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The Relationship between Government Policies and Projects: A Strategic Management Perspective in Renewable Energy Industry

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ABSTRACT

This paper aims to identify the internal attributes of a firm that act as mediators by integrating research on Entrepreneurship, Strategic Management, and Project Management. Previous research shows that entrepreneurial orientation and capabilities are important attributes that mediate the relationship between institutional context and project level. Project in this paper refers to a strategic project — a bundle of activities that are intended to achieve a business goal of a firm. Thus, project performance has a broader definition in this case. Six hypotheses of the research model were analysed using Structural Equation Modelling (SEM). The specific context of the renewable energy power generation industry is chosen to confirm the research model. This industry is highly regulated; the government has a critical role in creating and shaping the market. In this industry, the return of capital is regulated, and there is only one buyer. The units of analysis are Independent Power Producers (IPPs), which are project-based companies dedicated to building, operating and maintaining power generation projects. Structural model analysis shows that only four hypotheses are supported by data. Findings indicate the relationship between government policies and project performance is mediated by two firm attributes: entrepreneurial orientation and network capability. Further study is needed for an indepth understanding of the relationship between project management capability and project performance.

Keywords: Entrepreneurial orientation, government policies, project performance, resource orchestration

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INTRODUCTION

There is an urgency to investigate the relationship between government policies and projects from a theoretical perspective and as a current phenomenon in business. From the theoretical perspective, the relationship between government policies and projects still remains an unexplored (Pinto & Winch, 2016). It has been argued that strategic management theories can explain the relationship between government policies and projects. Literature on strategic management pointed to the influence of environment in corporations in providing competitive advantage (Lazzarini, 2013; Peng, Sun, Pinkham, & Chen, 2009). For example, government policies, as external institutions, are institutional capital that must be managed by firms as keys to maintaining sustainable competitive advantage (Bresser & Millonig, 2003; Oliver, 1997). This occurs because governments have the ability to create and shape the market for firms through their actions, laws, and regulations (Eckhardt & Shane, 2003; Razeghi, Shaffer, & Samuelsen, 2017).

A very clear example of the roles that government policies play can be seen in the electricity power generation industry. Some governments have deregulated their electricity sectors to invite the business sector to participate in power generation industries which were previously monopolised by state-owned companies. The power generation industry is the most highly regulated industry, and the government regulates the capital return of the company through their pricing regulations (Eckhardt & Shane, 2003). In this regard, the government policies not only encourage entrepreneurship, but they simultaneously strengthen and weaken the entrepreneurial behaviour of firms. Corporations or holdings can participate in the industry by forming specific-purpose companies, namely Independent Power Producers (IPPs). An IPP is a company that has a responsibility to build, maintain, and operate power generation projects and sign power purchase agreements with the electricity buyer (Perusahaan Listrik Negara [PLN], 2013). In Indonesia, the laws on energy and electricity give opportunity to business sectors to participate in renewable energy power generation industry. This industry is very unique, however, since it has only one buyer: the stated-owned company, PT PLN (Persero). The electricity selling price and mechanism are specifically regulated. Meanwhile, the government also expects the business sector will grow and contribute to both electricity provision and renewable energy target achievement.

The power plant project in this case is seen as a company's strategic effort to achieve their corporation and business aims. Literature on the strategic management school of thought in the project management field have shown that projects are a group of activities that are started from the initiation phase until the project is completed (Jugdev & Müller, 2005). Consequently, this paper defines project as a group of activities from the initiation phase of power plant development until the end of the power purchase agreement between the IPP and

PLN. The project is a strategic project focused on achieving business goals and winning over the competition (Shenhar, Poli, & Lechlar, 2001 as cited in Shenhar, Dvir, Ofer, & Maltz, 2001). Project performance, in this situation, should not be measured by referring to the schedule and budget aims only, but it should also consider, for example, the sustainability of the project, customer satisfaction, and the overall success of the business (Shenhar et al., 2001). It is then argued that overall business success is influenced not only by firm resources, but also external factors. In highly regulated industries it is argued that government policies are the most crucial external factors that can influence firm resources and, further, influence a project's performance.

