 ***	0.033	0.005	-0.014
	(-3.135)	(-0.028)	(-9.037)	(0.821)	(0.638)	(-0.291)
MBR(t-1)	0.000	0.000	-0.002 ***	0.001	0.000	-0.002
	(-0.381)	(0.326)	(-2.621)	(0.332)	(0.840)	(-1.185)
ROA(t-1)	0.001 *	-0.002 ***	0.001	0.000	0.003 ***	0.000
	(1.924)	(-3.193)	(1.212)	(0.489)	(5.857)	(-0.259)
MEDLEV(t-1)	-0.113 ***	0.147 *	-0.288 ***	-0.287 ***	0.133 **	-0.254 ***
	(-3.257)	(1.734)	(-4.216)	(-3.349)	(2.004)	(-4.786)
Adjusted R^2	86%	96%	50%	89%	64%	85%
Number of firms	266	52	76	30	60	48
Observations	2,106	342	548	208	704	304
Country fixed effect	Yes	No	No	No	No	No
Industry fixed effect	Yes	Yes	Yes	Yes	Yes	Yes

This table reports pooled OLS estimation results for the robustness of the leverage of the speed adjustment model in equation (3). LEV is a dependent variable, measured by book leverage ratio at year t. Leverage SOA is one minus the coefficient of lagged leverage. Table 1 defines all variables. T-statistic reported in parentheses. ***, **, * indicates statistically significant at the 1%, 5%, and 10% levels respectively.

The results appear similar to those of the initial model results. All coefficients were between 0 and 1 across the six different sample types, indicating a dynamic capital structure for ASEAN firms. Firms were adjusting their capital structure to a target level over time. After using the matching procedure, the ASEAN firms' adjustment was 29.5%. Even though the robustness result shows a higher SOA than the original sample (20.7%), the adjustment speed is still low.

Estimating the Eq. (4) model with our matching sample produced the results shown in Table 10. Again, the effects of CSR on SOA did not change qualitatively from the findings earlier in this paper. A positive relationship between CSR and SOA in ASEAN firms is being observed. The only difference observed was in Thailand, where the CSR effect on SOA became insignificant. This model also included the dummy variables to show whether higher CSR could produce a more pronounced SOA.

Table 10. Robustness for the Relationship between CSR and SOA

Variable	ASEAN	Indonesia	Malaysia	Philippine	Singapore	Thailand
CSR(t-1)	0.001 ***	-0.001	0.002 ***	0.005 ***	0.001 **	0.001
	(3.814)	(-0.782)	(3.221)	(4.481)	(1.786)	(1.345)
SIZE(t-1)	-0.007	-0.039 **	-0.021 ***	-0.047 ***	0.012 ***	-0.001
	(-1.345)	(-2.505)	(-2.088)	(-2.781)	(1.462)	(-0.030)
TANG(t-1)	0.002	-0.025	0.072 **	0.494 ***	-0.003 ***	-0.313 ***
	(0.084)	(-0.161)	(0.880)	(2.878)	(-0.155)	(-2.938)
MBR(t-1)	-0.002 ***	-0.001	-0.003	-0.007	-0.002	-0.001
	(-2.941)	(-0.784)	(-1.570)	(-0.467)	(-2.115)	(-0.193)
ROA(t-1)	0.001	0.000	0.001	0.005	0.001 **	0.006 ***
	(0.859)	(-0.069)	(0.757)	(1.388)	(0.531)	(3.984)
MEDLEV(t-1)	-0.158 **	-0.343 *	-0.145	-0.554	0.015	0.117
	(-2.056)	(-1.896)	(-1.067)	(-1.527)	(0.085)	(1.003)
LEV(t-1)	0.176 ***	0.210	0.209 **	1.350 ***	0.054 ***	-0.289
	(3.925)	(1.045)	(2.361)	(5.688)	(0.617)	(-2.388)
Constant	0.121	1.121 ***	0.634 ***	0.674 **	-0.201 ***	0.957 **
	(1.622)	(4.617)	(4.044)	(2.554)	-(1.355)	(4.269)
Adjusted R^2	52%	49%	46%	60%	43%	82%
Number of CSR firms	1,186	197	312	119	382	176
Number of Non-CSR firms	1,186	197	312	119	382	176
Observations	2,372	394	624	238	764	352
Country fixed effect	Yes	No	No	No	No	No
Industry fixed effect	Yes	Yes	Yes	Yes	Yes	Yes

