



# IMPACT OF CORPORATE SOCIAL RESPONSIBILITY AND CAPITAL ALLOCATION EFFICIENCY ON FAMILY AND NON-FAMILY FIRMS

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## Abstract

**Purpose of the study:** Purpose of this study was to examine how family firms differ from non-family firms in the relationship between corporate social responsibility (CSR) and capital allocation efficiency, including slack resources as moderating variables.

**Methodology:** This study used moderated regression analysis and subgroup analysis of nonfinancial companies listed in Indonesia Stock Exchange from 2011-2016. The data were gathered from Thomson Reuters and analyzed using STATA 14 unbalanced panel fixed effect.

**Main Findings:** The results show that family firms and non-family firms are different in relation to CSR performance and capital allocation efficiency. When family firms are efficient, there is no relationship between CSR, capital allocation efficiency, and slack resources. When family firms are inefficient, CSR performance negatively affects capital allocation efficiency and slack resources reduce this negative effect.

**Implications:** It is implied that trade-off theory only applies to non-family firms and inefficient family firms. Family firms are more efficient in allocating resources for CSR. Therefore, shareholders shall not be afraid of investing in family firms.

**Keywords:** CSR, Capital Allocation Efficiency, Family and Non-family Firms, Slack.

## INTRODUCTION

Capital allocation decisions are paramount in modern enterprises where internal decision-makers access better information to allocate capital to invest with the best return prospects. Under uncertain circumstances, the company allocates its capital to anything that enhances its performance in the future, but at the same time does not depend on its current performance ([Arrfelt, Wiseman, & Hult, 2013](#)). In these uncertain business circumstances, the company begins to invest in any investments that can improve future performance; one of them is corporate social responsibility (CSR) activities.

CSR is not a mere government obligation. Previous researches show that CSR improves investment efficiency ([Benlemlih & Bitar, 2016](#); [Samet & Jarboui, 2017](#)). A good CSR can improve the company's image, thereby reducing the company's shortage of funds ([Campello, Graham, & Harvey, 2010](#)). Besides, social responsibility also increases shareholder confidence, thereby reducing capital costs and improving the efficiency of capital allocation ([Dhaliwal, Li, & Tsang, 2011](#)). Previous researches show that company that volunteers in implementing environmental management and social responsibility have better performance ([McWilliams & Siegel, 2000](#); [Mardiandari & Rustiyansih, 2013](#); [Darmawati, 2015](#); [Rhou, Singal, & Koh, 2016](#); [Charlo, Moya, & Muñoz, 2017](#)). The company is more enthusiastic about investing in environmental issues to generate innovation because of the expected marginal benefits of improving its social responsibility performance beyond the expected cost. However, all these benefits can only be obtained in the long run ([Barnett & Salomon, 2006](#); [Wang, Lu, Ye, Chau, & Zhang, 2016](#)). CSR creates intangible assets that are useful in creating long-term corporate value ([Lo & Sheu, 2007](#); [Kuzey & Uyar, 2017](#)). In the short term, social responsibility only adds to the company's costs to reduce the company's ability to invest elsewhere ([Bhandari & Javakhadze, 2017](#)). Additionally, [Nishitani et al. \(2017\)](#) shows that CSR in Indonesia does not have a big impact on financial performance because companies in Indonesia use CSR and reduce production costs to improve their performance. However, CSR has yet reached environmental innovation to reduce production cost. The increase in Indonesia's environmental performance can also be gained by only reducing the greenhouse effect, but it is also closely linked to sustainable development that takes considerable time. In addition to the environment, other social responsibility activities, such as community development, also take a long time to get the benefits. For these two reasons, it can be concluded that if companies in Indonesia focus on voluntary social responsibility activities, better than required, and invest heavily in such activities, they cannot get profit from social responsibility activities for a while. Therefore, in a certain time, social responsibility is considered as a burden to the company's profit. As a result, capital allocated to social responsibility cannot be used for other profitable investments.

The investment problem lies at the mistake of allocating capital structures by managers. In family companies, families take an important role in allocating capital by becoming managers and controlling shareholders (Vallejo, 2011). Since family firms have low information asymmetries, they know opportunities that enable them to allocate capital more efficiently (Connelly, 2016). Researches show that family firms tend to know how to invest more efficiently (Berrone, Cruz, Gomez-Mejia, & Larraza-Kintana, 2010; Berrone, Cruz, & Gomez-Mejia, 2012a; Kalm & Gomez-Mejia, 2016) thus having more strategic investment (Zhou, He, & Wang, 2017). Regarding social responsibility, as family firms are closer to stakeholders, family firms know how to improve the performance of social responsibility without spending large resources (Gómez-Mejía, Haynes, Núñez-Nickel, Jacobson, & Moyano-Fuentes, 2007; Berrone et al., 2012a; Xiang, Chen, Tripe, & Zhang, 2018). As a result, there is no negative impact of the performance of social responsibility on the capital allocation efficiency.

The focus of the efficiency of capital allocation lies in the limited capital. Companies with excess resources can use these for other things outside of investments that can support the growth of the companies. If the company has sufficient capital of slack resources, then social responsibility should not reduce the efficiency of capital allocation (Bhandari & Javakhadze, 2017). Since a family company controls the capital of the company and is more cautious in investing, it has fewer financial problems than any other company. Research shows that family firms are not dependent on the resources they have to invest (Pindado, Requejo, & de la Torre, 2011). Thus, slack resources are useless for family firms in moderating the social responsibility, relationships, and efficiency of the company's capital allocation.

The present study examines how the corporate slack resources affect the impact of CSR on the efficiency of the company's capital allocation to family firms and non-family firms. This study concentrates on family companies that have different resource constraints with non-family companies. Previous studies have examined the differences in investment behavior in family firms (Pindado et al., 2011; Connelly, 2016), the influence of social responsibility on the efficiency of corporate investment and the efficiency of the company's capital allocation (Benlemlih & Bitar, 2016; Bhandari & Javakhadze, 2017), and the effect of slack in improving investment efficiency (Love & Nohria, 2005; Jalilvand & Kim, 2013). This paper fills the gap by examining the impact of family ownership on the relationship of social responsibility, slack, and efficiency of the company's capital allocation.

This research is important, considering most companies in Indonesia are family companies; therefore, family plays an important role in the decision-making. Claessens et al. (2000) argued that Indonesia is one of the countries with the largest family-owned companies in the world (71.5%). Based on the PricewaterhouseCoopers survey, family companies in Indonesia has now reached to 95% (Price Waterhouse Coopers Indonesia, 2014). Given the mandatory CSR rule, family companies' capital allocation and the impact of family-owned companies' slack resources are in the spotlight of today's shareholders.

This study contributes in three ways. First, this study focuses on Indonesian contexts, which are different from other countries in the regulation of social responsibility, the impact of social responsibility and domination of family firms. Because of this different context, the results of this study may differ from those in other countries. Second, this study also adds the ownership status of a company (family company) that differentiates the impact of social responsibility on the company's capital allocation efficiency and slack. Third, the study also enhances research literature on social responsibility and the efficiency of a company's capital allocation by providing evidence of the sources of capital used by firms in investing.

## LITERATURE REVIEW

### Trade-off hypothesis

Capital allocation efficiency is how companies use limited capital to create shareholder wealth. Capital allocation efficiency comes from the investment sensitivity of the growth prospects reflected in the stock price (Baker, Stein, & Wurgler, 2003).

The trade-off hypothesis says that the performance of CSR is an independent variable that requires financial costs (Preston & Bannon, 1997). These financial costs can deplete a company's capital and other capital (Aupperle, Carroll, & Hatfield, 1985). As a result, the capital that should be used for other purposes (increase a company's value), is allocated to CSR. In addition, managers who engage in time-consuming social responsibility activities may lose focus on their primary managerial responsibilities (Jensen, 2001) and ignore favorable investment prospects. A company's capital consists of internal capital and external capital.

Social responsibility is not a profitable investment in the near future ([Lo & Sheu, 2007](#); [Kuzey & Uyar, 2017](#)) and its impact cannot be felt directly. Researches show mixed results on the impact of CSR on both, firm performance and firm value in the short term ([Brine, Brown, & Hackett, 2007](#); [Surroca, Tribó, & Waddock, 2010](#); [Ameer & Othman, 2012](#); [Flammer, 2015](#)). Current researches even show various forms of their relationship, such as U or inverse U ([Huang & Chen, 2010](#); [Wang et al., 2016](#)). This shows that companies with good corporate responsibility have a vision for abstract corporate sustainability. In making a trade-off, a company considers its advantages and disadvantages. Companies that pay attention to long-term survival assume social responsibility as a more profitable investment than other investments. As a result, the company's investment amount elsewhere is incompatible with the company's growth opportunities.

### Slack Resources Theory

A company is an organizational entity that processes and accumulates resources [Penrose (1959) in ([Zhong, 2011](#))]. Companies with limited resources find it difficult to gain competitive advantage ([Wefald, Katz, Downey, & Rust, 2010](#)). If the company has limited resources, the company that has allocated its resources on social responsibility cannot use its resources to make investments as per its growing opportunity. Excess resources, called organizational slack resources, can be used to achieve corporate goals ([George, 2005](#)). Slack resources are used for a variety of corporate investments. Research shows that firms with many slack resources tend to reverse poor performance with increasing investments and even seem to be over-invested ([Arrfelt et al., 2013](#)). The reduction of the negative impact of CSR on capital allocation efficiency through slack resources can be seen from two points of view, the psychological point of view, and the economic point of view. From a psychological point of view, companies with excessive slack resources will feel that they have sufficient resources to invest so that even if the company has allocated its costs to social responsibility, the company still runs a profitable investment with the idea that it has enough resources. From an economic point of view, in companies with high growth opportunities, they will not waste the opportunity by making the investment. Real slack resources can be used for investment. Slack resources can help companies because they do not need to seek outside funding by issuing shares or debt to finance their investments ([Connelly, 2016](#)).