In light of this, the paper empirically examines the relationship between government policies and projects through a strategic management perspective in the renewable energy-based power generation industry. Firm resources that are influenced by government policies are identified before examining how those resources influence the project performance to open the 'black box' on the relationship between the government and the project. In doing so, this research reviews three major research streams of management: Entrepreneurship, Strategic Management, and Project Management (Strategic Management School of Thought). In addition, a review of literature on energy policy is also conducted. Based on the review, this paper employs a strategic entrepreneurship framework as the basis of its research model development. The framework is called an "input-process-output framework" and suggests a comprehensive approach to how external factors can impact on firm performance (see Hitt, Ireland, Sirmon, & Trahms, 2011). The framework suggests environments and resources, both organizational and individual as inputs. The process is called the resource orchestration process, while creating value or gaining competitive advantage is defined as the output (Hitt et al., 2011). Further, this study uses five measurable variables that are expected to contribute to the research model as follows: government policies (GP), entrepreneurial orientation (EO), network capability (NC), project management capability (PMC), and project performance (PP). The relationships among those variables are discussed under the section on Methods.

The remainder of the paper is organised as follows. The following section describes the methods used in this study, including model development, sampling and its procedures, and measures. This is followed by presentation and discussion of results of the study. The conclusion summarises and highlights main findings of the paper.

METHODS

The Model Development

The model used in this study was developed based on literature review. A discussion with industry experts was also conducted during the model development. Referring to the strategic entrepreneurship framework, Government Policies (GP) are external

resources or institutional capital that act as the input. This research defines GP as laws and regulations that were enacted by the government of Indonesia to support the renewable energy-based power generation industry. Following the framework, Entrepreneurial Orientation (EO) is suggested as the input that influences the entrepreneurial nature of corporations. The EO is an internal resource of firms that shows the firm's orientation to take risks, act innovatively, or to be proactive in pursuing opportunities (Covin & Slevin, 1991; Miller, 1983). Under the resource orchestration process, the internal resources are translated into specific capabilities to achieve optimal performance (Sirmon, Hitt, Ireland, & Gilbert, 2011), which in the case of this study would require that EO be translated into specific capabilities of IPP to achieve the project performance. Literature and field findings indicate that there are two main capabilities that are owned by IPP as follows: Network Capability (NC) and Project Management Capability (PMC). The NC is a firm's capability to develop and maintain the network that supports its business and it is the ability to utilise that network to gain external resources (Parida, Patel, Wincent, & Kohtamäki, 2016; Walter, Auer, & Ritter, 2006). The PMC is defined as a firm's ability to utilise corporation resources at the project level and to translate corporation strategy into project strategy (Morris & Jamieson, 2004).

Finally, Project Performance (PP) is defined as output. PP describes not only the project success, but also reflects the business success of the IPP. Since the power plant project is seen as a long-term project, and its sustainability in producing electricity is important to the business life of the firm, a multidimensional measurement is used, as suggested in some studies (e.g., Joslin & Müller, 2015; Shenhar et al., 2001). The conceptual model is shown in Figure 1 below, and the relationships among variables are described in the following sub-sections.

