

DO SLACK RESOURCES AFFECT SUSTAINABILITY PERFORMANCE?

UTPALA RANI (email: utpala@untidar.ac.id)

Jurusan Akuntansi, Fakultas Ekonomi, Universitas Tidar, Indonesia

A B S T R A C T

This study reveals the role of slack resources in forming one element of company's competitive advantage, named sustainability performance. Adapting the resource-based perspective, this study documents that company's ability to achieve sustainability performance is affected by its free resource, or this study called slack resources. Sample selection is based on the criteria of SRI KEHATI Index and LQ 45, results in 107 firms. It is also found that state-owned enterprises (BUMN) pay more attention to the achievement of sustainability performance. This is enable by the multiple duties carry out by SOE to enhance community's wealth while gaining profits. Though it's questionable whether company's willingness truly rises from its concern to the environment, sustainability performance has been adopted to win the heart of the market.

Keywords: *sustainability performance, slack resources, SRI KEHATI*

Penelitian ini mengungkap peran sumberdaya *slack* untuk membentuk salah satu elemen keunggulan kompetitif perusahaan, yakni kinerja keberlanjutan. Dengan mengadaptasi perspektif *resource-based*, penelitian ini mendokumentasikan bahwa kemampuan perusahaan untuk mencapai kinerja keberlanjutan dipengaruhi oleh sumberdaya bebasnya, yang dalam studi ini disebut sumberdaya *slack*. Pemilihan sampel didasarkan pada kriteria Indeks SRI KEHATI dan LQ 45 sehingga menghasilkan 107 perusahaan sebagai sampel. Hasil pengujian juga menunjukkan bahwa Badan Usaha Milik Negara (BUMN) lebih peduli terhadap pencapaian kinerja keberlanjutan. Hal ini bisa jadi berkaitan dengan tugas ganda yang dijalankan oleh BUMN, yakni meningkatkan kesejahteraan masyarakat, sekaligus menghasilkan keuntungan. Meskipun dipertanyakan apakah kesediaan perusahaan benar-benar muncul dari kepedulian perusahaan terhadap lingkungan, kinerja keberlanjutan tampaknya diadopsi menarik perhatian investor.

Kata kunci: kinerja keberlanjutan, sumberdaya *slack*, SRI KEHATI

INTRODUCTION

Since sustainability become an important consideration for investor to evaluate stock performance, firms start taking the notion of sustainability performance seriously (Aust 2013). Sustainability performance is now considered as a source of competitive advantage for companies. This study takes institutional theory perspective which see the adoption of certain behaviors (in this study refers to firm's sustainability performance) basically aim to gain social legitimacy (license to operate) or the acceptance of external constituencies on firm's existence. Failure to comply these norms rise threats on firm's legitimacy and resources, even its survival (Lourenco, Branco, Curto & Eugenio 2012). Since sustainability is gener-

ated through the development of valuable organizational capabilities—for example continuous innovation, organizational learning, and integration of key stakeholders, this performance is associated with proactive environmental strategies (Aragon-correa & Sharma 2003).

This study combines the perspectives of resource-based view (RBV), institutional theory, and stakeholder theory as Lourenco *et al* (2012) to examine the interchange of slack resources and sustainability performance. Taking sustainability performance as a source of competitive advantage, firm should be willing to dedicate its uncommitted resources to fulfill environmental requirements, while also develop a good community relationship. In the

perspective of resource-based view, firm creates sustainability performance to enhance its reputation in order to maintain the pool of resources configuration that form its unique competitive advantage. As Barney (1991) said that reputation is a resource of competitive advantage that difficult to imitate by competitors, and it can also establish the legitimacy of a firm toward external constituents (Perez-Batrez, Miller & Pisani 2011).

According to RBV, slack resources are enabler for firms to grow. When they are combined with firm's other resources, slack resources may generate productive services (Lockett, Thompson & Morgensten 2009). Previous studies paid attention mostly about the relationship of slack resources and firm's exploration activities, such as innovation, risk taking, and adaptation (Voss, Sirdeshmukh & Voss 2008). Tan and Peng (2003) began to investigate the relation of firm's slack resources and its financial performance. In accordance to sustainability issue, some researchers believe that firm's philanthropic activities are closely related to its financial performance (Chen, Patten & Robert 2008; Wang, Choi & Li 2008). Since sustainability mostly defined as economic accomplishment, social justice, and environmental stability (Chen, Feldman & Tang 2015), it is necessary to investigate whether slack resources is also an enabler for firm's sustainability performance, other than financial performance (Artiach, Lee, Walker 2010). According to Porter and Kramer (2006), sustainability initiatives will only create long-term value when they are integrated into firm's strategy, as well as the element of firm's system (Lozano 2012).