This table shows the result for estimating the robustness of the relationship between CSR and leverage of speed adjustment following equations (4). SOA_i is a dependent variable, measured by estimation in Table 6. Table 1 defines all variables. T-statistic reported in parentheses. ***, **, * indicates statistically significant at the 1%, 5%, and 10% levels respectively.

This result remains in agreement with the original sample. There is no difference between high and low CSR contributions when determining SOA. The robustness test also examines the effects of CSR and SOA on firm performance. Table 11 presents the results of the model that followed Eq. (5) to (7). Firms engaging in CSR in ASEAN nations are being affected when measured by Tobin's Q. In addition, the interaction between SOA and CSR has a positive relation to firm performance. We also find the same result in Malaysia, The Philippines, and Thailand. Hence, the robustness test lends support to the second hypothesis.

For Singapore, the result shows CSR improved firm performance directly. However, the interaction term between SOA and CSR is insignificant with regard to firm performance. Although the result using matched samples showed a positive effect of CSR on firm performance, the result still notes that only Singapore supports the first hypothesis. Using matched samples in Indonesia, the result shows that all the specified models were insignificant. The result for the robustness test using matched samples produced the same result as the original estimation.

Table 11. Robustness for the Relationship between CSR, SOA, and Firm Performance

Variable	ASEAN			Indonesia			Malaysia			Philippine			Singapore			Thailand		
Panel A: The dependent variable is Tobin's Q																		
SOA	0.138			-0.192			0.288 *			1.016 ***			-0.012			0.802 **		
	(1.464)			(-0.590)			(1.869)			(2.637)			(-0.151)			(2.052)		
CSR(t-1)		0.012 ***			0.006			0.018 ***			0.010 *			0.003 **			0.011 **	
		(7.869)			(1.082)			(7.312)			(1.695)			(2.214)			(1.856)	
SOA*CSR (t-1)			0.012 ***			0.003			0.02 **			0.012 *			0.003			0.011 **
			(6.000)			(0.502)			(5.861)			(1.738)			(1.377)			(1.919)
Constant	0.642	1.728 ***	1.465 ***	0.959	0.987	0.775	2.054 ***	3.914 ***	3.262 ***	4.392 ***	5.569 ***	5.563 ***	0.204	0.446	0.381	-1.520	1.119	-0.015
	(1.482)	(3.850)	(3.247)	(0.674)	(0.711)	(0.564)	(4.144)	(7.433)	(6.363)	(3.255)	(3.784)	(3.798)	(0.697)	(1.438)	(1.202)	(-1.614)	(0.783)	(-0.015)
Adjusted R^2	72%	72%	72%	75%	75%	75%	80%	82%	81%	43%	42%	42%	47%	47%	47%	81%	81%	81%
Panel B: The dependent variable is ROE																		
SOA	-1.341			-1.923			1.877			0.346			-2.219			9.303 ***		
	(-1.003)			(-0.323)			(1.356)			(0.183)			(-1.486)			(2.872)		
CSR(t-1)		0.081 ***			0.093			0.030			0.034			0.008			0.042	
		(3.714)			(0.973)			(1.299)			(1.159)			(0.282)			(0.875)	
SOA*CSR (t-1)			0.115 ***			0.109			0.030 **			0.057 *			0.005			0.109 **
			(4.094)			(0.983)			(0.957)			-1.747			(0.123)			(2.228)
Constant	3.185	10.546	11.193 *	2.189	4.082	1.299	3.485	7.160	5.896	-7.358	-4.139	-2.713	17.234 **	18.448 ***	18.173 ***	-9.531	5.337	6.139
	(0.518)	(1.639)	(1.743)	(0.084)	(0.160)	(0.052)	(0.783)	(1.445)	(1.242)	(-1.111)	(-0.581)	(-0.384)	(3.192)	(3.210)	(3.094)	(-1.222)	(0.445)	(0.723)
Adjusted R^2	26%	27%	27%	18%	19%	19%	71%	71%	71%	50%	50%	50%	32%	32%	32%	49%	48%	49%
Number of firms	266	266	266	52	52	52	76	76	76	30	30	30	60	60	60	48	48	48
Observations	2,106	2,106	2,106	342	342	342	548	548	548	208	208	208	704	704	704	304	304	304
Control variables	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Country fixed effect	Yes	Yes	Yes	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No
Industry fixed effect	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