### Agency Theory

[Chua et al. \(1999\)](#) identifies a family company as a business managed and/or controlled to establish and pursue a business vision held by a dominant coalition controlled by the same family members or small families in a potentially sustainable way of generation to generations for the same family. From this definition, it can be seen that family firms are run by families with the hope of continuing from generation to generation. Therefore, if the family company is a listed company, it will retain its majority shareholding in the hands of the family to ensure regeneration of the reins of governance in the family circle. Researches show that decision-making within a family enterprise is different from a company not owned by a family ([Munro, 1999](#); [Berrone et al., 2010](#); [Gomez-Mejia, Cruz, Berrone, & de Castro, 2011](#); [Berrone, Cruz, & Gomez-Mejia, 2012b](#)).

The decision on capital allocation is in the director's hand approved by a general meeting of the shareholders. The role of director and shareholders are very important capital allocation. In the family company, the majority shareholder and directors are from the family ([Bergamaschi & Randerson, 2016](#)). Therefore, the family can control the allocation of the company's capital completely.

Family firms tend to have a higher socio-emotional wealth and be closer to stakeholders ([Gómez-Mejía et al., 2007](#); [Berrone et al., 2012a](#)). With the family's ability to control capital allocation, family firms can improve the performance of social responsibility with little capital allocation so as not to disrupt the balance of the company's capital allocation. Because family firms are already efficient in allocating capital, slack resources as a tool to reduce financial constraints are no longer useful to family firms ([Connelly, 2016](#)).

### Hypothesis Development

The impact of CSR cannot be seen immediately and in a while ([Kim, 2010](#)). In a short time, the cost of CSR looks like sunk costs because there seems to be no return on social responsibility investment. With limited capital, companies need to allocate their capital to useful investment. According to the trade-off theory, by allocating capital to social responsibility, the company reduces its capital allocation to investments that have a positive net present value ([Bhandari & Javakhadze, 2017](#)). The company's capital is limited; therefore, it must make the best use of its capital for investment. Company's investments that illustrate the company's growth give opportunities to show the company's efficiency ([Faccio, Marchica, & Mura, 2016](#); [Bhandari & Javakhadze, 2017](#)). Investing in CSR does not describe a company's growth opportunity because its impact is not seen immediately. Therefore, investing in CSR can reduce capital allocation efficiency. [Iturriaga and](#)

[Crisostomo \(2010\)](#) found a trade-off between CSR performance and other investments due to limited resources in Brazil. Besides, focusing on social responsibility eliminates the opportunity to invest in something that benefits companies, but violates the norms of CSR ([Bhandari & Javakhadze, 2017](#)). Avoiding of investment in profitable aspects of CSR culminates in lower efficiency of the company's capital allocation.

*H1. Corporate social responsibility negatively impacts the efficiency of the company's capital allocation.*

The word 'slack' usually has a negative connotation. For example, the reason for downsizing the company is to reduce slack and improve company performance ([Lee, 2010](#)). Yet, organizational theory, such as behavioral theory suggests that slack improves firm performance ([Lee, 2010](#)). Research shows different results with slack resources. Some studies show that slack resources harm a company's performance and firm value because it can be used for personal gain and not given to shareholders ([Jensen, 1986](#)). However, other studies have shown that slack resources are used to source innovation, help in crisis ([Latham, 2008](#)), and provide the financial flexibility necessary for decision-making ([Daniel, Lohrke, Fornaciari, & Turner, 2004](#); [George, 2005](#); [Voss & Voss, 2013](#)). Slack resources theory says that slack resources can help companies deal with uncertainty ([Singh, 1986](#); [Tan & Peng, 2003](#); [Voss & Voss, 2013](#)). In order to mediate, [Wiersma \(2017\)](#) shows that slack resources can improve a company's performance if the company has many lucrative investment opportunities. If the company has slack resources, even if it invests these on social responsibility, it does not lack resources to allocate its capital to other profitable investments. The existence of slack resources that can be used for investments reduce the negative impact of CSR on the capital allocation efficiency.

*H2. Slack resources reduce the negative impact of corporate social responsibility on capital allocation efficiency.*

Research shows that family companies are different from other companies regarding social responsibility. Family firms have socio-emotional wealth that makes family firms close to stakeholders ([Gómez-Mejía et al., 2007](#); [Berrone et al., 2012a](#)). Because family firms are close to stakeholders, they know how to spend fewer resources to achieve good social responsibility performance. As a result, good CSR performance does not affect the efficiency of capital allocation in family companies.

*H3. There is no effect on the performance of corporate social responsibility and the efficiency of capital allocation to family firms.*

Since family firms are already efficient in allocating capital in CSR and other investments, the company does not need additional funds to invest. Slack resources are very useful for non-family companies because of limited funds owned by the company due to its investment in CSR to get a good performance ([Connelly, 2016](#)). Besides, slack resources are also useful because it reduces the possibility of companies to invest with additional debt. Family firms have lower capital costs than other companies and have fewer financial and financing problems ([Husain, Hazoor, & Sabir, 2014](#); [Connelly, 2016](#)). Researches even show that slack resources in family firms decrease the possibility of companies doing internationalization ([Yun Shi, Wen Ting, & Kuei Yang, 2008](#)). Therefore, slack resources are useless to family firms in the impact of CSR and the efficiency of capital allocation.

*H4. Slack resources in family firms do not moderate the relationship of social responsibility to the efficiency of capital allocation.*

## METHODOLOGY

### Study Design and Variables

#### Study design, its basics and definition

This empirical study used cross-sectional approach to see the difference between family and non-family firms in allocating resources for CSR. Cross-sectional studies were aimed at finding out the prevalence of a phenomenon, problem, attitude, or issue by taking a snapshot or cross-section of the population. The purpose of this study was to get empirical evidence about the relationship between CSR and capital allocation efficiency and the role of slack resources to support the trade-off hypothesis in two subgroups, family firms, and non-family firms. The dependent variable was capital allocation efficiency, the independent variable was CSR performance, and the moderating variables were slack resources and family firms.

Capital allocation efficiency was how capital is allocated in a way that is most beneficial to the owners. In order to achieve an efficient allocation, the capital should be invested in sectors with good investment opportunities and withdrawn from those sectors that have poor investment opportunities ([Faccio et al., 2016](#)). Capital allocation efficiency was seen from how the firm's investment decisions are in line with the growth opportunities for the firm (market-assumed market growth derived from the market reward of the previously invested capital) ([Baker et al., 2003](#)). Capital allocation is forward-



looking because internal decision-makers access information to direct capital towards investments with the best prospects of returns, while denying capital to investments with lesser potential of returns ([Arrfelt et al., 2013](#)). Capital allocation efficiency was crucial in determining companies' competitive advantage and sustainability.

CSR performance was the performance of companies' social and environmental activities. Companies have a social responsibility to return what they have received from stakeholders (e.g. customer, employee, and environment). According to [ISO 26000 \(2010\)](#), social responsibility was the responsibility of the company (organization) for its decisions and activities to society and the environment through ethical and transparent actions that contribute to sustainable development, including health and welfare of the community, taking into account stakeholder expectations as per the law and applicable behavioral norms, integrated in the company (organization) as a whole. In general, social responsibility created social, ecological, and economic value (3 Ps: People, Planet and Profit); played role in all company processes; and required companies to consider the interests of their various stakeholders, including the people involved and other companies and organizations, different for each company ([MVO Nederland, 2016](#)).

Initially, CSR arose due to concerns over environmental damage caused by the company's operational activities, which began in the 1970s ([Saifullah, 2013](#)). This concern developed in returning the company's operating results to the environment and stakeholders who are directly or indirectly involved in the company's existence. Social responsibility then developed into a triple bottom line ([Elkington, 1998](#)).

CSR performance indicated the level of companies' care for their social responsibility. Companies need resources to concentrate on their social responsibility. With scarce resources, companies that concentrated in social responsibility had to sacrifice their investments and reduced their capital allocation efficiency.

Slack resources were the excess of resources that companies had and could be used to help them in pursuing their purpose ([George, 2005](#)). The concept of slack resources originated from March and Simon (1958) in [Xu, Yang, Quan, & Lu \(2015\)](#) which said that the organization was a coalition consisting of several members who formed a sub-coalition. The coalition members consisted of managers, workers, suppliers, customers, shareholders, and others [Cyert and March, 1963 in ([Altaf & Shah, 2017](#))]. Because of the friction in the adjustment of joint payments and coalition demands resulting from inadequate and limited information and slow adaptation to demand, there was usually a difference between available resources for the organization and payment requirements to maintain the coalition [Cyert and March, 1963 in ([Altaf & Shah, 2017](#))]. This difference was called slack.

Researchers have divided the types of slack resources into several categories. For example, [Bourgeois and Singh \(1983\)](#) divided slack resources into available, potential, and recoverable slack; [Singh \(1986\)](#) divided slack resources into absorbed slack and unabsorbed slack; [Finkelstein and Hambrick \(1990\)](#) divided slack resources into immediate and deferred resources; [Sharfman et al. \(1988\)](#) divided slack resources into high and low discretionary slack; [Voss et al. \(2008\)](#) divided slack resources into financial, relational, operational, and human resources customers; and [Soetanto and Jack \(2016\)](#) divided slack resources into internal and external resources. This study focused on financial slack resources, namely organizational slack resources that can be measured by the financial condition of the company ([Singh, 1986](#)). According to [Singh \(1986\)](#), slack resources were divided into absorbed slack and unabsorbed slack. Absorbed slack was a resource that had been tied to a particular usage ([Sharfman et al., 1988](#)), while unabsorbed slack was a resource that was not yet tied and could be used easily ([Bradley, Shepherd, & Wiklund, 2011](#)). This study focused on unabsorbed slack because it could be used to make investments elsewhere in a not so urgent situation.