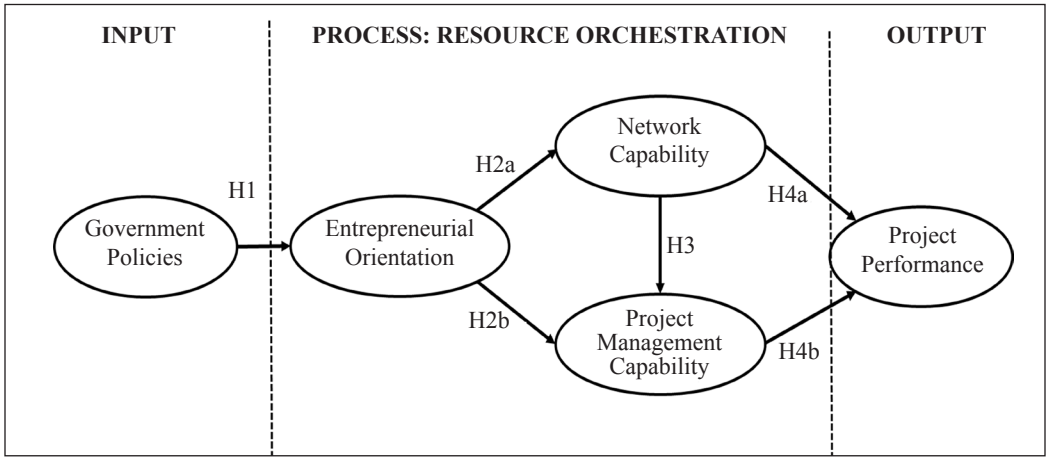

Figure 1. The conceptual model

The Relationship between Government Policies and Entrepreneurial Orientation

Studies have shown GP can stimulate entrepreneurial behaviour (e.g., Eckhardt & Shane, 2003; Wustenhagen & Menichetti, 2012). Such policies often provide opportunities and reduce risks and market uncertainties (Tracey & Phillips, 2011), while at the same time also have an unproductive and destructive influence on entrepreneurial behaviour (Minniti, 2008). Other empirical studies have indicated government policies encourage entrepreneurial activity (Krichevskiy & Synder, 2015). Shirokova and Sokolova (2013) showed that in an emerging market, GP as institutional capital has an impact on EO, and different policies have different impacts on the latter. It must be emphasised that not all policies have positive relationships with EO, and their impact also depends on the context. For example, the protection of contract law has a negative impact on EO, while a policy of protection of property rights has a positive impact on EO (Shirokova & Sokolova, 2013).

However, even though some policies may inhibit entrepreneurship, it is believed that the concern of the government in each regulation and policy enactment is aimed to support entrepreneurial behaviour. Public policies also influence renewable energy investment (Polzin, Migendt, Täube, & Flotow, 2015) and play an important role. For example, through policies, public authorities can intervene in a contract to reduce market risk in energy investment (D'Aertrycke, Ehrenmann, & Smeers, 2017), which will lead to an increase of EO. Thus, the following hypothesis is developed:

Hypothesis 1: Government policies will positively affect entrepreneurial orientation.

The Relationship between Entrepreneurial Orientation and Network Capability

The EO is argued to be a company's intangible resource that accumulates in the organisation (Lee, Lee, & Pennings, 2001). It also can be seen as the process of identifying and pursuing opportunities (Stevenson & Jarillo, 1990). According to resource orchestration, resources owned by a company should be translated into specific capabilities through the process of resource bundling and leveraging (Sirmon et al., 2011). In this regard, NC is argued to be one of the capabilities that has a relationship with the entrepreneurial process as the process of finding and gaining resources in a network (Mitrega, Forkmann, Ramos, & Henneberg, 2012; Walter et al., 2006). The study shows that companies with high EO tend to have high networking behaviour to seek the critical resources needed to exploit their opportunities (Ramachandran & Ramnarayan, 1993). Thus, it is argued that EO has a critical role in encouraging a company to find and gain resources. Thus, it can be stated:

Hypothesis 2a: Entrepreneurial orientation will positively affect network capability.

The Relationship between Entrepreneurial Orientation and Project Management Capability

It is also argued that EO has an impact on PMC. EO, as an intangible resource, must be translated into a specific capability at the implementation level if a firm wants to achieve high performance on their project investment. This capability is actually rarely discussed at the business level, while on the other hand, it is argued that this capability is connected to firm performance (Ethiraj, Kale, Krishnan, & Singh, 2005; Hadaya, Cassivi, & Chalabi, 2012), and the performance itself is connected to the business process (Jurisch & Palka, 2014). Thus, it can be stated:

Hypothesis 2b: Entrepreneurial orientation will positively affect project management capability.

The Relationship between Network Capability and Project Management Capability

This paper argues that there are two critical capabilities for companies that conduct strategic projects in emerging markets: NC and PMC. The NC is seen a business-level capability (Kale, Singh, & Perlmutter, 2000) developed to gain trust and access external resources (Uzzi, 1997; Uzzi & Lancaster, 2003). It is the ability to build, use and exploit the network to gain external resources (Walter et al., 2006). Often, implementation at the project level is delayed when resources are not owned by the company or are even temporarily absent. It is argued that by having NC, the time and cost spent in gaining external resources will decrease, since NC is able to reduce asymmetry information (Uzzi & Lancaster, 2003). Thus, it can be stated:

Hypothesis 3: Network capability will positively affect project management capability.