This table shows the result for estimating the robustness of the relationship between corporate social responsibility (CSR), leverage of speed adjustment (SOA), and firm performance follow the model in equations (5), (6), and (7). $Performance_{i,t}$ is a dependent variable, measured by Tobin's Q reported in Panel A, and ROE reported in Panel B. Table 1 defines all variables. T-statistic reported in parentheses. ***, **, * indicates statistically significant at the 1%, 5%, and 10% levels respectively.

5. Conclusion

Although some research papers have explored the link between CSR and firm performance, there are still many gaps in the literature. The relationship between CSR and debt/equity ratio SOA has not been examined in depth. This research explores the relationship between CSR and leverages SOA for ASEAN companies from 2004 to 2018 and measures the relationship between CSR and SOA on firm performance.

This study strongly supports the primary hypotheses: CSR for ASEAN firms is positively related to leverage adjustment, except in Indonesia. Our result is consistent with Do et al. (2018), which shows that CSR is associated with faster leverage SOA. Implementing CSR strategies delivers more transparent and reliable financial information to investors; thus, firms find it easier to get financing and adjust their leverage. Our research finds that CSR was associated with a faster SOA when measured by Tobin's Q, except for Singapore.

Finally, this study contributes to the literature in several ways: First, this study estimated the SOA for ASEAN nations. Second, this study verified that the effects of CSR are varied in this area. Third, this study provides the undiscovered relationship between CSR and SOA. Follow-up papers should be encouraged to examine recent issues that affect CSR, how CSR is deployed, and the time between deployment and reward for the firm. These are all factors that may affect leverage, SOA, or firm performance.

References

Abuhommous, A. A. (2019). Trade credit and the speed of leverage adjustment. *Management Decision*. doi:https://doi.org/10.1108/MD-04-2019-0530.

Aflatooni, A., & Mansori, K. (2019). Opaque information, deviation from target leverage and SOA. *Advances in Mathematical Finance Applications, 4*(2), 15-29.

Akpinar, A., Jiang, Y., Gomez-Mejia, L. R., Berrone, P., & Walls, J. L. (2008). Strategic use of CSR as a signal for good management. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1134505.

Alareeni, B. A., & Hamdan, A. (2020). ESG impact on performance of us s&p 500-listed firms. *Corporate Governance: The International Journal of Business in Society*.

Ali, I., & Ali, J. F. (2011). Corporate social responsibility, corporate reputation and employee engagement. *Munich Personal RePEc Archive,*(33891), 1-17.

Ansong, A. (2017). Corporate social responsibility and access to finance among Ghanaian smes: The role of stakeholder engagement. *Cogent Business Management Decision, 4*(1), 1385165.

Aybar, C. A., Casino, A. M., & López, J. G. (2012). On the adjustment speed of SMEs to their optimal capital structure. *Small Business Economics, 39*(4), 977-996.

Bannier, C. E., Bofinger, Y., & Rock, B. (2019). Doing safe by doing good: ESG investing and corporate social responsibility in the US and Europe. Retrieved from http://nbn-resolving.de/urn:nbn:de:hebis:30:3-480587

Barnea, A., & Rubin, A. (2010). Corporate social responsibility as a conflict between shareholders. *Journal of Business Ethics, 97*(1), 71-86.

Barth, M. E., Konchitchki, Y., & Landsman, W. R. (2013). Cost of capital and earnings transparency.