This paper consists of five sections. First, the introduction which explains research's background. Then, the hypothesis development section which explains the logic this research develops to build the arguments behind the hypothesis statements. The third part is research method that describes how this research is carried out. The fourth part is results and discussion which contains the interpretation of statistical test's results in connection with the arguments built in the hypotheses de-

velopment section. The last section is conclusion which explains the main results of this research, the implication for managers, the limitation of this research, and some suggestions for further study.

LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

Sustainability performance refers to the application of sustainable development concept at corporate level (Lourenco *et al* 2012). This term describes the performance generated by three pillars of sustainable development, namely the activity of corporate social responsibility and environmental management systems without compromising the aspects of the company's financial performance (Wagner 2010). The concept of corporate sustainability emerged as economic growth, environmental regulatory compliance, as well as the pressure of the creation of social justice and equity (Christofi, Christofi & Sisaye 2012).

Firm's sustainability is a business and investment strategy that seeks to use of best business practices to meet and balancing the needs of current and future stakeholders (Report of the United Nations World Commission on Environmental and Development 1987). This implies a series of complex tasks to provide a competitive outcome in short term while helping protect, maintain, and improve human resources and natural resources for the future (Artiach *et al* 2010). According to Aras and Crowther (2008), sustainability is based on the efficiency of transformation and justice in the distribution of securities. Sustainability performance form the framework that (1) connects with the environmental and social performance, business strategy and competitive management; and (2) integrating environmental and social information with economic and business information (Schaltegger & Wagner 2006; Ameer & Othman 2012).

The effort to implement sustainability at corporate level become more complicated by the fact that sustainability initiatives should fit firm's local circumstances (Searcy 2012). It means that firms should pay more attention to every aspect of their activities and relationships, for example

their supply chain. Firm manages the flows of material and information as well as the cooperation among organizations along the supply chain while integrating triple bottom line factors into account. By adopting this approach, firm takes a responsible position in those three aspects (Govindan, Khodaverdi & Jafarian 2013).

Quantification of sustainability performance is quite difficult. By definition, sustainability performance measurement is a system of indicators that provides a firm with information that may assist in the short- and long-term management, controlling, planning, and performance of economic, environmental, and social activities that firms carried out (Searcy 2012). Considering the indicators which tend to be qualitative, some researchers use multiple dimensions related to corporate sustainability, such as social performance (Wood 2010) to depict this concept. Although it specifically assesses social performance, but Woods (2010) also included environmental performance aspects (such as toxic emissions and estimated liabilities superfund site) and the relationship with stakeholders (such as customer and employee satisfaction). Although it attempts to collaborate as much aspects of sustainability, such measurements do not capture the essence of sustainability in a comprehensive manner.

Artiach *et al* (2010) and Lourenco *et al* (2013) try to overcome this problem by using Dow Jones Sustainability Index (DJSI) as proxy to quantify sustainability performance. Since this study aims to investigate sustainability practices conducted by public company, it takes sustainability index issued by third parties to reduce the potential measurement bias due to subjectivity. This study focuses on the firms that were included in SRI KEHATI index. It is a SRI-based index developed by Indonesia Stock Exchange (*Bursa Efek Indonesia*) and Yayasan KEHATI (a non profit foundation engaged in conservation and use of biodiversity) that rank the member of BEI that are considered to have sustainability performance.

SRI KEHATI index is distinguished from other indexes in BEI for it uses the

procedures for Sustainable and Responsible Investment for determining the index. SRI has six fundamental sustainability factors, in addition to economic factors, as basis for assessing the firm's performance. SRI KEHATI index was launched on June 8, 2009. Those SRI KEHATI-indexed stocks are expected to be a barometer of investment in companies with sufficient awareness of the environmental, social and good governance (BEI 2009). SRI-KEHATI index uses SRI criteria, including a total assets of over USD 1 trillion; positive price earnings ratio; as well as the free float ratio (public ownership should be greater than or equal to 10%). Measurement of this index involving 25 firms that perform the best sustainability practices, including environmental, community, corporate governance, human rights, business behavior and labor practices and decent work. The inclusion of companies in the index SRI-KEHATI indicates their serious efforts to integrate sustainability practices in business strategy, enabling enterprises to implement social responsibility programs and a comprehensive environmental and sustainable.

Exploration of sustainability performance drivers

The inclusion of sustainability aspects in stakeholders' (including shareholders) assessment on companies' performance pushing the adoption of the concept of sustainability by most business entities (Aust 2013) thus creating isomorphic adoption (Caprar & Neville 2012). Although referring to the same concept, it turns out that adoption of mechanisms used by the company may be different. Referring to the perspective of social legitimacy, isomorphic adoption can occur through three mechanisms, namely normative (awareness of responsibility of various stakeholders), mimetic (mimic for being together with others), and coercive (obey or comply with regulations). Perez-Batres *et al* (2011) showed that normative mechanism dominated the registration pattern 394 companies from 12 countries of Western Europe and Latin America in the United Nations Global Compact which aims to encourage sustainability practices by business organizations.