The Relationship between Network Capability and Project Performance

Previous literature has shown the relationship between NC and performance in various ways. In particular, the studies discussed that NC directly affects performance, for example buyer and supplier performances (Henseler, 2009), financial performance (Human & Naudé, 2009), and innovation performance (Zeng, Xie, & Tam, 2010). Another study showed that NC acts as a moderator in the relationship between EO and spin-off performance of universities (Walter et al., 2006). However, this study argues that referring to the resource orchestration framework, NC has an influence on PP. Thus, it can be stated:

Hypothesis 4a: Network capability will positively affect project performance.

The Relationship between Project Management Capability and Project Performance

In project management literature, PMC is emphasised as a critical factor in project success. It can be seen in some prior studies that this capability has a positive relationship with PP (e.g., Jugdev & Thomas, 2002; Jurisch & Palka, 2014).

This capability is also discussed in a strategic management paper that showed the significant contribution of PMC on PP (Ethiraj et al., 2005). Thus, it can be stated that:

Hypothesis 4b: Project management capability will positively affect project performance.

Sampling and Procedures

The six hypotheses that were identified above were empirically tested in the renewable energy-based electricity industry in Indonesia. Therefore, a questionnaire, as the research tool, was developed in the Indonesian language. The questionnaire development was based on the literature review. However, to eliminate problems on common method biases in the research, some steps were adopted. First, a pre-test was conducted. Before the pre-test, a face validity test was conducted through discussions with a few experts to ensure that the indicators in the questionnaire accurately reflected the industry situation. The pre-test was conducted twice to 10 and 20 respondents from IPPs. The results were used to produce simple questions and avoid ambiguity to ensure that the respondents would understand the questions (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). This process reduces common biases in research. The questionnaire was a self-administered type. In this study, the construct of corporations' EO was perceived by their IPP. An appropriate guideline was prepared.

The samples were taken from a population of renewable energy-based IPPs registered with the Ministry of Energy and Mineral Resources. For administrative purposes, IPPs usually only have one power generation project at a time. Currently, there are more than 300 registered IPPs (Ministry of Energy and Mineral Resources [MEMR], 2017). To fit within this sample, this study used probability sampling to ensure that each registered IPP had an equal chance to participate in the research. The questionnaires were distributed and collected via many channels, namely workshop events, a distribution through IPP associations, post mail delivery, e-mail, and face-to-face meetings since March 2017. By mid-July 2017, there were 90 useful questionnaires collected for this research. Most participants came from hydro-based IPPs (68.89%). Others came from bioenergy IPPs (8.89%), geothermal IPPs (13.33%), and wind & solar IPPs (remaining participants). Those IPPs have various capacities for power plants as follows: less than 1 MW (5.56%), 1–10 MW (63.33%), and more than 10 MW (36.675).

The respondents were directors (46.67%), project managers (17.78%), and the remaining were project coordinators. Most participants were male (95.56%). The education levels of the participants were senior high/diploma (6.67%), bachelor's degree (47.78%), and master's degree (45.56%). It should be noted that since IPPs are project-based companies that focus on power plant development and operation, directors are usually fully involved in both

business and project activities. Often, the directors of small-scale IPPs will go into the field and ensure that the relationships between the project team and other stakeholders are working as intended. They usually have a technical background that can also evaluate the renewable energy potential along with their consultants.

Measures

A six-point Likert scale was used in this research. An even number of options was used to avoid neutral opinions from respondents (such as "neither agree nor disagree") (Wakita, Ueshima, & Noguchi, 2012). The scale was used to measure each indicator as a measurable variable of five latent variables of the model. The GP were measured through three dimensions as follows: general design policy (GDP), financial support (FS), and non-financial support (NF). The dimensions were developed based on the concept of Jager and Rathmann (2008). The dimension development was then enriched by knowledge gained through unstructured interviews with experts. It is emphasised that a stable and long-term design of policies, price regulation on electricity, and permit procedures are some critical factors considered by inventors and entrepreneurs in developing renewable energy projects. All those factors can incur risks and increase the cost of a project, which can be managed by the GP (Abdmouleh, Alammari, & Gastli, 2015; Jager & Rathmann, 2008; Klessmann et al., 2013).