Family companies were owned and regulated to form and pursue the company's vision controlled by members of the same family or small family groups that have the potential to pass on from generation to generation ([Chua, Chrisman, & Sharma, 1999](#)). Family companies had three aspects, namely ownership, management, and family ([Vallejo, 2011](#)).

Stakeholders' salience, i.e., the degree to which management prioritizes competing stakeholders' demands, was different and more complex in a family than in a non-family company as the family was a pivotal stakeholder with peculiar claims and concerns ([Mitchell, Agle, & Wood, 1997](#)). Recent studies have underlined that the main concern of family firms was not limited to economic performance and argued that their reference point was the preservation of socio-emotional wealth ([Basco, 2017; Liu, Shi, Wilson, & Wu, 2017](#)). Socio-emotional wealth referred to "the utilities family-owners derive from the non-economic aspects of the business" ([Gómez-Mejía et al., 2007](#)). Prior literature identified five main dimensions: family control and influence on the business, identification of family members with the firm, binding social ties, emotional attachment of family members, and renewal of family bonds to the firm through dynastic succession ([Berrone et al., 2012b](#)). Since one task of a family firm was to sustain and increase owners' socio-emotional wealth, its preservation affected the business decision-making of family owners and the firm's managers ([Kalm & Gomez-Mejia, 2016](#)). Members

of the owning family often identified with their firm, especially if it bore the family name, and valued their firm's public image because it reflected on the family. In other words, a positive public image of the firm enhanced the socio-emotional wealth derived from the firm. Therefore, family firms were closer to stakeholders (Micelotta & Raynard, 2011) and this relationship made family firms knew what stakeholders needed and what social activities they should do to increase their social performance.

### Sampling

Samples were taken from non-financial companies listed on the Indonesia Stock Exchange in 2011-2016, which have environmental, social, and governance (ESG) values. Indonesia had one of the largest family firms in the world and the number of family firms increased to 95% in 2014 (Price Waterhouse Coopers Indonesia, 2014). It also needed a long time to get the benefit from CSR in Indonesia for the benefit can only be obtained by reducing the greenhouse effect, but companies were focusing on reducing production costs related to the environment (Nishitani et al., 2017). This condition highlighted the possibility of resource trade-off.

The year 2011 was chosen because in 2010, ISO member countries (including Indonesia) agreed to the issuance of ISO 26000 guidance on social responsibility, which guides on the implementation of CSR. One year is given for adjustments to ISO 2010. Financial companies are excluded from the sample because financial companies have investment behavior that is different from other companies due to regulation (Benlemlih & Bitar, 2016; Samet & Jarboui, 2017).

### Measurement

Capital allocation efficiency was measured by a positive relationship between growth opportunity (Q) and investment (INV). Q was the Tobin's Q that was the market value of equity minus the book value of equity plus the book value of the asset and the total was divided by the book value of the asset (Bhandari & Javakhadze, 2017). INV was measured from the increase in the value of property and equipment plus research and development expenditure and divided by the previous year's book value of assets. Capital allocation efficiency was inseparable from how the company relied on its external and internal capitals. External capital was measured by equity financing (EQFIN) and debt financing (DEBTFIN). Internal capital was measured from the cash flow (CF). Equity financing was measured by changes in the book value of the company's capital plus changes in deferred tax minus changes in retained earnings divided by the previous year's assets. Debt financing was measured by changes in total debt (short-term debt and long-term debt divided by total assets last year). Cash flows were measured by net income plus depreciation and amortization expenses and research and development costs and all are divided by the book value of assets (Bhandari & Javakhadze, 2017). For parsimony reasons, external financing was separated into new equations. Although not hypothesized, how much social responsibility depended on external and internal financing was also seen to control the impact of social responsibility on capital allocation efficiency.

CSR performance was measured by the ESG value of Thompson Reuters. The value of ESG was a combination of environmental, social, and management of social responsibility. ESG score was a measure of CSR performance that had been used by many studies on CSR (Benlemlih & Bitar, 2016; Nollet, Filis, & Mitrokostas, 2016; Bhandari & Javakhadze, 2017). Slack resources were measured from natural cash logarithms and cash equivalents (Arora & Dharwadkar, 2011; Anggraini & Djakman, 2017).

This study divided the sample into two groups: family and non-family companies. The family company was a family-owned company of more than 20% and at least one family member who becomes the board of directors or commissioners (Nekhili, Nagati, Chtioui, & Rebolledo, 2017). Nekhili et al. (2017) used 10% as the main limit and 20% as an additional limitation. The study chose 20% as the main limitation because PSAK 15 stated that an ownership of more than 20% in a company was categorized as having control of that firm. Besides, the study also examined the 10% limit. Family shares were shares owned by family members. Family members were identified by the last name (blood) or married to the ultimate shareholder or founder (Cabeza-García, Sacristán-Navarro, & Gómez-Ansón, 2017).

The empirical model is as follows:

$$INV_{it} = \beta_0 + \beta_1 Q_{it-1} + \beta_2 CF_{it-1} + \beta_3 ESG_{it} + \beta_4 Q_{it-1} ESG_{it} + \beta_5 CF_{it-1} ESG_{it} + \beta_6 SLACK_{it-1} + \beta_7 Q_{it-1} ESG_{it} SLACK_{it-1} + \varepsilon_{it} \quad (1)$$

$$INV_{it} = \beta_0 + \beta_1 Q_{it-1} + \beta_2 EQFIN_{it-1} + \beta_3 DEBTFIN_{it-1} + \beta_4 ESG_{it} + \beta_5 Q_{it-1} ESG_{it} + \beta_6 EQFIN_{it-1} ESG_{it} + \beta_7 DEBTFIN_{it-1} ESG_{it} + \beta_8 SLACK_{it-1} + \beta_9 Q_{it-1} ESG_{it} SLACK_{it-1} + \varepsilon_{it} \quad (2)$$

Hypothesis 1 was seen from the negative impact of  $\beta_4$ . Hypothesis 2 was seen from the positive impact of  $\beta_7$ . Hypothesis 3 and 4 were seen from the impact of  $\beta_4$  and  $\beta_7$  on the family company.

## Data

The list of listed companies in Indonesia Stock Exchange and all financial data (for capital allocation efficiency, slack resources, and internal and external financing) were obtained through Thomson Reuters data stream. CSR performance (ESG) was obtained from ASSET4 Thomson Reuters. ESG database used publicly available information, including CSR and annual reports, company websites, proxy filings, NGO information, and Carbon Disclosure project. The ESG scores are computed using over 750 indicators. In particular, the environmental score includes metrics covering resource education, emission reduction, and product innovation; the social score includes employment quality, health and safety, training and development, diversity, human rights, and community and product responsibility; and governance includes board structure, compensation policy, board functions, shareholder rights, and vision and strategy ([Thomson Reuters, 2017](#)).

## Method

This research used an unbalanced panel fixed effect method with STATA 14. Panel data analysis is a statistical method to analyze two-dimensional (typically cross-sectional and longitudinal) data. The data are collected over time from the same individuals and then a regression is run over these two dimensions. Panel data analysis has nearly three independent approaches, which include independently pooled panels, random-effects model, and fixed-effects model. Independently pooled panels assumed there were no unique attributes of individuals within the measurement set and no universal effects across time. The random-effects model assumed there were unique, time constant attributes of individuals that were not correlated with the individual regressors. The fixed-effects model assumed there were unique attributes of individuals that did not vary across time. The fixed-effects model refers to a regression model in which the group means are fixed (non-random) as opposed to a random-effects model in which the group means are a random sample from a population ([Gujarati & Porter, 2009](#)). Generally, data can be grouped according to several observed factors. The group means could be modeled as fixed or random effects for each grouping. In a fixed-effects model, each group mean is a group-specific fixed quantity. In order to determine whether independently pooled model or random-effects model was more efficient, the Lagrange Multiplier (LM) test was used. In order to determine whether fixed-effects or random-effects model was more efficient, Hausman test should be used. From Hausman and LM test results, fixed-effect was the most suitable model used in this research (Prob > X2 = 0.0027).

This study used moderated regression analysis for slack resources role and sub-group analysis for the family firm role. The effect of slack resources is characterized statistically as an interaction quantitative variable, which affects the strength of the relationship between CSR performance and capital allocation efficiency. Subgroup analysis is a type of analysis by breaking down study samples into subsets of participants based on shared characteristics. This study broke down the samples into two categories, namely family firms and non-family firms to see the difference, like relationship among CSR performance, capital allocation efficiency, and slack resources.

## RESULTS AND DISCUSSION

After excluding companies that do not have an ESG score, a sample of 204 companies was selected for data collection. This study has used an unbalanced panel for using companies that had no ESG score every single year. The limited number of observations in this study was a weakness of the study; thus, readers need to be careful in interpreting the results of this study.