Different mechanism of sustainability adoption may produce different outcomes, such as strategy and performance. The mechanism chosen is influenced by the stakeholders' perception of strategy (Brammer & Millington, 2003, Chen *et al*, 2008), and resources required to execute a strategy. According to Funk (2003), practical implementation of sustainability concept will implicate the role of intangible resources and the creation of a more comprehensive value. This indicates the achievement of a performance that in line or confirming the adoption of sustainability is influenced by several internal and external factors.

Availability of slack resources

Sustainability performance implicitly requires the availability of resources that exceed the "minimum requirements" to achieve an ordinary performance or sustain routine operation (Vanacker, Collewaert & Zahra 2017). The excess of resources is invested in innovative projects that can improve the efficiency of operations, the effectiveness of actions' mechanism, as well as improving the quality of the product.

Firm will be able to maintain its existence through competitive advantage if distinctive internal capabilities can be synchronized with the changes of external environment (Hart 1995). The distinctive competencies will yield advantage only if it is supported by the availability of resources that are not easily duplicated by competitors (Hart 1995; Tang & Liu 2010). In fact, market cannot supply all necessary resources to form a bundle of unique resources. It requires companies to build or create these resources (Dierickx & Cool 1989). Vital resources are not only limited to the physical and financial assets, but also includes skills of employees and organizational processes in the company (Hart 1995).

Competitive advantage is an outcome of valuable organizational capabilities development—for example, continuous innovation, organizational learning, and integration of key stakeholders associated with proactive environmental strategies (Aragon-correa & Sharma 2003). According

to Chen and Huang (2010), organizational slack is one such important factor that determines the amount of optimal creative workforce in a firm. Slack can be interpreted as potential resources that can be utilized to achieve firm's objectives (George 2005). The existence of slack in the organization may arise from overcapacity—that is firm owns resources above minimum necessity to produce a certain level of organizational outcomes (Nohria and Gulati 1996), and good financial performance (Voss *et al* 2008). Citing Bourgeois (1981), Tan and Peng (2003) mentioned four organizational slack function namely as an inducement, resource of conflict resolution, buffers, and facilitator of strategic behavior. In the creation of sustainability performance, slack resources can serve as a facilitator of strategic behavior (for example innovation project) as well as buffer or shield management is facing changes in the environment that may disturb normal performance.

Singh (1986) and Tang and Peng (2003) grouped organizational slack divided into two, absorbed slack –excess cost which is associated with the current operation; and unabsorbed slack-resources have not been allocated for specific purposes. In this case, sustainability performance requires flexible excess resources to be directed to initiatives that create added value for stakeholders. Tan and Peng (2003) revealed a positive relationship of unabsorbed slack on the financial performance, in accordance to predictions of organization theory. This positive relationship between slack and financial performance is also confirmed by Daniel *et al* (2004).

Corporate social performance (CSP) is a construct that emphasizes its responsibility to various stakeholders, such as employees and communities, in addition to economic responsibility to shareholders (Turban & Greening, 1996). Seifert, Morris & Bartkus (2004) examined the philanthropic behavior of Fortune 1000 firms and found that discretionary slack (represented by cash flow) have a significant effect on cash donations to charitable causes. This supports the view that "doing well enables doing good". Harrison and Coombs (2012) ex-

explored the linkages of slack and the tendency of companies to build relationships with the community. Community building empirically defined as the capability of managing relationships with stakeholders, which is based on the premise that companies must build and support the communities in which its employees live and work. Their study found a positive correlation of available slack and the community-based performance. The positive relationship is moderated by the nature of corporate governance. Xu *et al* (2015)'s study of 1,299 public companies in China showed only unabsorbed slack that contribute positively to the CSP. This positive relationship also occurs between CSP and financial performance. The findings are in line with Tang and Peng (2003).

Companies must perform financially, socially, and environmentally to generate sustainability performance (Galdwin, Kenney & Krause 1995; Goyal, Rahman & Kazmi 2013). Referring to Tan and Peng (2003) and Xu *et al* (2015) findings, this study focuses on unabsorbed slack, given its uncommitted nature that enable firms to carry out exploration (Voss *et al*, 2008) –for example through innovation. Implementation of sustainability initiatives requires firms to have free resources to be used in strategic activities that increase the value of the company. This study posits a positive correlation between unabsorbed slack with sustainability performance. Referring to social legitimacy perspective, when sustainability is able to provide legitimacy effect for firms, the management will dedicate their slack resources to gain performance. This allegation is formulated as:
H1: The presence of unabsorbed slack positively related to sustainability performance.

Ownership

The use of slack resources in the state-owned enterprise-SOE (*Badan Usaha Milik Negara*) is affected by the target set by the government. Although privatization led to a smaller part of government's stake in the company, SOEs do not really have a problem of resource constraints, unlike their counterpart, the private owned enterprises.

