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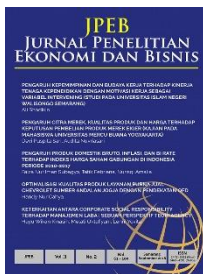
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## **Innovation Capability Performance through Potential and Realized Absorptive Capacity: an Empirical Study in the West Java Mini Market**

Sri Raharso<sup>1</sup>✉

<sup>1</sup> Business Administration Department, Bandung State Polytechnic, Indonesia

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### **Abstract**

*This study explores how potential and realized absorptive capacity affects innovation capability. This study aims to empirically examine the path relationship between potential absorptive capacity, realized absorptive capacity, and innovation capability in mini market in West Java, thus enhance our understanding of the mechanism between absorptive capacity and innovation capability. The authors have conducted a survey among employees with a valid response from 597 respondents. Multiple regression was used to assess the research model. The results provide evidence to show that potential and realized absorptive capacity are positively related to innovation capability, but in different proportions, and potential absorptive capacity affects positively to realize absorptive capacity. This study will contribute in an acceptable way to highlight the effects and role of both the potential absorptive capacity and the realized absorptive capacity in their role as independent variables and the results of this in innovation capability in turn as a dependent variable.*

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✉correspondence address:

Jurusan Administrasi Niaga, Politeknik Negeri Bandung  
Jalan Gegerkalong Hilir, Ds. Ciwaruga, Kec. Parongpong, Bandung Barat  
E-mail: [harsopolban@gmail.com](mailto:harsopolban@gmail.com)

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## INTRODUCTION

In a complex business environment, innovation is an important resource for success and organizational life (Abbing, 2010; Canh et al., 2019; Cho & Pucik, 2005). Innovation creates new business opportunities, forms new markets, and improves performance (Chen, 2017; Canh et al., 2019; Kim, 1997a, 1997b). Furthermore, innovation is needed to create and maintain a competitive advantage (Canh et al., 2019; Ionescu & Dumitru, 2015; Ramdani et al., 2019; Eisenhardt & Brown, 1999).

However, innovation doesn't happen in vacuum circumstances. Innovation will only occur if the company has innovation capabilities (Chen, 2017; Laforet, 2011; Han et al., 1998; Lawson & Samson, 2001; Sözbilir, 2018; Teece et al., 1997; Yam et al., 2004; Cavusgil et al., 2003; Cohen & Levinthal, 1990; Zahra & George, 2002). Innovation capabilities provide the potential for effective innovation performance (Cavusgil et al., 2003). Innovation is a complex process and depends on a set of capabilities. These capabilities are scattered throughout the company structure, but all these capabilities can be aligned with a specific strategy. This set of capabilities forms a meta-capability known as innovation capability (Guan & Ma, 2003; Wang et al., 2008). So, innovation capabilities are the result of a complementary set of capabilities (Wonglimpiyarat, 2010), which is the embryo of innovation.

Capability refers to specific resources that help companies maintain a competitive advantage or know-how and knowledge about how to use resources efficiently (Stalk et al., 1992; Grant, 1991). To maintain competitive advantage, firms require adjustment to changes in the external environment and require ownership of internal competencies (Andrews, 1971; Chandler, 1962; Hofer & Schendel, 1978). Innovation capability refers to the internal ability to implement or apply new ideas, products, or processes (Burns & Stalker, 1961). If the company has innovation capabilities at a high level, then the company can integrate innovations into the company's activities and will have lasting success (Burgelman et al., 2004). This is following the opinion of Zheng et al. (2011) and Grant (1991) which state that company capability is a precursor to performance, including innovation performance.

Innovation capability is influenced by internal and external factors of the company (Idris, 2016). One of these factors is the absorptive capacity (Cohen & Levinthal, 1990), which can be a lever of innovation capabilities (Lane et al., 2006; Medase & Barasa, 2019; Gallegos & Torner, 2018). The mechanism, recognizing the importance of external knowledge flows, is an important phenomenon in the process of building innovation capabilities (Zook & Rigby, 2002). Companies gradually began to abandon the idea that more new knowledge is generated in internal processes within the company itself (Gans & Stern, 2003). This can occur because the boundaries of an organization's knowledge reserves with external knowledge reserves are blurred (Teece, 1998). However, organizations do not automatically benefit from external knowledge flows even though the organization has exposed them (Cohen & Levinthal, 1989, 1990). Moreover, the organization must develop the ability to recognize the value of external knowledge, and then assimilate and utilize that external knowledge for commercial purposes. That is, the organization must develop absorptive capacity, which consists of the components of acquiring and assimilating knowledge (often referred to as the dimension of potential absorptive capacity); and the component of transforming and exploiting knowledge, or what is often referred to as the dimension of realized absorptive capacity (Zahra & George, 2002).