The EO variable was measured using the dimensions' proactiveness (PRO), risk-taking (RT), and innovativeness (INN) (Covin & Slevin, 1991; Hughes & Morgan, 2007), which are treated as second-order dimensions (Anderson, Kreiser, Kuratko, Hornsby, & Eshima, 2014). The NC dimensions were developed based on Walter et al. (2009). The NC dimensions included coordination skills (CS), relational skills (RS), partner knowledge (PK), and internal communication (IC). The RS dimension was connected to the concept of managerial ties (Peng & Luo, 2000) and social relation and network (Uzzi, 1997; Uzzi & Lancaster, 2003). The PMC dimension was measured based on the previous work of Erickson and Ranganathan (2006), and the dimensions were further developed based on other literature (i.e., Grant & Pennypacker, 2006; Jugdev & Thomas, 2002). The PMC dimensions included project planning and control capability (PPCC), project governance capability (PGC), and team capability (TC).

Finally, PP was measured using a multidimensional approach on a measurement of project success introduced by Shenhar et al. (2001). This multidimensional concept was also proposed in other studies (e.g., Joslin & Muller, 2015; Williams, 2016). The dimensions include project efficiency (PE), impact on consumer (IOC), business success (BS), and preparing the future (PF). The PF dimension was enriched by the concept of sustainability in project management (Silvius, Schipper, Planko, van den Brink, & Kohler, 2012), and it is also strengthened by input from experts interviewed.

RESULTS

The research model includes five variables or constructs. Each construct was measured by several dimensions, and each dimension consists of specific indicators. The description on each construct is presented in Table 1. In total, the model was measured using 107 indicators. There were 28 indicators to measure GP, 14 to measure EO, and 25 to measure NC. The remaining indicators were used to measure PMC and PP, with each dimension consisting of 17 and 23 indicators respectively. The model was measured using a multivariate statistical technique, Structural Equation Modeling (SEM), which gives the possibility to conduct a series of regressions for variables that act as both dependent and independent variables (Hair Jr., William, Babin, & Anderson, 2014). That technique combines the structural and measurement models into one statistical test (Garver & Mentzer, 1999). To simplify the research model, a second order measurement was deployed using the Latent Variable Score (LVS) technique. The LVS is a combined value of all measurement indicators of one dimension. It can also be a composite of all dimensions of one latent variable or construct (Wijanto, 2005). In this regard, all variables in the model are considered as second order variables, and all variables have several dimensions. Those dimensions consist of some measurable indicators. The LVS technique is a solution that solves the limitation with the number of samples. Bentler and Chou (1987) emphasised that the minimum sample size for SEM should be five times the observed/measurable variables. By using the LVS, the minimum sample size in this research iwas17 dimensions multiplied by 5, resulting in 85 samples.

The descriptive data analysis was conducted using IBM SPSS Statistics 21. Based on the data descriptive values, the results show that GP has the highest standard deviation (SD) and the lowest mean (mean = 3.38; SD = 0.84). It seems that the IPPs have a wider range of values on their perception of the GP compared with other constructs (see Table 1). Further, the multivariate analysis was conducted using the SEM LISREL 8.70. The measurement model analysis for each dimension was conducted and is presented in Table 1. The analysis was conducted by identifying values of Construct Reliability (CR) and Variance Extracted (VE). A dimension is defined as being good if that dimension has a CR value ≥ 0.70 and VE value ≥ 0.50 (Hair Jr. et al., 2014). The analysis shows that all dimensions are valid and reliable.

The model was measured, and the fit indices of the Goodness of Fit Index (GoFI) show that the measurement model overall has a good fit. The measurement model has a NCS value of 1.26 and RMSEA of 0.054. Other incremental fit indices are more than 90 (Hooper, Coughlan, & Mullen, 2008). The structural model analysis was then conducted by developing the LVS of each construct in the model, as can be seen in Figure 2. The model analysis was conducted by considering several fit indices of the GoFI. The model has a GoFI value of 0.82 and a p-value of 0.03, showing that the

model has a marginal fit (Wijanto, 2015, p. 71–72). However, other fit indices (IFI, RFI, NFI, NNFI, and CFI) have values of more than 90, the NCS value is less than 2, and the RMSEA value is 0.067. Those values show that the model has a good fit (Hooper et al., 2008). Overall, it can be concluded that the model has a good fit.