Descriptive statistics of the data are shown in Table 1 as:

**Table 1:** Mean and SD with minimum and maximum scores for observation

	OBS	Mean	Standard Deviation	Minimum	Maximum
INV (winsor)	204	0.095076	0.060509	0.015465	0.22448
Q (winsor)	204	3.122626	2.675278	1.022131	11.24461
CF (winsor)	204	0.174144	0.102908	0.039277	0.404091
INV	204	0.098576	0.075929	0.003549	0.680701
Q	204	3.284929	3.285447	0.636418	18.64041
CF	204	0.171811	0.122178	-0.55523	0.527931
FAM	204	0.465686	0.500048	0	1
EQFIN	204	0.021716	0.191897	-1.30612	1.595655
DEBTFIN	204	0.05517	0.180198	-0.47408	1.981173
ESG	168	0.473528	0.179209	0.105519	0.882348
SLACK	204	21.74664	1.105887	17.99122	24.15515

	OBS	Mean	Standard Deviation	Minimum	Maximum
Q*ESG (winsor)	168	1.530256	1.68205	0.258278	9.316105
CF*ESG (winsor)	168	0.08873	0.0691	0.012557	0.334787
Q*ESG*SLACK (winsor)	168	32.80767	33.92603	5.575337	188.7285
Q*ESG	168	1.670062	2.311046	0.258278	15.44349
CF*ESG	168	0.086793	0.080299	-0.33342	0.334787
EQFIN*ESG	168	0.005527	0.060976	-0.39158	0.483766
DEBTFIN*ESG	168	0.018187	0.04554	-0.14213	0.210529
Q*ESG*SLACK	168	35.59652	46.37296	5.575337	312.8588

INV: investment; Q: Tobin's Q (relation of Q and investment is capital allocation efficiency); FAM: family firms; CF: cash flow (the use of internal capital); EQFIN: equity financing; DEBTFIN: debt financing; EQFIN and DEBTFIN are the use of external capital; ESG: CSR activities; SLACK: slack resources; LEV: leverage; AGE: company age; Q\*ESG: CSR activities effect on capital allocation efficiency; CF\*ESG: CSR activities effect on internal capital usage; EQFIN\*ESG and DEBTFIN\*ESG: CSR activities effect on external capital usage; Q\*ESG\*SLACK: slack resources effect on the impact of CSR activities on capital allocation efficiency.

Due to outlier data, the investment data, cash flow, and growth opportunities were winsorized at 5%. Winsorizing data made data normally distributed and eliminated outliers and negative cash flow. Negative cash flows were due to negative net income and negative net income has no meaning in the company's dependence on internal funds.

**Table 2:** Family Company Data

	N	Percentage (%)
Family	131	64.22
Non-family	73	35.78
Total	204	100

After excluding data that has no ESG, the family company data (Table 2) represented 55 observations and non-family company data represented 113 observations.

**Table 3:** Pearson Correlation Table.

	inv	q	fam	cf	Eqfin	debtfin	esg	slack	Q*esg	Cf*esg	Eqfin*esg	Debtfin*esg	Q*ESG*slack
inv	1												
q	0.02	1											
fam	-0.07	-0.10	1										
cf	0.27*	0.81*	-0.26*	1									
eqfin	-0.04	-0.09	0.04	-0.11	1								
debtfin	0.02	-0.20*	0.03	-0.25*	0.15*	1							
esg	-0.00	0.07	-0.56*	0.21*	-0.01	-0.08	1						
slack	-0.09	-0.44*	-0.04	-0.27*	0.02	-0.07	0.22*	1					
Q*esg	0.05	0.86*	-0.22*	0.73*	-0.03	-0.25*	0.46*	-0.35*	1				
Cf*esg	0.23*	0.62*	-0.40*	0.82*	-0.04	-0.27*	0.66*	-0.14	0.84*	1			
Eqfin*esg	-0.09	-0.05	-0.06	-0.06	0.98*	0.13	-0.00	0.02	-0.03	-0.05	1		
Debtfin*esg	0.07	-0.33*	-0.03	-0.36*	0.11	0.91*	0.12	0.07	-0.19*	-0.18*	0.12	1	
Q*esg*slack	0.05	0.85*	-0.22*	0.73*	-0.03	-0.25*	0.48*	-0.30*	0.997*	0.85*	-0.03	0.198*	1

The correlation (Table 3) used 5% significance. This table showed that there was a relation between internal capital and investment and a relation between CSR performance, internal capital, and investment. Correlation table showed that companies depended on internal capital in investing (positive relation) and the performance of CSR made companies more dependent on internal capital (positive relation). Shareholders did not value the performance of CSR, so they did not reduce capital costs and increased its dependence on the company's internal capital. CSR investments used internal capital so that companies become more dependent on internal capital. This also indicates that CSR did not improve company performance (indicated by ESG, which is not associated with the efficiency of capital allocation) so that it was valued by shareholders. Multivariate associations for H<sub>1</sub> and H<sub>2</sub> are shown in Table 4.

The results showed that overall, the companies in this study allocated capital efficiently. In the above three models, it was seen that the CSR performance was positively associated with the company's investment. Companies with good social responsibility were confident to invest more. However, this reduced the efficiency of the company's capital allocation. Thus, H<sub>1</sub> is accepted. Slack resources could reduce the negative impact of social responsibility only when the company used external funds or internal and external funds to finance investment. The existence of slack was not able to reduce the negative impact of social responsibility on capital allocation efficiency in companies that depended on internal funds



because the company was not experiencing financial problems, hence it did not require slack resources. This is as per the hypothesis, that slack resources did not affect companies with no financial problems. The positive impact of slack resources on model 2 and model 1 and 2 indicates that H<sub>2</sub> was accepted.

**Table 4:** Multivariate Test Result for H<sub>1</sub> and H<sub>2</sub>

	Model 1	Model 2	Model 1 and 2
cons	0.165073	0.228372	0.161113
q	0.013549*	0.041414***	0.020217**
cf	0.433463***		0.509694***
eqfin		0.18616**	0.074637
debtfin		0.083409	0.192162*
esg	0.185934***	0.196824***	0.22241***
slack	-0.00999	-0.01264	-0.01122
Q*esg	-0.09212*	-0.12465**	-0.12132***
Cf*esg	-0.22372		-0.33554
Eqfin*esg		-0.44123**	-0.17795
Debtfin*esg		-0.10785	-0.26394
Q*esg*slack	0.003134	0.003372*	0.004061***
Prob > Chi <sup>2</sup>	0.0000	0.0182	0.0000
R square	0.1031	0.0069	0.1137

INV: investment; Q: Tobin's Q (relation of Q and investment is capital allocation efficiency); FAM: family firms; CF: cash flow (the use of internal capital); EQFIN: equity financing; DEBTFIN: debt financing; EQFIN and DEBTFIN are the use of external capital; ESG: CSR activities; SLACK: slack resources; LEV: leverage; AGE: company age; Q\*ESG: CSR activities effect on capital allocation efficiency; CF\*ESG: CSR activities effect on internal capital usage; EQFIN\*ESG and DEBTFIN\*ESG: CSR activities effect on external capital usage; Q\*ESG\*SLACK: slack resources effect on the impact of CSR activities on capital allocation efficiency; \*, \*\*, \*\*\* significant in 1%, 5%, 10%

In order to conduct H<sub>3</sub> and H<sub>4</sub> tests, this study divided the company into two subsamples, namely, family and non-family companies. Multivariate associations for H<sub>3</sub> and H<sub>4</sub> are shown in Table 5.

**Table 5:** Multivariate Test Result for H<sub>3</sub> and H<sub>4</sub>

	Family (n = 55)			Non-family (n = 113)		
	Model 1	Model 2	Model 1 and 2	Model 1	Model 2	Model 1 and 2
cons	0.7116	0.48	0.7362*	0.1542	0.1888	0.1868
q	0.0041	0.0385**	-0.008	0.008	0.0457***	0.0298*
cf	0.6445*		1.0764***	0.435**		0.3025
eqfin		0.6895	-0.183		0.1853**	0.0862
debtfin		0.1976	0.5655***		0.0514	0.1169**
esg	-0.0014	0.1553	0.0752	0.169**	0.1887***	0.1723**
slack	-0.0329	-0.024	-0.0361*	-0.009	-0.012	-0.011
Q*esg	-0.7996*	-0.460	-0.8144**	-0.063	-0.119*	-0.115*
Cf*esg	-1.0144		-1.6783	-0.186		0.0140
Eqfin*esg		-2.194	0.3973		-0.4162*	-0.177
Debtfin*esg		-0.555	-1.4647**		0.0128	-0.05
Q*esg*slack	0.0386	0.0193	0.0399**	0.0021	0.0029	0.0031
Prob > Chi <sup>2</sup>	0.0000	0.04	0.0000	0.0000	0.0212	0.0000
R square	0.1764	0.0609	0.3248	0.1493	0.034	0.0980

INV: investment; Q: Tobin's Q (relation of Q and investment is capital allocation efficiency); FAM: family firms; CF: cash flow (the use of internal capital); EQFIN: equity financing; DEBTFIN: debt financing; EQFIN and DEBTFIN are the use of external capital; ESG: CSR activities; SLACK: slack resources; LEV: leverage; AGE: company age; Q\*ESG: CSR activities effect on capital allocation efficiency; CF\*ESG: CSR activities effect on internal capital usage; EQFIN\*ESG and DEBTFIN\*ESG: CSR activities effect on external capital usage; Q\*ESG\*SLACK: slack resources effect on the impact of CSR activities on capital allocation efficiency; \*, \*\*, \*\*\* significant in 1%, 5%, 10%

In family and non-family companies, capital allocation efficiency could occur in model 2. This result implied that the use of internal funds only resulted in inefficient capital allocation. As a previous study has stated, family company had lower investment-cash flow sensitivity, indicating that family companies were not dependent on internal financing to get capital allocation efficiency (Pindado et al., 2011). If a family company too was dependent on internal funds to invest and did not see growth opportunities, good social responsibility performance resulted in inefficient capital allocation. It was at this point that CSR performance negatively affected capital allocation efficiency and slack resources reduced that impact. Because CSR used internal financing, family companies should use external financing to make other investments and get an efficient capital allocation. In that way, companies do not have to do trade-off between CSR and other investments and do not need slack resources. When companies use both, internal and external funds to invest, family firms prefer to use debt

rather than stock to invest. Family firms use debt as an investment fund because family firms do not want to sell new shares to keep family ownership off (Connelly, 2016).