The soft budget constraint allows SOEs still run despite a loss position in operation (Stan, Peng & Bruton 2014). As Aharoni (1981) stated, SOE carry out two dimensions of performance: social and economic. In the context of Indonesia, SOEs are obligated to implement the partnership program and community development, although the company has only a low resource slack, or even be in a loss position. Since the effect of organizational slack is stronger for private enterprises than SOE (Ju & Zhao 2009), the existence of this social obligation allows SOEs to use unabsorbed slack to create sustainability performance better than private enterprise. In the perspective of social legitimacy, it implies a positive relation of government ownership and sustainability performance. According to these argument, the second hypothesis is stated as:

H2: State ownership status positively related to management's ability to produce sustainability performance.

Concentration of ownership is also considered to affect management in using slack resource. Lower public ownership enhances the dominance management on the decision of resource allocation and utilization, as occurs in private companies (George 2005). Concentration of ownership in a company generally led to the placement of majority owner representatives in the board of directors. Peng and Yang (2014) showed a negative association of ownership concentration to socio-environmental performance and short-term financial performance. This indicates the ownership concentration restrict the use of excess resources for innovative activity. Therefore, this study states:

H3: The concentration of ownership negatively related to sustainability performance.

RESEARCH METHOD

Model

For empirical testing, multiple regression analysis is applied to following equation:

$$SP_t = \alpha + \beta_1 Slack_{t-1} + \beta_2 State_t + \beta_3 Concent_t + \beta_4 control\ variable_{it} + \varepsilon$$

With:

SP_t = Sustainability performance, as measured by the frequency of incoming companies in KEHATI SRI index in 2013 (three periods of the announcement).

Slack_{t-1} = Availability of resources, measured by several proxies of unabsorbed slack by Tan and Peng (2003) with financial data in 2012

State_t = The percentage of government ownership of the company's shares in 2013

Concent_t = Concentration of ownership, measured by the percentage of public ownership the shares of the company in 2013

Control Variables = Industry (industry code in the Indonesia Stock Exchange) and leverage (Measured by the ratio of debt to equity of the company in 2013)

Data Collection Techniques

This study applies cross-sectional data obtained from IDX official website (in the form of annual reports, financial statements, a summary of performance, and the announcement of LQ45 Index) as well as site SRI-KEHATI Foundation Indonesia (for the announcement SRI-KEHATI Index).

Population and Sample

This study adopts two criteria for sample selection. Following SRI-based criterion used in SRI-KEHATI index, this study takes assets value and PER as criterion. Given this study raises usefulness issue, liquidity of stock trading is also taken as a criterion as it is used by LQ45. One of the purposes of reporting and disclosure is to reduce the information asymmetry between insiders with outsiders (Leuz and Verrechia 2000). Companies selected as the sample of this study should meet the criteria purposive as follows:

1. The total assets reported in 2013 amounted to more than one trillion rupiah (refer to SRI criterion);
2. Have a price earnings ratio (PER) of 2013

- which is positive (refer to SRI criterion);
3. The company's stock traded for a minimum of 240 days or actively traded for 12 months (assuming five trading days per week, 20 days per month);
 4. The trading volume of at least 50,000 times during the year (refer to the intensity of trade as an indicator of liquidity of shares).

ANALYSIS AND DISCUSSION

This test uses data from 107 companies, yields in 107 observations. Of these samples, 17 companies are state-owned enterprises with more than 50% of the shares owned by the Indonesian government. In addition, only 24 companies or 22% of the samples were never included in the SRI - KEHATI during 2013 (through three periods of different announcements). A general description of the data used are presented in Table 1.

For the purposes of statistical testing, RE is calculated from retained earnings t-1 divided by total assets t-1, and DEP is using logarithm of depreciation t-1. Results of testing each hypothesis presented in table 2 below.

Statistical test support for the H1 and H2. The coefficient of retained earnings (0,361) and fund depreciation coefficient (0.275) is significant at the 0.05 level. This indicates unabsorbed slack resources is enabler for creating sustainability performance. Meanwhile, government ownership coefficient (2.227) was also significant at the 0.05 level. The results indicated that government ownership is one of the factors that encourage management to produce

Table 1.
Descriptive Statistics

	Min	Max	Mean	Std. Dev.
SP	0	3	0,64	1,21
RE ^{a)}	-1,837 billion	66,289 billion	5,579 billion	11,797 billion
DF ^{b)}	1.578 billion	97,275 billion	3,104 billion	10,142 billion
State	0,0000	0,9003	0,0941	0,2255
Concent	0,0669	0,8524	0,4204	0,1623
Leverage	0,0500	106,00	2,7069	10,3117

Notes:^{a)} RE : retained earnings; ^{b)} DF : depreciation fund

performance that is comprehensive sustainability-financial, environmental, and social.

Although this result is yield using the data of 2013, an addition of observation period will not the author believe that the condition will not be generate a very different result. This argument is based on facts that the number of firms that fit the criterion of sample selection of this study does not change much. Further, firms which are included in SRI-KEHATI index through period of 2016-2018 are almost the same as those included in this study.