Further, structural data analysis shows that there are only four hypotheses supported by data, as can be seen in Figure 2. The solid line shows that there is a significant influence between the two constructs ($t \geq 1.96$), while the dashed lines show that the relationships between the two constructs are not significant ($t \leq 1.96$). The GP positively influences corporations' EO (Hypothesis 1). The EO is also shown to influence the NC of the IPP (Hypothesis 2a). However, this EO has no impact on PMC (Hypothesis 2b). Interestingly, NC has a significant impact on PMC (Hypothesis 3). Further, NC has a significant impact on PP (Hypothesis 4a). The study shows, surprisingly, that while IPPs are project-based companies, their PMC has no impact on the PP. It was found that corporations perceive government support in terms of general design of the policies (standardised factor loading, sfl = 0.89). Also, the financial support (sfl = 0.89) and non-financial support policies (sfl = 0.91) are very important in increasing the corporations' tendency to take risk (sfl = 0.84) and being proactive (sfl = 0.83) in doing business. The high EO of corporations strengthens the NC of IPPs,

Table 1
Summary of variables and their dimensions analysis

Variable	Dimension	Mean	Standard Deviation (SD)	Construct Reliability (CR)	Variance Extracted (VE)	Conclusion
GP (mean=3.38; SD=0.84) (independent variable)	- GDP (9 indicators) - FS (10 indicators) - NF (9 indicators)	3.56 3.29 3.30	1.08 0.95 0.84	0.93 0.89 0.88	0.60 0.50 0.50	Valid & Reliable
EO (mean=4.79; SD=0.40) (dependent variable)	- PRO (5 indicators) - RT (3 indicators) - INN (6 indicators)	5.07 4.47 4.85	0.48 0.54 0.55	0.81 0.85 0.83	0.50 0.65 0.50	Valid & Reliable
NC (mean=4.73; SD=0.51) (dependent variable)	- CS (6 indicators) - RS (9 indicators) - IC (5 indicators) - PK (5 indicators)	4.92 4.81 4.41 4.79	0.57 0.64 0.72 0.63	0.88 0.89 0.85 0.86	0.55 0.50 0.54 0.58	Valid & Reliable
PMC (mean=4.97; SD=0.53) (dependent variable)	- PPCC (6 indicators) - PGC (5 indicators) - TC (6 indicators)	4.87 5.03 5.01	0.62 0.56 0.61	0.91 0.81 0.89	0.63 0.50 0.59	Valid & Reliable
PP (mean=4.73; SD=0.51) (dependent variable)	- PE (4 indicators) - IOC (8 indicators) - BS (5 indicators) - PF (6 indicators)	4.26 5.17 4.47 5.03	0.99 0.50 0.87 0.44	0.96 0.91 0.90 0.87	0.85 0.55 0.64 0.54	Valid & Reliable

especially in coordination skill (sfl = 0.86) and internal communication (sfl = 0.87). Interestingly, IPPs perceive that they have a high project management capability, and project governance capability (sfl = 0.98) is the most important capability. In measuring performance, a measurement of the impact on consumers is considered the most crucial.