In non-family companies, efficient capital allocation was derived from dependence on capital from stocks. The shareholders wanted the company to invest so that they get a return on their investment, otherwise, the debt holders did not want the company to invest to pay their debts. As per previous research, family firms were not faced with this problem and family firms aligned the interests of shareholders and debt holders (Anderson, Mansi, & Reeb, 2003). When non-family firms were efficient, CSR performance negatively affected capital allocation efficiency, but they did not use slack resources to minimize this negative relation. It was concluded that trade-off theory was applied by non-family firms. Non-family firms were not too much concerned about social responsibility, which was regarded as one of the company's investment. Family firms prioritized social responsibility and saved social responsibility funds so that social responsibility did not reduce their capital allocation efficiency. Non-family firms did not prioritize social responsibility, so to get a good CSR performance; they had to sacrifice some of their capital allocation efficiency.

Good CSR performance increased the company's confidence to invest and reduced capital allocation efficiency. The test results showed that slack resources did not reduce the negative impact of social responsibility and capital allocation efficiency in non-family companies although there was no difference in slack resources of family and non-family companies (t-test Pr = 0.5498). This showed that non-family companies were less effective in utilizing slack resources to invest.

In an inefficient family company's capital allocation, CSR negatively affected capital allocation efficiency and slack reduced the impact, while efficient capital allocation was not influenced by CSR. Conversely, in an efficient family company's capital allocation, CSR negatively associated capital allocation efficiency while inefficient capital allocation is influenced by CSR and slack. This suggested that the impact of CSR on capital allocation efficiency depends on the level of capital allocation efficiency and family ownership. Thus, H<sub>3</sub> and H<sub>4</sub> are partially supported.

### Additional Test

Family ownership and family leadership had different effects. Families who only lead without having large shares in the family company did not have the same interests as investors, because companies were not careful in investing. The existence of a gap between voting rights and control rights reduced the impact of alignment. Consequently, the impact of the family had an entrenchment effect, i.e., the family invests with the purpose of self-interest. To this end, this study attempted to separate the impact of ownership and family leadership. Multivariate associations with family and non-family Board of Directors (BOD) are shown in Table 6.

**Table 6:** Multivariate test with separating family BOD and non-family BOD

	Family BOD (n = 79)			Non-family BOD (n = 89)		
	Model 1	Model 2	Model 1 and 2	Model 1	Model 2	Model 1 and 2
Cons	0.2971	0.4030	0.3779	0.1915	0.182	0.1985
q	0.0307***	0.0449***	0.0215**	0.0103	0.0272**	0.0219
cf	0.3260**		0.5821***	0.0101		-0.074
eqfin		0.0211	-0.1169		0.2189**	0.0381
debtfin		0.1454	0.2725**		-0.2318	0.0077
esg	0.2433***	0.2389**	0.2748**	0.0339	0.0804	0.0225
slack	-0.0176	-0.0259**	-0.0222*	-0.008	-0.008	-0.008
Q*esg	-0.2158	-0.271**	-0.2284*	-0.078*	-0.0204	-0.08*
Cf*esg	-0.3832*		-0.7149**	0.9815*		1.1054*
Eqfin*esg		-0.0871	0.2324		-0.5088**	-0.0541
Debtfin*esg		-0.2394	-0.4913		0.4383	0.0625
Q*esg*slack	0.0079	0.0096**	0.009	0.002	0.0003	0.0019
Prob > Chi <sup>2</sup>	0.0000	0.04	0.0000	0.0056	0.022	0.0000
R square	0.0656	0.0945	0.0717	0.3347	0.01	0.2139

INV: investment; Q: Tobin's Q (relation of Q and investment is capital allocation efficiency); FAM: family firms; CF: cash flow (the use of internal capital); EQFIN: equity financing; DEBTFIN: debt financing; EQFIN and DEBTFIN are the use of external capital; ESG: CSR activities; SLACK: slack resources; LEV: leverage; AGE: company age; Q\*ESG: CSR activities effect on capital allocation efficiency; CF\*ESG: CSR activities effect on internal capital usage; EQFIN\*ESG and DEBTFIN\*ESG: CSR activities effect on external capital usage; Q\*ESG\*SLACK: slack resources effect on the impact of CSR activities on capital allocation efficiency; \*, \*\*, \*\*\* significant in 1%, 5%, 10%

Companies with family directors tended to be efficient in allocating capital. Although CSR negatively affected the company's capital allocation efficiency in companies with family directors, it also applied to companies without family

directors. Companies with family directors, who had performed good social responsibility, tended to invest even more in the short run though it decreased capital allocation efficiency. This indicated that the socio-emotional wealth of a family company applied to the directors of the company and not to the ownership or commissioner of the company. CSR in companies with family directors played a role in reducing dependence on internal capital in investing, while in companies with no family as directors, social responsibility increased dependency on internal capital in investing. This shows that CSR was used more efficiently by companies with family directors.

Multivariate association with family and non-family Board of Commissioner (BOC) are shown in Table 7.

**Table 7:** Multivariate test with separating family BOC and non-family BOC

	Family BOC (n = 69)			Non-family BOC (n = 99)		
	Model 1	Model 2	Model 1 and 2	Model 1	Model 2	Model 1 and 2
Cons	0.2906	0.4754	0.2625	0.1414	0.182	0.1469
Q	0.0131	0.0242**	0.0039	0.0145	0.0461***	0.0323**
Cf	0.6377		0.9188**	0.2904**		0.0937
Eqfin		-0.0806	-0.1334		0.1579**	0.0215
Debtfin		0.3156	0.4201*		-0.1489**	-0.0755
Esg	0.2515**	0.167	0.281*	0.1249*	0.1418*	0.0771
Slack	-0.018	-0.023	-0.017	-0.0078	-0.0092	-0.0081
Q*esg	-0.3742*	-0.483**	-0.4332**	-0.088	-0.0557	-0.0807
Cf*esg	-0.7752		-1.127*	0.402		0.7596*
Eqfin*esg		-0.223	-0.111		-0.2662	0.0633
Debtfin*esg		-0.592	-0.858		0.2758	0.2645
Q*esg*slack	0.0167*	0.0208**	0.0198**	0.002	0.0002	0.001
Prob > Chi <sup>2</sup>	0.0005	0.0000	0.0000	0.0001	0.0001	0.0000
R square	0.015	0.0328	0.328	0.2970	0.0121	0.1819

INV: investment; Q: Tobin's Q (relation of Q and investment is capital allocation efficiency); FAM: family firms; CF: cash flow (the use of internal capital); EQFIN: equity financing; DEBTFIN: debt financing; EQFIN and DEBTFIN are the use of external capital; ESG: CSR activities; SLACK: slack resources; LEV: leverage; AGE: company age; Q\*ESG: CSR activities effect on capital allocation efficiency; CF\*ESG: CSR activities effect on internal capital usage; EQFIN\*ESG and DEBTFIN\*ESG: CSR activities effect on external capital usage; Q\*ESG\*SLACK: slack resources effect on the impact of CSR activities on capital allocation efficiency; \*, \*\*, \*\*\* significant in 1%, 5%, 10%

The existence of the family BOC had entrenchment effect. There was a negative relationship between CSR and the efficiency of capital allocation and slack reduced the impact while companies that did not have family BOC had no relationship with CSR and slack resources.

**Table 8:** Multivariate test with separating family ownership and non-family ownership

	Family ownership (n = 60)			Non-family ownership (n = 108)		
	Model 1	Model 2	Model 1 and 2	Model 1	Model 2	Model 1 and 2
Cons	0.3023	0.376	0.5017	0.4240*	0.5882**	0.0241**
Q	0.0117	0.0398*	9.09E-05	0.0051	0.0487***	0.0241
Cf	0.5890*		0.9431***	0.5285**		0.4510*
Eqfin		0.6662**	0.2655		0.1583**	0.047
Debtfin		0.2235	0.4715***		0.055	0.1341
Esg	0.1717	0.1930	0.1583	0.2309***	0.2309***	0.2323***
Slack	-0.017	-0.02	-0.026*	-0.023	-0.03**	-0.027**
Q*esg	-0.1453	-0.3234*	-0.414***	-0.039	-0.167***	-0.105*
Cf*esg	-0.9715		-1.415	-0.345		-0.215
Eqfin*esg		-2.1996**	-1.268		-0.318	-0.072
Debtfin*esg		-0.6458	-1.158**		0.0468	-0.029
Q*esg*slack	0.0069	0.01268	0.0202**	0.001	0.0049*	0.0030
Prob > Chi <sup>2</sup>	0.0000	0.0000	0.0000	0.0003	0.0008	0.0001
R square	0.0268	0.0370	0.2685	0.1702	0.0641	0.283

INV: investment; Q: Tobin's Q (relation of Q and investment is capital allocation efficiency); FAM: family firms; CF: cash flow (the use of internal capital); EQFIN: equity financing; DEBTFIN: debt financing; EQFIN and DEBTFIN are the use of external capital; ESG: corporate social responsibility activities; SLACK: slack resources; LEV: leverage; AGE: company age; Q\*ESG: CSR activities effect on capital allocation efficiency; CF\*ESG: CSR activities effect on internal capital usage; EQFIN\*ESG and DEBTFIN\*ESG: CSR activities effect on external capital usage; Q\*ESG\*SLACK: slack resources effect on the impact of CSR activities on capital allocation efficiency; \*, \*\*, \*\*\* significant in 1%, 5%, 10%

Multivariate associations with family and non-family ownerships are shown in Table 8. The above test results showed that there was no difference between firms with family ownership and family ownership in capital allocation efficiency and the impact of CSR on capital allocation efficiency. What distinguishes them was that companies, which did not have family ownership, used slack resources to reduce the impact of CSR when there was efficient capital allocation. Firms with family ownership used slack resources to reduce the impact of CSR on capital allocation efficiency in the absence of efficiency. CSR increased investment in companies without family ownership. This was very different from the result of family BOD.