Discussion

Statistical testing supports the idea that availability of "excess" resources and ownership is a driving factor for the achievement of sustainability performance. Slack or "excess" resources that are uncommitted (in the form of unabsorbed slack)—which in this study represented by retained earnings and depreciation fund, is one factor that enables management to improve strategies and produce a comprehensive performance. This finding supports the result of Harrison and Combb (2012) and Xu *et al* (2015) which documented a positive association of unabsorbed slack positive on the achievement of corporate social performance. This study investigates the relation

of slack resources and sustainability performance using SRI criteria of firms' total assets or size. One must consider that larger firms tend to integrate environmental activities to their organization earlier than smaller firms (López-Gamero, Molina-Azorín & Claver-Cortés 2009). The finding of this study support that argument.

Tan and Peng (2003) indicate retained earnings as one of the strongest forms of unabsorbed slack. They said management has the greatest discretion for the usage of retained earnings. This slack give management a chance to innovate, such as updating technology that improve firm's performance, or fulfilling regulation to avoid a breach. Depreciation fund is slack resulting from the allocation of acquisition price over the economic life of the assets. When companies operate the assets (such as equipment, production machinery, and vehicles) that has outlived its economic life, but still allocate depreciation, then the costs allocated are not related to current production (Tan & Peng 2003).

The company's ability to produce sustainability performance is also related to ownership aspect, because it affects the decisions of resource management, especially the use of "surplus" resources. Ownership aspect is considered to have impact on the company's ability to produce innovation. On a purely private company, agency conflict between majority and minority shareholders is more likely to occur. Chin, Kleinman & Lee (2009) found a conflict of interest between the controlling owner with minority owners have an impact on firm's innovation. With a sample electronics companies in Taiwan, they documented that level of innovation represented by the number of patents registered with the company, related to the divergence of control and presence of owner in the board of directors as CEO. This indicates, the issue of expropriation may be a barrier for companies to produce sustainability performance due to the reluctance of controlling owner to divert resources utilization for intellectual property investment that drives innovation.

The situation should be different when the controlling owner of firm is gov-

Table 2.
Results of Testing

	Koef	Std. Error	t	Sig.
Unabsorbed Slack				
Retained Earnings	0,361	0,126	2,865	0,005
Depreciation Fund	0,275	0,108	2,539	0,013
Ownership				
Concentration	-0,212	0,652	-0,325	0,746
State	2,227	0,447	4,983	0,000
Var. Control				
Leverage	0,000	0,010	-0,039	0,969
Industry	-0,004	0,004	-1,014	0,313
<i>Adjusted R²</i>	0,290			
<i>F</i>	8,210			
<i>Sign</i>	0,00			

ernment. State-owned enterprises (BUMN) are not aimed solely at maximizing profit. State-owned enterprises in Indonesia even explicitly have the responsibility to organize Partnership Program and Community Development (CSR). These Terms are governed by decree of the Minister of SOE No. Kep-236/MBU/2003, which was subsequently changed to Regulation of the Minister of State Enterprises numbers Per-05/MBU/2007 and updated with Per-08/MBU/2013. This study finds positive association of government ownership to firms' ability to generate sustainability performance. This is apparently related to their responsibilities to carry out Partnership Program and Community Development (*Program Kemitraan dan Bina Lingkungan*). Considering SOE's investment in the Partnership are always monitored by the ministry, the planning for activities to be implemented through the program tend to be more comprehensive and sustainable. As a government agency, state-owned enterprises are relatively more cautious in operations, particularly in relation to environmental aspects. This affects the tendency of SOEs to be included in the index Sustainability and Responsible Investment. Regarding this result, SOEs should consider that the outcome (sustainability performance) is strongly related to the expertise of managers. Those managers in SOEs should be aware of their potential for learning in the market, which is particularly relevant if the budgets are soft, although they are not really have to worry about the competition in the market (Goldeng, Grünfeld & Benito 2008).

Insignificant association of ownership concentration and slack resources may be related to the small proportion of public ownership in public firms. As La Porta *et al* (1999) found that majority of Indonesian public firms are owned by families through a pyramid of ownership. In this condition, when the majority owner is not pay more concern in sustainability performance, it is difficult for non-family owner to affect the decision. Though minority owner has right in RUPS, their voice may not be strong enough to affect firm's strategy. Despite its

insignificancy, the coefficient's negative sign implies that the more concentrated a firm's ownership, its ability to perform comprehensively will be lower, in accordance to the finding of Peng and Yang (2014).

Study of Wagner (2010) yielded that innovation activities do not *per se* improve corporate sustainability. This result implies that innovation will contribute to firm's sustainability performance when it is directed toward inventive innovation. Paelman and Vanacker (2015) stated that superior performance will be achieved only if firms are able to combine "more" specific resources with "less" of another types of resources. This statement implies that not all slack resources yields a good sustainability performance. An excess of some resources (for example human resources) may also deter the achievement of this performance.