Journal of Accounting Economics, 55(2-3), 206-224.

Baskin, J. (1989). An empirical investigation of the pecking order hypothesis. *Financial Management*, 26-35.

Beaudoin, C. A. (2008). Earnings management: the role of the agency problem and corporate social responsibility. Ph.D. dissertation. Drexel University, USA.

Benlemlih, M. (2017). Corporate social responsibility and firm financing decisions: A literature review, *Journal of Multinational Financial Management*, 42-43, 1-10.

Jian, M. & Lee, K. W. (2015), CEO compensation and corporate social responsibility, *Journal of Multinational Financial Management*, 29, 46-65.

Ben-Nasr, H., & Ghouma, H. (2018). Employee welfare and stock price crash risk. *Journal of Corporate Finance, 48*, 700-725.

Beurden, P. V., & Gössling, T. (2008). The worth of values–a literature review on the relation between corporate social and financial performance. *Journal of Business Ethics, 82*(2), 407.

Boubakri, N., Guedhami, O., Mishra, D., & Saffar, W. (2012). Political connections and the cost of equity capital. *Journal of Corporate Finance, 18*(3), 541-559.

Brealey, R. A., & Myers, S. C. (2003). *Financing and risk management*: McGraw Hill Professional.

Byoun, S. (2008). How and when do firms adjust their capital structures toward targets? *The Journal of Finance, 63*(6), 3069-3096.

Cespa, G., & Cestone, G. (2007). Corporate social responsibility and managerial entrenchment. *Journal of Economics and Management Strategy*, 16(3), 741–771.

Chang, Y., Chen, T. H., Chou, H. H., & Shen, Y. F. (2014). Corporate Social Responsibility and Analyst's Recommendation. *International Review of Accounting, Banking & Finance*, *6*(2), 1-42.

Chang, Y., Hsieh, C. H., Wang, T. C., & Hsieh, T. Y. (2014). Corporate Social Responsibility, Cost of Equity and Cost of Bank Loans. *International Review of Accounting, Banking & Finance, 6*(3-4), 99-143.

Cheng, B. T., Ioannou, I., & Serafeim, G. (2014). Corporate social responsibility and access to finance. *Strategic Management Journal, 35*(1), 1-23.

Chih, H.-L., Shen, C.-H., & Kang, F.-C. (2008). Corporate social responsibility, investor protection, and earnings management: Some international evidence. *Journal of Business Ethics, 79*(1-2), 179-198.

Cho, S. J., Chung, C. Y., & Young, J. (2019). Study on the relationship between CSR and financial performance. *Sustainability, 11*(2), 343.

Chua, M., Ab Razak, N. H., Nassir, A. M., & Yahya, M. H. (2020). Does CEO education influence the target leverage and speed of adjustment? *Journal of Critical Reviews, 7*(12), 59-68.

Connors, E., & Gao, L. S. Corporate Environmental Performance, Disclosure and Leverage: An Integrated Approach. *International Review of Accounting, Banking & Finance,3*(3), 1-26.

Dhaliwal, D., Li, O., Tsang, A., Yang, G., 2011. Voluntary nonfinancial disclosure and the cost of equity capital: The initiation of corporate social responsibility reporting. *The Accounting Review, 86* (1), 59–100.

DeAngelo, H. & L. DeAngelo (2007). Capital structure, payout policy and financial flexibility. *SSRN working paper*, https://papers.ssrn.com/sol3/papers.cfm?abstract_id=916093

De Miguel, A., & Pindado, J. (2001). Determinants of capital structure: New evidence from Spanish panel data. *Journal of Corporate Finance, 7*(1), 77-99.

Do, T. K., Huang, H. H., & Lo, T. C. (2018). Corporate social responsibility and leverage speed of adjustment. *SSRN Electronic Journal*. doi:10.2139/ssrn.3187924.

Drobetz, W., Schilling, D. C., & Schröder, H. (2014). Heterogeneity in the speed of capital structure adjustment across countries and over the business cycle. *European Financial Management, 21*(5), 936-973. doi:https://doi.org/10.1111/eufm.12048.