All results of this study indicated that the different capital allocation efficiency between family and non-family enterprises was due to family BOD. Family BOD generated more efficient capital allocation. However, BOD families were likely to be optimistic about the performance of CSR, so they tend to make a big investment. It was controlled by family ownership and BOC. As a result, an efficient family company's capital allocation was not affected by good social responsibility performance and it did not use slack resources.

### Ownership 10%

The study would also like to report the results, when family firms had fewer family holdings. Previous research used 10% as the boundary of family ownership as a control (Chen & Hsu, 2009; Yoshikawa & Rasheed, 2010). This study wanted to test whether less family ownership could reduce the impact of BOD optimism. Multivariate association with 10 % control limit of family and non-family ownership are shown in Table 9.

**Table 9:** Multivariate test of family ownership and non-family ownership (10%)

	Family ownership (n = 70)			Non-family ownership (n = 98)		
	Model 1	Model 2	Model 1 and 2	Model 1	Model 2	Model 1 and 2
Cons	0.4681	0.4030	0.6111	0.1347	0.1888	0.1429
Q	0.0061	0.0377**	-0.0109	0.0022	0.0356**	0.0193
Cf	0.6072**		1.1606***	0.5765***		0.3409
Eqfin		0.418	-0.4415		0.2095***	0.1074
Debtfin		0.24	0.6248***		-0.2792**	-0.1709
Esg	0.0345	0.116	0.10997	0.19999**	0.1458**	0.1467*
Slack	-0.0219	-0.0199	-0.0305*	-0.0090	-0.010	-0.009
Q*esg	-0.6572**	-0.4808*	-0.7781**	-0.0514	-0.040	-0.0432
Cf*esg	-1.0643		-2.0265**	-0.4032		-0.0677
Eqfin*esg		-1.2973	1.2507		-0.4626**	-0.2219
Debtfin*esg		-0.631	-1.6116*		0.5203*	0.3887
Q*esg*slack	0.0315*	0.0203*	0.0383**	0.0019	0.0001	0.0007
Prob > Chi2	0.0000	0.04	0.0000	0.0000	0.0156	0.0000
R square	0.1821	0.0945	0.3793	0.1545	0.01	0.0632

INV: investment; Q: Tobin's Q (relation of Q and investment is capital allocation efficiency); FAM: family firms; CF: cash flow (the use of internal capital); EQFIN: equity financing; DEBTFIN: debt financing; EQFIN and DEBTFIN are the use of external capital; ESG: CSR activities; SLACK: slack resources; LEV: leverage; AGE: company age; Q\*ESG: CSR activities effect on capital allocation efficiency; CF\*ESG: CSR activities effect on internal capital usage; EQFIN\*ESG and DEBTFIN\*ESG: CSR activities effect on external capital usage; Q\*ESG\*SLACK: slack resources effect on the impact of CSR activities on capital allocation efficiency; \*, \*\*, \*\*\* significant in 1%, 5%, 10%

The results of the study indicated that although 10% or more family ownership could eliminate the impact of social responsibility performance on investment, the performance of CSR was negatively associated with the efficiency of capital allocation under all conditions. Additional test results indicated that non-family firms have a higher growth opportunity (P = 0.0811) but had no differences with family firms regarding investment (P = 0.1776). This showed the tendency of excessive investment in family firms. The results of this study indicated that family firms in Indonesia tended to have an entrenchment impact, i.e. excessive investment due to information asymmetry between minority shareholders and families (Connelly, 2016). The results of Table 9 were similar to those of the BOC (Table 7). This meant that without large family ownership, the BOC controlled the family BOD and resulted in entrenchment impact.

When a family company was fully dependent on internal and external capital, the efficiency of capital allocation did not occur because the company was investing not for the opportunity to grow, but because the firm is not dependent on capital to invest. Social responsibility reduced capital allocation efficiency, both when capital allocation was efficient and inefficient and slack resources reduced the impact of CSR performance. It was implied that family companies in Indonesia with good social responsibility tended to invest heavily in social responsibility. Family companies that had financial problems used slack resources to invest. It could be concluded from the above statement that 10% ownership, as a control

limit, could not reduce the impact of optimism on family BOD in Indonesia. This result supported the use of a 20% limit applied by PSAK 15.

## CONCLUSION, IMPLICATION AND LIMITATION

This study examines the impact of CSR performance on capital allocation efficiency in family and non-family company with slack resources as moderating variables. The results show that there are differences in the impact of CSR performance between family and non-family companies. When family firms have efficient capital allocation, the performance of CSR does not affect the efficiency of capital allocation and slack resources do not affect moderating this relationship. Conversely, when family firms do not have efficient capital allocation, CSR negatively affects the efficiency of capital allocation and slack resources mitigate the negative impact. In non-family firms, when family firms have efficient capital allocation, CSR negatively affects the efficiency of capital allocation. This impact is seen in the 20% family ownership limit as per PSAK 15. If the family ownership limit is changed to 10%, social responsibility still has a negative impact on capital allocation efficiency in the family companies. Further analysis indicates that the impact of BOD, BOC, and family ownership separately demonstrates the negative impact of social responsibility activities on capital allocation efficiency in family firms. These results suggest that family companies should combine family ownership, family as BOC and family as BOD to eliminate the negative impact of CSR on efficient capital allocation. Slack resources does not moderate the negative impact of social responsibility on capital allocation efficiency to non-family firms that indicate non-family companies do not use slack resources to invest.

The implication of this research is that there are differences between family and non-family companies on the impacts of CSR and the efficiency of the capital allocation of family ownership with a 20% limit as per PSAK 15. This indicates that PSAK 15 is appropriate in giving a 20% limit as control. In addition, the role of the family as BOD plays an important role in improving the efficiency of capital allocation, thus, family companies must have family as BOD.

This study is limited in the number of ESG data in Indonesia, so these results do not fully represent the impact of CSR performance on capital allocation efficiency. Further research could combine ESG data from other countries to see the overall impact of social responsibility performance on capital allocation efficiency with slack as a moderating variable in family and non-family companies. In addition, this study did not see statistical differences between family and non-family companies in the influence of social responsibility on capital allocation efficiency and slack as a moderator. Subsequent research can examine these differences statistically and more thoroughly.

Nevertheless, this study provides an overview of how the performance of corporate social responsibility affects the efficiency of capital allocation and how slack is vital in this relationship with family and non-family enterprises in Indonesia. This sparked further research for development in this current study in many ways.

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## REFERENCES

1. Altaf, N., & Shah, F. (2017). Slack heterogeneity and firm performance: Investigating the relationship in Indian context. *Research in International Business and Finance*, 42(November 2016), 390–403. <https://doi.org/10.1016/j.ribaf.2017.07.059>
2. Ameer, R., & Othman, R. (2012). Sustainability practices and corporate financial performance: A study based on the top global corporations. *Journal of Business Ethics*, 108(1), 61–79. <https://doi.org/10.1007/s10551-011-1063-y>
3. Anderson, R. C., Mansi, S. A., & Reeb, D. M. (2003). Founding family ownership and the agency cost of debt. *Journal of Financial Economics*, 68(2), 263–285. [https://doi.org/10.1016/S0304-405X\(03\)00067-9](https://doi.org/10.1016/S0304-405X(03)00067-9)
4. Anggraini, D. Y., & Djakman, C. D. (2017). Slack resources , feminisme dewan, dan kualitas pengungkapan tanggung jawab sosial perusahaan. *Jurnal Akuntansi Dan Keuangan Indonesia*, 14(1), 94–118. <https://doi.org/10.21002/jaki.2017.06>
5. Arora, P., & Dharwadkar, R. (2011). Corporate governance and corporate social responsibility (CSR): The moderating roles of attainment discrepancy and organization slack. *Corporate Governance*, 19(2), 136–152. <https://doi.org/10.1111/j.1467-8683.2010.00843.x>
6. Arrfelt, M., Wiseman, R. M., & Hult, G. T. M. (2013). Looking backward instead of forward: Aspiration-driven influences on the efficiency of the capital allocation process. *Academy of Management Journal*, 56(4), 1081–1103. <https://doi.org/10.5465/amj.2010.0879>
7. Aupperle, K., Carroll, A., & Hatfield, J. (1985). An Empirical Examination of the Relationship Between Corporate Social Responsibility and Profitability. *Academy of Management Review (Pre-1986)*, 28(2), 446–463. <https://doi.org/10.2307/256210>