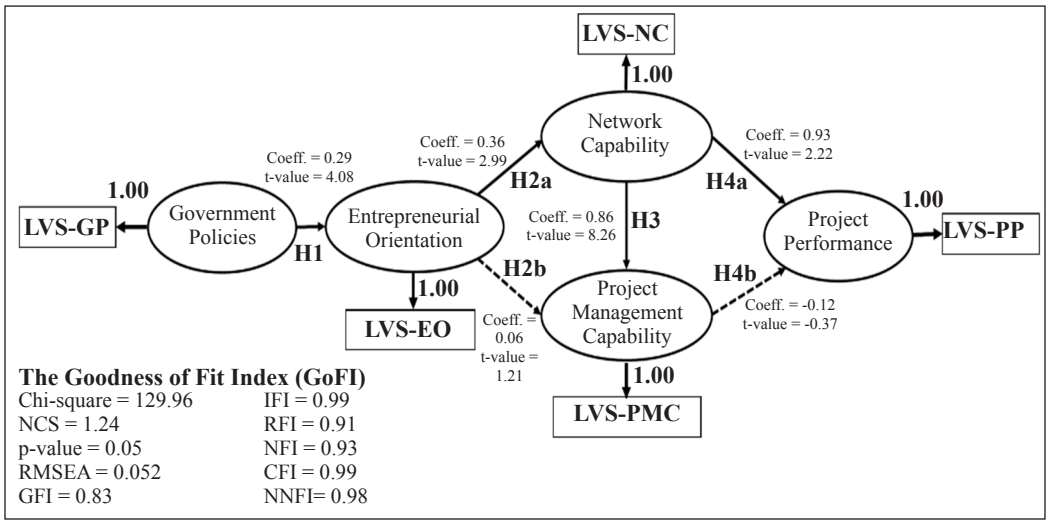

Figure 2. The structural model

DISCUSSION

This study opens the black box on the relationships between government policies and projects, and contributes theoretically to project management field. It also contributes to strengthening the concept of strategic entrepreneurship through empirical findings using a model that provides a comprehensive analysis at the level of corporation, business, and project. The study shows that in highly regulated industries, government policies have a critical role in project performance via a specific path, as follows: government policies – entrepreneurial orientation of the corporation – network capability of the IPP – project performance. Moreover, this study supports an entrepreneurial orientation antecedent in an emerging economy, as was suggested by Shirokova and Sokolova (2013), especially in highly regulated industries.

The research model shows that government policies and their dimensions are perceived by corporations as crucial factors in strengthening their EO. The general design of policy dimension measures whether the policies show a long commitment by the government to develop the renewable energy market, and whether the government can decrease the investment barriers on renewable energy projects. The policies on both financial and non-financial supports are also important in reducing the cost of projects and increasing the return of capital from project investments (Abdmouleh et al., 2015; Jager & Rathmann, 2008).

The study shows that current government policies show are based on its long-term commitment and supporting the renewable energy market while also increasing the corporations' trust in investing in renewable energy-based power generation projects. Those perceptions have encouraged and strengthened corporations to take risk and be proactive, as they consider the associated risks to be fair. They also encourage their employees to offer new ideas along with their risk calculation. Governmental support also encourages corporations to actively participate in the policy dialogue related to renewable energy development.

Further, corporations view innovativeness as a crucial factor in business. The renewable energy industry is a relatively 'younger' compared with the fossil industry. Consequently, corporations that enter into this business should be open to new methods in doing business, to invest in technological development, and to keep an open mind to changes within the industry and in technology, especially regarding policies. For example, when a corporation applies for a loan to finance a new power generation project, the financial institutions are usually unfamiliar with renewable energy and the processes that take place around it. Thus, corporations should be willing to modify their application efforts to convince the financial institution of the project's viability.

Such willingness to find new ways to acquire financing is important for IPPs, especially in building relationships with financial institutions to exploit their financial resources to boost the renewable energy industry. This is one of the reasons why entrepreneurial orientation can have a positive relationship with network capability. Data analysis shows that the coordination skills dimension of network capability is the most critical for IPPs, followed by the internal coordination in IPP organisation. Therefore, it is important for IPPs to understand the goal/aim of the corporation, to inform that goal to the internal IPP, and to identify and efficiently utilise its corporation resources. Those activities are important before IPP engages in networking activities to exploit their external resources. The study shows that relational ties with the government in the energy sector are as critical factors in the industry. Interestingly, these results support Peng and Luo's (2000), which showed the importance of managerial ties in emerging economies. Relational skills are critical, since IPP business is highly dependent on legality and permits, which are strictly regulated. Asymmetry information may lead to inefficiency in holding the permits, which can be reduced by relational ties. In addition, IPPs are concerned with competitors' strategies. Since the renewable energy absorption capacity of the regional electricity system is limited, IPPs should be able to identify their best strategies that will bring their projects to the forefront.