CONCLUSION

The inclusion of firms in SRI KEHATI Index may indicate the orientation of the management on achieving a comprehensive performance. Half of companies entering the index SRI-KEHATI in 2013 are SOEs. It implies that SOEs, through their dual role for government namely acts as revenue generating for the state and an agent for government services to the public, forces company to dedicate some of their resources to fulfill the duty. Indirectly, this enhance firm's ability to produce sustainability performance (economic, environmental, and social) that potentially increase government legitimacy in the public eye.

Sustainability performance requires management's willingness to pay more attention on the aspect other than financial. The changes of stakeholders' expectation on environmentally related issues (Cormier *et al* 2004, Henriques dan Sadorsky 1999, Rodrigues *et al* 2013, Deegan dan Gordon 1996; Danatas dan Gadenne 2006) should also be a point of management's concern. The failure to meet this expectation may rise a threat on firm's legitimacy. This threat is not only harm firm's reputation and financial performance but may also threatened firm's existence in competition.

LIMITATION AND SUGGESTION

This study only focuses on unabsorbed slack, the uncommitted excess resource as a sustainability performance enabler. Given Tan and Peng (2003) indicating that unabsorbed slack and absorbed slack have different organizational roles, further studies of absorbed slack relation and sustainability performance need to be performed (such as using Wagner 2010). Further study also necessary to investigate the combination of slack resources that may yield superior performance (using the argument of Paeleman and Vanacker 2015) in the context of SOE and private enterprises.

The limitations of this study are related to the absence of an accessible database to set an indicator of company's sustainability performance, particularly those derived from independent organization's valuations (such as KLD index). The use of sustainable and responsible investment indexes, such as SRI-KEHATI, does not allow researchers to involve firms with total assets of less than one trillion. This limits the generalizability of the findings of this study.

ACKNOWLEDGEMENT

I should thank Prof. Indra Wijaya Kusuma, as the advisor of this research. This paper is part of my independent study research during my doctorate study in UGM.

REFERENCE

- 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. doi: 10.1007/s10551-011-1063-y
- Aharoni, Y. (1981). Performance Evaluation of State-Owned Enterprises: A Process Perspective. *Management science*, 27(11), 1340-1347.
- Aragón-Correa, J. A., & Sharma, S. (2003). A Contingent Resource-Based View of Proactive Corporate Environmental Strategy. *Academy of Management review*, 28(1), 71-88. doi: 10.5465/amr.2003.8925233
- Aras, G., & Crowther, D. (2008). Corporate Sustainability Reporting: A Study in Disingenuity? *Journal of Business Ethics*, 87(1), 279. doi: 10.1007/s10551-008-9806-0
- Artiach, T., Lee, D., Nelson, D., & Walker, J. (2010). The determinants of corporate sustainability performance. *Accounting & Finance*, 50(1), 31-51. doi: 10.1111/j.1467-629X.2009.00315
- Aust, D. N. (2013). Enhancing shareholder value by improving sustainability performance. *Corporate Finance Review*, 17(6), 11.
- Barney, J. (1991). Firm Resources and Sustained Competitive Advantage. *Journal of Management*, 17(1), 99-120. doi: 10.1177/014920639101700108
- Bourgeois, L. J. (1981). On the Measurement of Organizational Slack. *The Academy of Management Review*, 6(1), 29-39. doi: 10.2307/257138
- Brammer, S., & Millington, A. (2003). The Effect of Stakeholder Preferences, Organizational Structure and Industry Type on Corporate Community Involvement. *Journal of Business Ethics*, 45(3), 213-226. doi: 10.1023/a:1024151528646
- Caprar, D. V., & Neville, B. A. (2012). "Norming" and "Conforming": Integrating Cultural and Institutional Explanations for Sustainability Adoption in Business. *Journal of Business Ethics*, 110(2), 231-245. doi: 10.1007/s10551-012-1424-1
- Chen, C.-J., & Huang, Y.-F. (2010). Creative workforce density, organizational slack, and innovation performance. *Journal of Business Research*, 63(4), 411-417. doi: https://doi.org/10.1016/j.jbusres.2009.03.018
- Chen, J. C., Patten, D. M., & Roberts, R. W. (2008). Corporate Charitable Contributions: A Corporate Social Performance or Legitimacy Strategy? *Journal of Business Ethics*, 82(1), 131-144. doi: 10.1007/s10551-007-9567-1
- Chin, C.-L., Chen, Y.-J., Kleinman, G., & Lee, P. (2009). Corporate Ownership Structure and Innovation: Evidence from Taiwan's Electronics Industry. *Journal of Accounting, Auditing & Finance*, 24