8. Baker, M., Stein, J. C., & Wurgler, J. (2003). When Does the Market Matter? Stock Prices and the Investment of Equity-Dependent Firms. *The Quarterly Journal of Economics*, 118(3), 969–1005. <https://doi.org/10.1162/00335530360698478>
9. Barnett, M. L., & Salomon, R. M. (2006). Beyond dichotomy: The curvilinear relationship between social responsibility and financial performance. *Strategic Management Journal*, 27(11), 1101–1122. <https://doi.org/10.1002/smj.557>
10. Basco, R. (2017). “Where do you want to take your family firm?” A theoretical and empirical exploratory study of family business goals. *BRQ Business Research Quarterly*, 20(1), 28–44. <https://doi.org/10.1016/j.brq.2016.07.001>
11. Benlemlih, M., & Bitar, M. (2016). Corporate Social Responsibility and Investment Efficiency. *Journal of Business Ethics*, (January 2016), 1–25. <https://doi.org/10.1007/s10551-016-3020-2>
12. Bergamaschi, M., & Randerson, K. (2016). The futures of family businesses and the development of corporate social responsibility. *Futures*, 75, 54–65. <https://doi.org/10.1016/j.futures.2015.10.006>
13. Berrone, P., Cruz, C., & Gomez-Mejia, L. R. (2012a). Socioemotional Wealth in Family Firms: Theoretical Dimensions, Assessment Approaches, and Agenda for Future Research. *Family Business Review*, 25(3), 258–279. <https://doi.org/10.1177/0894486511435355>
14. Berrone, P., Cruz, C., & Gomez-Mejia, L. R. (2012b). Socioemotional Wealth in Family Firms. *Family Business Review*, 25(3), 258–279. <https://doi.org/10.1177/0894486511435355>
15. Berrone, P., Cruz, C., Gomez-mejia, L. R., & Larrazza-kintana, M. (2010). Socioemotional Wealth and Corporate Responses to Institutional Pressures : Do Family- Controlled Firms Pollute Less ? Linked references are available on JSTOR for this article : and Corporate Do Family-Controlled Firms Pollute Less ? Pascual Berrone Crist. *Administrative Science Quarterly*, 55(1), 82–113. <https://doi.org/10.2307/27856089>
16. Bhandari, A., & Javakhadze, D. (2017). Corporate social responsibility and capital allocation efficiency. *Journal of Corporate Finance*, 43, 354–377. <https://doi.org/10.1016/j.jcorpfin.2017.01.012>
17. Bourgeois, L., & Singh, J. (1983). Organizational slack and political behavior among top management teams. *Academy of Management Proceedings*, 43–47. <https://doi.org/10.5465/ambpp.1983.4976315>
18. Bradley, S. W., Shepherd, D. A., & Wiklund, J. (2011). The importance of slack for new organizations facing “tough” environments. *Journal of Management Studies*, 48(5), 1071–1097. <https://doi.org/10.1111/j.1467-6486.2009.00906.x>
19. Brine, M., Brown, R., & Hackett, G. (2007). Corporate Social Responsibility and Financial Performance in the Australian Context. *Autumn*, 47–58.
20. Cabeza-García, L., Sacristán-Navarro, M., & Gómez-Ansón, S. (2017). Family involvement and corporate social responsibility disclosure. *Journal of Family Business Strategy*, 8(2), 109–122. <https://doi.org/10.1016/j.jfbs.2017.04.002>
21. Campello, M., Graham, J. R., & Harvey, C. R. (2010). The real effects of financial constraints: Evidence from a financial crisis. *Journal of Financial Economics*, 97(3), 470–487. <https://doi.org/10.1016/j.jfineco.2010.02.009>
22. Charlo, M. J., Moya, I., & Muñoz, A. M. (2017). Financial performance of socially responsible firms: The short- and long-term impact. *Sustainability (Switzerland)*, 9(9), 1–15. <https://doi.org/10.3390/su9091622>
23. Chen & Hsu, W.-T. (2009). Family Ownership, Board Independence, and R&D Investment. *Family Business Review*, 22(4), 347–362. <https://doi.org/10.1177/0894486509341062>
24. Chua, J. H., Chrisman, J. J., & Sharma, P. (1999). Defining the Family Business by Behavior. *Entrepreneurship: Theory & Practice*, 23, 19–39. <https://doi.org/10.1111/j.1540-6520.2006.00131.x>
25. Claessens, S., Djankov, S., & Lang, L. H. . (2000). The separation of ownership and control in East Asian Corporations. *Journal of Financial Economics* (Vol. 58). [https://doi.org/10.1016/S0304-405X\(00\)00067-2](https://doi.org/10.1016/S0304-405X(00)00067-2)
26. Connelly, J. T. (2016). Investment policy at family firms: Evidence from Thailand. *Journal of Economics and Business*, 83, 91–122. <https://doi.org/10.1016/j.jeconbus.2015.08.003>
27. Daniel, F., Lohrke, F. T., Fornaciari, C. J., & Turner, R. A. (2004). Slack resources and firm performance: A meta-analysis. *Journal of Business Research*, 57(6), 565–574. [https://doi.org/10.1016/S0148-2963\(02\)00439-3](https://doi.org/10.1016/S0148-2963(02)00439-3)
28. Darmawati, D. (2015). Pengaruh Tanggung Jawab Sosial Perusahaan Terhadap Kinerja Dan Risiko Perbankan Di Indonesia. *Finance and Banking Journal*, 17(1). <https://doi.org/10.35697/jrbi.v1i2.44>
29. Dhaliwal, D. S., Li, O. Z., & Tsang, A. (2011). 18::Voluntary Nonfinancial Disclosure and the Cost of Equity Capital: The Initiation of Corporate Social Responsibility Reporting. *The Accounting Review*. <https://doi.org/10.2139/ssrn.1343453>
30. Elkington, J. (1998). The triple bottom line of 21 st century business Cannibals with forks. *Environmental Quality Management*, 8(April), 424. <https://doi.org/10.1002/tqem.3310080106>
31. Faccio, M., Marchica, M. T., & Mura, R. (2016). CEO gender, corporate risk-taking, and the efficiency of capital allocation. *Journal of Corporate Finance*, 39, 193–209. <https://doi.org/10.1016/j.jcorpfin.2016.02.008>
32. Finkelstein, S., & Hambrick, D. C. (1990). Top-Management-Team Tenure and Organizational Outcomes : The Moderating Role of Managerial Discretion. *Administrative Science Quarterly*, 35(3), 484–503. <https://doi.org/10.2307/2393314>

33. Flammer, C. (2015). Does Corporate Social Responsibility Lead to Superior Financial Performance? A Regression Discontinuity Approach. *Management Science*, (Articles in Advance), 1–20. <https://doi.org/10.1287/mnsc.2014.2038>
34. George, G. (2005). Slack Resources and the Performance of Privately Held Firms. *The Academy of Management Journal*, 48(4), 661–676. <https://doi.org/10.5465/amj.2005.17843944>
35. Gomez-Mejia, L. R., Cruz, C., Berrone, P., & de Castro, J. (2011). The Bind that ties: Socioemotional wealth preservation in family firms. *Academy of Management Annals*, 5(1), 653–707. <https://doi.org/10.1080/19416520.2011.593320>
36. Gómez-Mejía, L. R., Haynes, K. T., Núñez-Nickel, M., Jacobson, K. J. L., & Moyano-Fuentes, J. (2007). Socioemotional Wealth and Business Risks in Family-controlled Firms: Evidence from Spanish Olive Oil Mills. *Administrative Science Quarterly*, 52(1), 106–137. <https://doi.org/10.2189/asqu.52.1.106>
37. Gujarati, D. N., & Porter, D. C. (2009). *Basic Econometrics* (5th ed.). McGraw-Hill.
38. Huang, Y. F., & Chen, C. J. (2010). The impact of technological diversity and organizational slack on innovation. *Technovation*, 30(7–8), 420–428. <https://doi.org/10.1016/j.technovation.2010.01.004>
39. Husain, S., Hazoor, T., & Sabir, M. (2014). Impact of Family Ownership on Market Investment Decision : A Comparative Analysis of Family and Non-Family Companies Listed at Karachi Stock Exchange (Pakistan), 3(12), 673–683.
40. ISO. (2010). *ISO 26000 : Guidance on Social Responsibility*.
41. Iturriaga López, F. J., & Crisóstomo, V. L. (2010). Do Leverage, Dividend Payout, and Ownership Concentration Influence Firms' Value Creation? An Analysis of Brazilian Firms. *Emerging Markets Finance and Trade*, 46(3), 80–94. <https://doi.org/10.2753/ree1540-496x460306>
42. Jalilvand, A., & Kim, S. M. (2013). Matching slack resources and investment strategies to achieve long-term performance: New perspectives on corporate adaptability. *Journal of Economic Asymmetries*, 10(1), 38–52. <https://doi.org/10.1016/j.jeca.2013.10.001>
43. Jensen, M. (1986). Agency Costs of Free Cash Flow, Corporate Finance, and Takeovers. *American Economic Review*, 76(2), 323–329.
44. Kalm, M., & Gomez-Mejia, L. R. (2016). Socioemotional wealth preservation in family firms. *Revista de Administração*, 51(4), 409–411. <https://doi.org/10.1016/j.rausp.2016.08.002>
45. Kim, J. W. (2010). Assessing the long-term financial performance of ethical companies. *Journal of Targeting, Measurement and Analysis for Marketing*, 18(3–4), 199–208. <https://doi.org/10.1057/jt.2010.8>
46. Kuzey, C., & Uyar, A. (2017). Determinants of sustainability reporting and its impact on firm value: Evidence from the emerging market of Turkey. *Journal of Cleaner Production*, 143, 27–39. <https://doi.org/10.1016/j.jclepro.2016.12.153>
47. Latham, S. F. (2008). The Performance Implications of Financial Slack during Economic Recession and Recovery: Observations from the Software Industry (2001-2003). *Journal of Managerial Issues*, 1, 30–50. Retrieved from <http://remote-lib.ui.ac.id:2059/stable/pdf/40604593.pdf>
48. Lee, S. H. (2010). An Empirical Analysis of Organizational Slack and Firm Performance in British Firms. *POSRI Business Review*, 10(2), 177–202.
49. Liu, M., Shi, Y., Wilson, C., & Wu, Z. (2017). Does family involvement explain why corporate social responsibility affects earnings management? *Journal of Business Research*, 75, 8–16. <https://doi.org/10.1016/j.jbusres.2017.02.001>
50. Lo, S. F., & Sheu, H. J. (2007). Is Corporate Sustainability a Value- Increasing Strategy for Business? *Corporate Governance: An International Review*, 15(2), 345–359. <https://doi.org/10.1111/j.1467-8683.2007.00565.x>
51. Love, E. G., & Nohria, N. (2005). Reducing slack: The performance consequences of downsizing by large industrial firms, 1977-93. *Strategic Management Journal*, 26(12), 1087–1108. <https://doi.org/10.1002/smj.487>
52. Mardiandari, P., & Rustiyaningsih, S. (2013). Tanggung Jawab Sosial dan Kinerja Keuangan pada Perusahaan Manufaktur Go Publik di Bursa Efek Indonesia. *Jurnal Riset Manajemen Dan Akuntansi*, 1(1), 70–80.
53. McWilliams, A., & Siegel, D. (2000). Corporate Social Responsibility and Financial Performance : Correlation or Misspecification? Author(s): Abigail McWilliams and Donald Siegel Published by: Wiley Stable URL : <http://www.jstor.org/stable/3094143> Accessed : 03-05-2016 07 : 02 UTC CORPOR. *Strategic Management Journal*, 21(5), 603–609. [https://doi.org/10.1002/\(SICI\)1097-0266\(200005\)21:5<603::AID-SMJ101>3.3.CO;2-V](https://doi.org/10.1002/(SICI)1097-0266(200005)21:5<603::AID-SMJ101>3.3.CO;2-V)
54. Micelotta, E. R., & Raynard, M. (2011). Concealing or revealing the family?: Corporate brand identity strategies in family firms. *Family Business Review*, 24(3), 197–216. <https://doi.org/10.1177/0894486511407321>
55. Mitchell, R. K., Agle, B. R., & Wood, D. J. (1997). Toward a Theory of Stakeholder Identification and Salience: Defining the Principle of Who and What Really Counts. *Academy of Management Review*, 22(4), 853–886. <https://doi.org/10.5465/AMR.1997.9711022105>
56. Munro, L. (1999). A Principal-Agent Analysis of the Family : Implications for the Welfare State, 1–24.
57. MVO Nederland. (2016). *Country scan CSR in Indonesia*.
58. Nekhili, M., Nagati, H., Chtioui, T., & Rebolledo, C. (2017). Corporate social responsibility disclosure and market value: Family versus nonfamily firms. *Journal of Business Research*, 77(April), 41–52. <https://doi.org/10.1016/j.jbusres.2017.04.001>