Drobetz, W., & Wanzenried, G. (2006). What determines the speed of adjustment to the target capital structure? *Applied Financial Economics, 16*(13), 941-958.

Dudley, E. (2007). Testing models of dynamic trade-off theory. *SSRN Electronic Journal*. doi:10.2139/ssrn.1030119.

El Ghoul, S., Guedhami, O., Kwok, C. C., & Mishra, D. R. (2011). Does corporate social responsibility affect the cost of capital? *Journal of Banking & Finance, 35*(9), 2388-2406.

Fama, E. F., & French, K. R. (2002). Testing trade-off and pecking order predictions about dividends and debt. *The Review of Financial Studies, 15*(1), 1-33.

Faulkender, M., Flannery, M. J., Hankins, K. W., & Smith, J. M. (2012). Cash flows and leverage adjustments. *Journal of Financial Economics, 103*(3), 632-646.

Fitzgerald, J., & Ryan, J. (2019). The impact of firm characteristics on speed of adjustment to target leverage: A UK study. *Applied Economics, 51*(3), 315-327.

Flannery, M. J., & Rangan, K. P. (2006). Partial adjustment toward target capital structures. *Journal of Financial Economics, 79*(3), 469-506.

Fombrun, C. J., & Riel, C. B. V. (2004). Fame and fortune: How successful companies build winning reputations. *New Jersey: FT Prentice Hall*.

Francés, D. S., & Tomás, L. P. (2019). The effects of corporate social responsibility on consumer loyalty through consumer perceived value. *Economic Research-Ekonomska Istraživanja, 32*(1), 66-84.

Gazzola, P. (2014). Corporate social responsibility and companies' reputation. *Network Intelligence Studies, 2*(03), 74-84.

Goss, A., & Roberts, G. S. (2011). The impact of corporate social responsibility on the cost of bank loans. *Journal of Banking & Finance, 35*(7), 1794-1810.

Graves, S. B., & Waddock, S. A. (1994). Institutional owners and corporate social performance. *Academy of Management Journal, 37*(4), 1034-1046.

Harjoto, M. A. (2017). Corporate social responsibility and degrees of operating and financial leverage.

Review of Quantitative Finance, 49(2), 487-513.

Heal, G. (2005). Corporate social responsibility: An economic and financial framework. *The Geneva Papers on Risk Insurance-Issues Practice, 30*(3), 387-409. doi:https://doi.org/10.1057/palgrave.gpp.2510037.

Heshmati, A. (2001). The dynamics of capital structure: Evidence from Swedish micro and small firms. *Research in Banking and Finance, 2*(1), 199-241.

Hoang, H. C., Xiao, Q., & Akbar, S. (2019). Trade credit, firm profitability, and financial constraints. *International Journal of Managerial Finance, 15*(5), 744-770. doi:https://doi.org/10.1108/IJMF-09-2018-0258.

Hovakimian, A., & Li, G. (2011). In search of conclusive evidence: How to test for adjustment to target capital structure. *Journal of Corporate Finance, 17*(1), 33-44.

Hovakimian, A., Opler, T., & Titman, S. (2001). The debt-equity choice. *Journal of Financial Quantitative Analysis, 36*(1), 1-24.

Huang, R., & Ritter, J. R. (2009). Testing theories of capital structure and estimating the speed of adjustment. *Journal of Financial Quantitative Analysis, 44*(2), 237-271.

Jin, M., Zhao, S., & Kumbhakar, S. C. (2020). Information asymmetry and leverage adjustments: A semiparametric varying-coefficient approach. *Journal of the Royal Statistical Society: Series A (Statistics in Society), 183*(2), 581-605.

Jo, H., & Harjoto, M. A. (2011). Corporate governance and firm value: The impact of corporate social responsibility. *Journal of Business Ethics, 103*(3), 351-383.

Kayhan, A., & Titman, S. (2007). Firms' histories and their capital structures. *Journal of Financial Economics, 83*(1), 1-32.