- (1) , 1 4 5 - 1 7 5 . d o i : 10.1177/0148558x0902400108
- Christofi, A., Christofi, P., & Sisaye, S. (2012). Corporate sustainability: historical development and reporting practices. *Management Research Review*, 35(2), 157-172. doi: doi:10.1108/01409171211195170
- Cormier, D., Gordon, I. M., & Magnan, M. (2004). Corporate Environmental Disclosure: Contrasting Management's Perceptions with Reality. *Journal of Business Ethics*, 49(2), 143-165. doi: 1 0 . 1 0 2 3 / B:BUSI.0000015844.86206.b9
- Danastas, L., & Gadenne, D. (2006). Social and environmental NGOs as users of corporate social disclosure. *Journal of Environmental Assessment Policy and Management*, 08(01), 85-102. doi: 10.1142/s1464333206002323
- 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. doi: https://doi.org/10.1016/S0148-2963(02)00439-3
- Deegan, C., & Gordon, B. (1996). A Study of the Environmental Disclosure Practices of Australian Corporations. *Accounting and Business Research*, 26 (3) , 1 8 7 - 1 9 9 . d o i : 10.1080/00014788.1996.9729510
- Dierickx, I., & Cool, K. (1989). Asset Stock Accumulation and Sustainability of Competitive Advantage. *Management science*, 35(12), 1504-1511. doi: 10.1287/mnsc.35.12.1504
- Funk, K. (2003). Sustainability and performance. *MIT Sloan Management Review*, 44(2), 65.
- Gladwin, T. N., Kennelly, J. J., & Krause, T.-S. (1995). Shifting Paradigms for Sustainable Development: Implications for Management Theory and Research. *Academy of Management review*, 20(4), 874-907. doi: 10.5465/amr.1995.9512280024
- George, G. (2005). Slack Resources and the Performance of Privately Held Firms. *Academy of management Journal*, 48 (4), 661-676. doi: 10.5465/amj.2005.17843944
- Goldeng, E., Grünfeld, L. A., & Benito, G. R. G. (2008). The Performance Differential between Private and State Owned Enterprises: The Roles of Ownership, Management and Market Structure. *Journal of Management Studies*, 45(7), 1244-1273. doi: doi:10.1111/j.1467-6486.2008.00790.x
- Goyal, P., Rahman, Z., & Kazmi, A. A. (2013). Corporate sustainability performance and firm performance research: Literature review and future research agenda. *Management Decision*, 51(2), 361-379. doi: doi:10.1108/00251741311301867
- Govindan, K., Khodaverdi, R., & Jafarian, A. (2013). A fuzzy multi criteria approach for measuring sustainability performance of a supplier based on triple bottom line approach. *Journal of Cleaner Production*, 47, 345-354. doi: https://doi.org/10.1016/j.jclepro.2012.04.014
- Harrison, J. S., & Coombs, J. E. (2012). The Moderating Effects from Corporate Governance Characteristics on the Relationship Between Available Slack and Community-Based Firm Performance. *Journal of Business Ethics*, 107 (4), 409-422. doi: 10.1007/s10551-011-1046-z
- Hart, S. L. (1995). A Natural-Resource-Based View of the Firm. *Academy of Management review*, 20(4), 986-1014. doi: 10.5465/amr.1995.9512280033
- Henriques, I., & Sadorsky, P. (1999). The Relationship Between Environmental Commitment and Managerial Perceptions of Stakeholder Importance. *Academy of management Journal*, 42 (1), 87-99. doi: 10.5465/256876
- Ju, M., & Zhao, H. (2009). Behind organizational slack and firm performance in China: The moderating roles of ownership and competitive intensity. *Asia Pacific Journal of Management*, 26(4), 701-717. doi: 10.1007/s10490-009-9148-1
- La Porta, R., Lopez-De-Silanes, F., & Shleifer, A. (1999). Corporate Ownership Around the World. *The Journal of Finance*, 54(2), 471-517. doi:

- doi:10.1111/0022-1082.00115
- Leuz, C., & Verrecchia, R. E. (2000). The economic consequences of increased disclosure. *Journal of Accounting Research*, 91-124.
- Lockett, A., Thompson, S., & Morgenstern, U. (2009). The development of the resource-based view of the firm: A critical appraisal. *International Journal of Management Reviews*, 11(1), 9-28. doi: doi:10.1111/j.1468-2370.2008.00252.x
- Lourenço, I. C., Branco, M. C., Curto, J. D., & Eugénio, T. (2012). How Does the Market Value Corporate Sustainability Performance? *Journal of Business Ethics*, 108(4), 417-428. doi: 10.1007/s10551-011-1102-8
- López-Gamero, M. D., Molina-Azorín, J. F., & Claver-Cortés, E. (2009). The whole relationship between environmental variables and firm performance: Competitive advantage and firm resources as mediator variables. *Journal of Environmental Management*, 90(10), 3110-3121. doi: https://doi.org/10.1016/j.jenvman.2009.05.007
- Lozano, R. (2012). Towards better embedding sustainability into companies' systems: an analysis of voluntary corporate initiatives. *Journal of Cleaner Production*, 25, 14-26. doi: https://doi.org/10.1016/j.jclepro.2011.11.060
- Nohria, N., & Gulati, R. (1996). Is Slack Good or Bad for Innovation? *Academy of management Journal*, 39(5), 1245-1264. doi: 10.5465/256998
- Paeleman, I., & Vanacker, T. (2015). Less is More, or Not? On the Interplay between Bundles of Slack Resources, Firm Performance and Firm Survival. *Journal of Management Studies*, 52(6), 819-848. doi: doi:10.1111/joms.12135
- Peng, C.-W., & Yang, M.-L. (2014). The Effect of Corporate Social Performance on Financial Performance: The Moderating Effect of Ownership Concentration. *Journal of Business Ethics*, 123(1), 171-182. doi: 10.1007/s10551-013-1809-9
- Perez-Batres, L. A., V. V. Miller, and M. J. Pisani. (2011). Institutionalizing Sustainability: An Empirical Study of Corporate Registration and Commitment to the United Nations Compact Guidelines. *Journal of Cleaner Production* 19(8):843-851.
- Porter, M. E., & Kramer, M. R. (2006). The link between competitive advantage and corporate social responsibility. *Harvard business review*, 84(12), 78-92.
- Rodrigue, M., Maignan, M., & Boulianne, E. (2013). Stakeholders' influence on environmental strategy and performance indicators: A managerial perspective. *Management Accounting Research*, 24(4), 301-316. doi: https://doi.org/10.1016/j.mar.2013.06.004
- Schaltegger, S., & Wagner, M. (2006). Integrative management of sustainability performance, measurement and reporting. *International Journal of Accounting, Auditing and Performance Evaluation*, 3(1), 1-19. doi: 10.1504/ijaape.2006.010098
- Searcy, C. (2012). Corporate Sustainability Performance Measurement Systems: A Review and Research Agenda. *Journal of Business Ethics*, 107(3), 239-253. doi: 10.1007/s10551-011-1038-z
- Seifert, B., Morris, S. A., & Bartkus, B. R. (2004). Having, Giving, and Getting: Slack Resources, Corporate Philanthropy, and Firm Financial Performance. *Business & Society*, 43(2), 135-161. doi: 10.1177/0007650304263919
- Singh, J. V. (1986). Performance, Slack, and Risk Taking in Organizational Decision Making. *Academy of management Journal*, 29(3), 562-585. doi: 10.5465/256224
- Stan, C. V., Peng, M. W., & Bruton, G. D. (2014). Slack and the performance of state-owned enterprises. *Asia Pacific Journal of Management*, 31(2), 473-495. doi: 10.1007/s10490-013-9347-7
- Tan, J., & Peng, M. W. (2003). Organizational slack and firm performance during economic transitions: two studies from an emerging economy. *Strategic*

- management journal*, 24(13), 1249-1263. doi: doi:10.1002/smj.351
- Tang, Y.-C., & Liou, F.-M. (2010). Does firm performance reveal its own causes? the role of Bayesian inference. *Strategic management journal*, 31(1), 39-57. doi: doi:10.1002/smj.799
- Turban, D. B., & Greening, D. W. (1997). Corporate Social Performance And Organizational Attractiveness To Prospective Employees. *Academy of management Journal*, 40(3), 658-672. doi: 10.5465/257057
- Vanacker, T., Collewaert, V., & Zahra, S. A. (2017). Slack resources, firm performance, and the institutional context: Evidence from privately held European firms. *Strategic management journal*, 38(6), 1305-1326. doi: doi:10.1002/smj.2583
- Voss, G. B., Sirdeshmukh, D., & Voss, Z. G. (2008). The Effects of Slack Resources and Environmental threat on Product Exploration and Exploitation. *Academy of management Journal*, 51(1), 147-164. doi: 10.5465/amj.2008.30767373
- Wagner, M. (2010). The role of corporate sustainability performance for economic performance: A firm-level analysis of moderation effects. *Ecological Economics*, 69(7), 1553-1560. doi: <https://doi.org/10.1016/j.ecolecon.2010.02.017>
- Walker, K., & Wan, F. (2012). The Harm of Symbolic Actions and Green-Washing: Corporate Actions and Communications on Environmental Performance and Their Financial Implications. *Journal of Business Ethics*, 109(2), 227-242. doi: 10.1007/s10551-011-1122-4
- Wang, H., Choi, J., & Li, J. (2008). Too Little or Too Much? Untangling the Relationship Between Corporate Philanthropy and Firm Financial Performance. *Organization Science*, 19(1), 143-159. doi: 10.1287/orsc.1070.0271
- Wood, D. J. (2010). Measuring Corporate Social Performance: A Review. *International Journal of Management Reviews*, 12(1), 50-84. doi: doi:10.1111/j.1468-2370.2009.00274.x
- 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. doi: 10.1007/s10490-014-9401-0