59. Nishitani, K., Jannah, N., Kaneko, S., & Hardinsyah. (2017). Does corporate environmental performance enhance financial performance? An empirical study of Indonesian firms. *Environmental Development*, 23(December 2016), 10–21. <https://doi.org/10.1016/j.envdev.2017.06.003>
60. Nollet, J., Filis, G., & Mitrokostas, E. (2016). Corporate social responsibility and financial performance: A non-linear and disaggregated approach. *Economic Modelling*, 52, 400–407. <https://doi.org/10.1016/j.econmod.2015.09.019>
61. Pindado, J., Requejo, I., & de la Torre, C. (2011). Family control and investment-cash flow sensitivity: Empirical evidence from the Euro zone. *Journal of Corporate Finance*, 17(5), 1389–1409. <https://doi.org/10.1016/j.jcorpfin.2011.07.003>
62. Preston, L. E., & Bannon, D. P. O. (1997). The corporate social-financial performance relationship Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.
63. Price Waterhouse Coopers Indonesia. (2014). *Survey Bisnis Keluarga 2014, Indonesia*. Retrieved from <http://www.pwc.com/id/en/publications/assets/indonesia-report-family-business-survey-2014.pdf>
64. Rhou, Y., Singal, M., & Koh, Y. (2016). CSR and financial performance: The role of CSR awareness in the restaurant industry. *International Journal of Hospitality Management*, 57, 30–39. <https://doi.org/10.1016/j.ijhm.2016.05.007>
65. Saifullah. (2013). Paradigma Pembangunan Lingkungan Hidup di Indonesia – Saifullah’s Blog. Retrieved September 28, 2017, from <http://saifullah.lecturer.uin-malang.ac.id/2013/11/20/paradigma-pembangunan-lingkungan-hidup-di-indonesia/>
66. Samet, M., & Jarboui, A. (2017). How does corporate social responsibility contribute to investment efficiency? *Journal of Multinational Financial Management*, 40, 33–46. <https://doi.org/10.1016/j.mulfin.2017.05.007>
67. Sharfman, M. P., Wolf, G., Chase, R. B., & Tansik, D. A. (1988). Antecedents of Organizational Slack. *The Academy of Management Review*, 13(4), 601–614. Retrieved from <http://www.jstor.org/stable/258378>. <https://doi.org/10.5465/amr.1988.4307484>
68. Singh, Jitendra, V. (1986). Performance, Slack, and Risk Taking in Organizational Decision Making. *Academy of Management Journal*, 29(3), 562–585. <https://doi.org/10.2307/256224>
69. Soetanto, D., & Jack, S. L. (2016). Slack resources, exploratory and exploitative innovation and the performance of small technology-based firms at incubators. *Journal of Technology Transfer*, 1–19. <https://doi.org/10.1007/s10961-016-9533-0>
70. Surroca, J., Tribó, J. A., & Waddock, S. (2010). Corporate responsibility and financial performance: The role of intangible resources. *Strategic Management Journal*, 31(5), 463–490. <https://doi.org/10.1002/smj.820>
71. Tan, J., & Peng, M. W. (2003). Organizational Slack and Firm Performance during Economic Transitions: Two Studies from an Emerging Economy. *Source: Strategic Management Journal*, 24(13), 1249–1263. Retrieved from <http://www.jstor.org/stable/20060619>. <https://doi.org/10.1002/smj.351>
72. Thomson Reuters. (2017). *Thomson Reuters ESG Scores*.
73. Vallejo, M. C. (2011). A model to study the organizational culture of the family firm. *Small Business Economics*, 36(1), 47–64. <https://doi.org/10.1007/s11187-009-9175-9>
74. Voss, G. B., Sirdeshmukh, D., & Giraud Voss, Z. (2008). The Effects of Slack Resources and Environmental Threat on Product Exploration and Exploitation. *The Academy of Management Journal*, 51(1), 147–164. Retrieved from <http://www.jstor.org/stable/20159499> <http://about.jstor.org/terms>. <https://doi.org/10.5465/amj.2008.30767373>
75. Voss, G. B., & Voss, Z. G. (2013). Strategic Ambidexterity in Small and Medium-Sized Enterprises: Implementing Exploration and Exploitation in Product and Market Domains. *Organization Science*, 24(5), 1459–1477. <https://doi.org/10.1287/orsc.1120.0790>
76. Wang, H., Lu, W., Ye, M., Chau, K. W., & Zhang, X. (2016). The curvilinear relationship between corporate social performance and corporate financial performance: Evidence from the international construction industry. *Journal of Cleaner Production*, 137, 1313–1322. <https://doi.org/10.1016/j.jclepro.2016.07.184>
77. Wefald, A. J., Katz, J. P., Downey, R. G., & Rust, K. G. (2010). Organizational Slack, Firm Performance, and the Role of Industry. *Journal of Managerial Issues*, 22(1), 70–87. Retrieved from <http://www.jstor.org/stable/25822516>
78. Wiersma, E. (2017). How and when do firms translate slack into better performance? *British Accounting Review*, 49(5), 445–459. <https://doi.org/10.1016/j.bar.2017.05.007>
79. Xiang, D., Chen, J., Tripe, D., & Zhang, N. (2018). Family firms, sustainable innovation and financing cost: Evidence from Chinese hi-tech small and medium-sized enterprises. *Technological Forecasting and Social Change*, (November 2017). <https://doi.org/10.1016/j.techfore.2018.02.021>
80. Xu, E., Yang, H., Quan, J. M., & Lu, Y. (2015). Organizational slack and corporate social performance: Empirical evidence from China’s public firms. *Asia Pacific Journal of Management*, 32(1), 181–198. <https://doi.org/10.1007/s10490-014-9401-0>
81. Yoshikawa, T., & Rasheed, A. A. (2010). Family Control and Ownership Monitoring in Family-Controlled Firms in Japan. *Journal of Management Studies*, 47(2), 274–295. <https://doi.org/10.1111/j.1467-6486.2009.00891.x>



82. Yun Shi, L., Wen Ting, L., & Kuei Yang, C. (2008). How do Organizational Slack and Family Ownership cum Management Affect a Firm's International Involvement? In *Academy of International Business Best Paper Proceedings 2008* (pp. 1–37).
83. Zhong, H. (2011). The Relationship between Slack Resources and Performance: An Empirical Study from China. *International Journal of Modern Education and Computer Science*, 3(1), 1–8. <https://doi.org/10.5815/ijmeecs.2011.01.01>
84. Zhou, H., He, F., & Wang, Y. (2017). Did family firms perform better during the financial crisis? New insights from the S&P 500 firms. *Global Finance Journal*, 33, 88–103. <https://doi.org/10.1016/j.gfj.2017.01.001>