Khan, A. G. (2012). The relationship of capital structure decisions with firm performance: A study of the engineering sector of Pakistan. *International Journal of Accounting Financial Reporting, 2*(1), 245-262.

Khan, S. Z., Yang, Q., & Waheed, A. (2018). Investment in intangible resources and capabilities spurs sustainable competitive advantage and firm performance. *Corporate Social Responsibility Environmental Management, 26*(2), 285-295. doi:https://doi.org/10.1002/csr.1678.

Knudson, H. (2018). Making the business case: The effects of corporate social responsibility on SME competitiveness. *Road CSR Project*.

Kotha, S., Rajgopal, S., & Rindova, V. (2001). Reputation building and performance: An empirical analysis of the top-50 pure internet firms. *European Management Journal, 19*(6), 571-586.

Krishnan, V. S., & Moyer, R. C. (1997). Performance, capital structure and home country: An analysis of Asian corporations. *Global Finance Journal, 8*(1), 129-143.

Leary, M. T., & Roberts, M. R. (2005). Do firms rebalance their capital structures? *The Journal of Finance, 60*(6), 2575-2619.

Lemmon, M. L., Roberts, M. R., & Zender, J. F. (2008). Back to the beginning: Persistence and the

cross-section of corporate capital structure. *The Journal of Finance, 63*(4), 1575-1608.

Li, Z. (2019). Firm leverage and performance. *All Graduate Plan B and other Reports., 1375*. Retrieved from https://digitalcommons.usu.edu/gradreports/1375.

Málovics, G., Csigéné, N. N., & Kraus, S. (2008). The role of corporate social responsibility in strong sustainability. *The Journal of Socio-Economics, 37*(3), 907-918.

Maqbool, S., & Zameer, M. N. (2018). Corporate social responsibility and financial performance: An empirical analysis of Indian banks. *Future Business Journal, 4*(1), 84-93.

Masulis, R. W., & Reza, S. W. (2015). Agency problems of corporate philanthropy. *The Review of Financial Studies, 28*(2), 592-636.

Mendibil, K., Hernandez, J., Espinach, X., Garriga, E., & Macgregor, S. (2007). How can CSR practices lead to successful innovation in SMEs. *Publication from the RESPONSE Project*, 1-7.

Modigliani, F., & Miller, M. (1958). The cost of capital, corporation finance and the theory of investment, in "American economic review", . In: Giugno.

Mukherjee, S., & Mahakud, J. (2010). Dynamic adjustment towards target capital structure: Evidence from Indian companies. *Journal of Advances in Management Research, 7*(2), 250-266. doi:https://doi.org/10.1108/09727981011085020.

Mustafa, S. A., Othman, A. R., & Perumal, S. (2012). Corporate social responsibility and company performance in the Malaysian context. *Procedia-Social and Behavioral Sciences, 65*, 897-905.

Myers, S. C. (1984). The capital structure puzzle. *Journal of Finance, 39*(3), 574-592.

Myers, S. C., & Majluf, N. S. (1984). Corporate financing and investment decisions when firms have information that investors do not have. *Journal of Financial Economics*, 13(2), 187-222.

Nguyen, P., & Nguyen, A. (2015). The effect of corporate social responsibility on firm risk. *Social Responsibility Journal, 11*(2), 324-339. doi:https://dx.doi.org/10.1108/SRJ-08-2013-0093.

Orlitzky, M. (2005). Social responsibility and financial performance: Trade-off or virtuous circle. *University of Auckland Business Review, 7*(1), 37-43.

Öztekin, Ö., & Flannery, M. J. (2012). Institutional determinants of capital structure adjustment speeds. *Journal of Financial Economics, 103*(1), 88-112.

Prommin, P., Jumreornvong, S., Jiraporn, P., & Tong, S. (2016). Liquidity, ownership concentration, corporate governance, and firm value: Evidence from Thailand. *Global Finance Journal, 31*, 73-87.