In relation to Hypothesis 2b, the structural model shows that EO has no impact on PMC. The hypothesis was based on the concept of resource orchestration that intangible resources should be translated into specific capabilities to

increase performance (Sirmon et al., 2011). The problem is to identify what kind of capability can be influenced by the corporations' entrepreneurial orientation in a real situation. This EO is then able to influence the NC, but not the PMC. This may occur because EO is highly related to exploring new business opportunities, while PMC is highly related to planning, controlling, and project governance activities that need resources, such as land, permits, and financing. Meanwhile, required resources are often not available at the project level. Some of the critical resources are available outside the IPP, and to exploit those resources, the IPP needs to have network capability. In this regard, EO cannot directly influence the PMC.

That argument is strengthened by the finding that NC significantly influences the PMC. The model shows that NC as a capability in business level (Kale et al., 2000) is a mediator between EO and PMC. Often project activities are delayed due to a lack of resources at the project level (Parker, Parsons, & Isharyanto, 2015), and this study shows that NC can strengthen the PMC through the skill of coordination with corporations, internal communication at the IPP, and the relational ties of the IPP to exploit internal resources. To the author's knowledge, there are very few studies on the antecedents of the PMC, and this study contributes to empirical findings on Resource-Based Theory related to the relationships of the two capabilities.

The study was aimed at showing that both NC and PMC have significant impacts on PP. However, it is only NC that showed a significant impact on the performance of a project. This is surprising since IPPs are project-based. The descriptive data shows that IPPs have good PMC. The capabilities of project planning and control, project governance, and project team management are perceived to be important factors in this type of business. In addition, the descriptive data shows that the dimensions of PP of IPPs have good mean values, so an analysis on performance was then conducted. The structural model analysis shows that the impact on consumers has become the highest consideration in this industry. This is natural, considering that in this industry, there is only one consumer: PT PLN (Persero)—a stated owned company. Under the regulation, PLN can give penalties or terminate the agreement if IPPs can't fulfil the requirements stated in the contract. This single-buyer scheme encourages IPPs to always maintain their relationship with PLN to ensure that the power purchase agreements are in line with their expectations and that those agreements can be well implemented. Referring to that analysis, it seems that in this case, NC, unlike PMC, has a role in performance.

Nevertheless, PMC logically contributes to performance. The requirements given by PLN can't be achieved if IPPs have poor PMC. In this regard, further analysis in the level of dimensions is important. Referring to the literature on project management over the last few decades, a complexity and uncertainty of the environment around the projects has caused difficulty in achieving

project efficiency (Thomas & Mengel, 2008). Project efficiency deals with schedule and budget aims. The IPP projects deal with external resources related to community issues. For example, the most critical problems occur with land and permits. In these circumstances, accurate planning and budget control would be impossible, and changing plans will decrease the overall PP (Dvir & Lechler, 2004).

Furthermore, descriptive data shows that, among other dimensions, project efficiency has the lowest mean values. The value shows that, on average, IPPs slightly agree that the project efficiency can and or will be achieved. In this situation, project efficiency dimension can't affect performance. However, it might be that the other dimensions of PMC affect the PP. Most IPPs experience a slow starting time, as the data shows that the period of time between the initiation stages until construction are mostly more than two years. That situation arises when the IPPs can't optimally utilise their PMC due to project uncertainties and complexity related to community issues, policy risks, and the natural risks.

CONCLUSION

Based on responses from 90 participants, this paper showed that government policies play an important role in the success of the project through entrepreneurial orientation and networking capability. However, the study is unable to empirically explain the relationship between project management capability and project performance. Further study is required analyse the relationship between those two constructs. A qualitative approach may be required to see whether measurement or project efficiency is needed in all phases of the project and whether corporations and IPPs are on the same page on project performance measurement. Further, more respondents may be needed in this regard. Due to the time limitation, this study only involved 90 IPPs.

In addition, the study has a limitation in the type of participants involved in measuring project performance. Since the performance can be perceived differently by various stakeholders involved in the project, future study is suggested to measure other stakeholders' perception of project performance. However, by using a multi-dimensional analysis on the performance, it is expected that the bias of participants' perceptions of their project/firm performance can be avoided. Another limitation of this study is related to the ability of corporations to provide resources for the IPP, which was not included in the research model. Further study is also needed to see whether the governments' policies can influence the strategy of corporations in managing their resources for project purposes.

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