Putri, R. K., Zulbahridar, Z., & Kurnia, P. (2017). Pengaruh ukuran perusahaan, profitabilitas, leverage, likuiditas, dan basis kepemilikan terhadap corporate social responsibility pada perusahaan pertambangan yang terdaftar di bursa efek indonesia (bei) periode tahun 2012-2014. *JOM Fekon, 4* (1), 558-571.

Ross, S. A., Westerfield, R., & Jordan, B. D. (2019). *Fundamentals of corporate finance*: Tata McGraw-Hill Education.

Samet, M. & Jarboui, A. (2017). How does corporate social responsibility contribute to investment

efficiency? *Journal of Multinational Financial Management*, 40, 33-46.

Seifert, B., Morris, S. A., & Bartkus, B. R. (2003). Comparing big givers and small givers: Financial correlates of corporate philanthropy. *Journal of Business Ethics, 45*(3), 195-211.

Sen, S., Bhattacharya, C. B., & Korschun, D. (2006). The role of corporate social responsibility in strengthening multiple stakeholder relationships: A field experiment. *Journal of the Academy of Marketing Science, 34*(2), 158-166.

Servaes, H., & Tamayo, A. (2013). The impact of corporate social responsibility on firm value: The role of customer awareness. *Management Science, 59*(5), 1045-1061.

Sheikh, S. (2018). Is corporate social responsibility a value-increasing investment? Evidence from antitakeover provisions. *Global Finance Journal, 38*, 1-12.

Shirasu, Y., & Kawakita, H. (2020). Long-term financial performance of corporate social responsibility. *Global Finance Journal*, 100532.

Shyam-Sunder, L., & Myers, S. C. (1999). Testing static trade-off against pecking order models of capital structure. *Journal of Financial Economics, 51*(2), 219-244.

Skinner, D. J., & Sloan, R. G. (2002). Earnings surprises, growth expectations, and stock returns or do not let an earnings torpedo sink your portfolio. *Review of Accounting Studies, 7*(2-3), 289-312. doi:https://doi.org/10.1023/A:1020294523516.

Sun, L., & Yu, T. R. (2015). The impact of corporate social responsibility on employee performance and cost. Review of Accounting and Finance, 14(3). 262-284.

Surroca, J., & Tibo, J. A. (2008). Managerial entrenchment and corporate social performance. *Journal of Business Finance & Accounting*, 35(5–6), 748–789.

Szutowski, D., & Ratajczak, P. (2016). Exploring the relationship between CSR and innovation. *Sustainability Accounting, Management and Policy Journal, 12*(2), 777-794.

Toly, A. A., Ronald, S., Hartanto, V., & Ferdinand, S. (2019). The effect of CSR, tax avoidance, and information asymmetry issues on corporate reputation. *Journal of Economics and Business, 2*(2).

Udayasankar, K. (2008). Corporate social responsibility and firm size. *Journal of Business Ethics, 83*(2), 167-175. doi:10.1007A10551-007-9609-8.

Wu, M. W., & Shen, C. H. (2013). Corporate social responsibility in the banking industry: Motives and financial performance. *Journal of Banking & Finance, 37*(9), 3529-3547.

Xu, H., Xu, X., & Yu, J. (2019). The impact of mandatory CSR disclosure on the cost of debt financing: Evidence from China. *Emerging Markets Finance Trade*, 1-15.

Yang, S., He, F., Zhu, Q., & Li, S. (2017). How does corporate social responsibility change capital structure? *Asia-Pasific Journal of Accounting & Economic*, 1-37.

Yoo, D., & Lee, J. (2018). The effects of corporate social responsibility (CSR) fit and CSR consistency on company evaluation: The role of CSR support. *Sustainability, 10*(8), 2956. doi:10.3390/su10082956.

Zen, F., & Regan, M. (2013). Financing ASEAN Connectivity. Economic Research Institute for ASEAN

and East Asia (ERIA), https://www.eria.org/publications/financing-asean-connectivity/.

Zulfiquar, S. (2016). Link between corporate philanthropy and corporate financial performance: Evidence from Pakistani textile sector. *International Journal of Engineering, 1*(1), 1-12.