This study will explore the relationship between absorptive capacity and innovation capabilities in the modern grocery store business, better known as mini markets. Respondents in this study were mini market employees in West Java. Mini markets are a form of service business that is growing in Indonesia, especially West Java (Bella, 2019). Urgently, studies on innovation are more dominant in the manufacturing sector. Innovations in the service sector have received little attention (John & Storey, 1998), including mini markets. Service characteristics make innovation in this sector different from the manufacturing sector (Drejer, 2004; De Jong et al., 2003; Miles, 2008). To the best of researchers' knowledge, studies on the relationship between absorptive and innovation capabilities in mini markets are still very rare. The number of mini markets in Indonesia is the largest in Southeast Asia, reaching 43,826 stores in 2017, with a growth rate of around 3.2%, and each year around one thousand mini markets are added. Mini markets are also a significant contributor to the sales value of fast-moving

consumer goods (FMCG), around 21%; grew by 8% in 2018, with 75% of consumers shopping in mini market formats, and visiting mini markets on average twice a week (Bella, 2019). This means that this situation is a challenge for mini market managers, if they do not understand what consumers want, then competitors will leave them (Hameli, 2018). Customers will easily move to another mini market if they are not satisfied.

However, the Covid-19 pandemic has weakened retail growth (Vader et al., 2020; Dinda, 2020; Alika, 2020). The Indonesian Retail Entrepreneurs Association (Aprindo) projects that in 2020 the retail industry will still grow, but will only reach around 1.5-2.0% or weaken compared to the growth in 2019 which ranges from 8% to 8.5% (Dinda, 2020; Alika, 2020). Sales of modern retail stores are still low, only about 40-60% of total sales before the pandemic. This situation causes cash flow for modern retail stores to experience difficulties, considering that sales are lacking, but store operations are still running (Dinda, 2020; Alika, 2020). Pandemics also change consumer behavior (Buck et al., 2020). So, for mini markets to survive, continuous innovation is a proactive action that must be taken (D'Aveni, 2010; D'Aveni et al., 2010; Buck et al., 2020; Vader et al., 2020). This can happen if mini market employees have innovative capabilities.

Also, the literature studying absorptive capacity is more dominant at the firm level (Lane et al., 2006; Volberda et al., 2010), or sometimes at the alliance level (Lane & Lubatkin, 1998; Lane et al., 2001) or the business unit level (Jansen et al., 2005; Tsai, 2001), ignoring the absorptive capacity at the individual level. Therefore, it is advisable to examine the concept at the individual level (Volberda et al., 2010; Lane et al., 2006). So, this study responds to the suggestions of these experts. Absorptive capacity at the individual level is determined by prior knowledge, cognition, and diversity of external networks (Jiménez-Castillo & Sánchez-Pérez, 2013; Lowik et al., 2012), and is associated with favorable outcomes such as task performance (Deng et al., 2008; Park et al., 2007), knowledge creation (Matusik & Heeley, 2005), and innovativeness (Lowik et al., 2012; Ter Wal et al., 2017; Tortoriello, 2014). Thus, the respondents in this study were individuals, mini market employees. This is in line with the statement of Cohen and Levinthal (1990) which states that individuals are at the forefront so that organizations can learn from external knowledge. The outcome, this study will add to the knowledge base of absorptive capacity from the perspective of individual roles.

Finally, this study also identifies the effect of the dimension of potential absorptive capacity on innovative capabilities, something other researchers rarely do. Existing empirical studies generally link absorptive capacity with innovative capabilities, or link potential absorptive capacity with realized absorptive capacity, and further link with innovative capabilities. This means that only the actual absorptive capacity directly affects innovation capability. One of the studies that we're able to prove the direct effect of potential absorptive capacity with innovation capability was conducted by Fosfuri and Tribó (2008) on 2,464 companies in Spain. So, this study will evaluate whether empirical studies of mini market employees in West Java support the relationship between potential absorptive capacity and innovative capabilities.

Cohen and Levinthal (1989) are experts who promote the term absorptive capacity, which is defined as a firm's ability to identify, assimilate, and exploit knowledge of the environment. Furthermore, Zahra and George (2002) reconceptualize the capacity to absorb and define it as a set of routine and organizational processes to acquire, assimilate, transform, and exploit knowledge to produce dynamic capabilities. Kim (1997a, 1997b) states that absorptive capacity is a firm's capacity to learn and solve problems.

The idea of absorptive capacity was obtained by Cohen and Levinthal (1989) after summarizing the insights from individual learning theory and then translated into organizational contexts. In particular, they noted the principle that prior knowledge (including basic skills and learning experiences) tends to enhance later learning because memory is associative. At the organizational level, they see the acquisition of new knowledge as mediated by individuals who become "gatekeepers" and "boundary-spanners". The gatekeeper's job is to filter and transfer knowledge, whereas boundary-spanners are those that go beyond organizational silos and help spread knowledge across all areas and levels of the organization (Zahra & George, 2002; Daghfous, 2004a). Besides, the diversity of internal perspectives is also very important, because a very homogeneous internal view will result in resistance to external ideas (Cohen & Levinthal, 1990).



Cohen and Levinthal (1990) stated that the basis of absorptive capacity is the individual ability of organizational members. However, Zahra and George (2002) and Duchek (2013) state that absorptive capacity is an organizational construct. Zahra and George (2002) state that absorptive capacity is a dynamic capability related to the creation and utilization of knowledge. Dynamic terminology refers to an organization's capability to update competencies continuously so that it is in line with the changing business environment (Teece et al., 1997). This capability can be realized through two routes. First, Teece et al. (1997) emphasized the role of organizational resources and processes in achieving competitive advantage. Second, Grant (1996) emphasizes the role of knowledge as the most strategic resource for companies to realize these capabilities.

There are four components of absorptive capacity and they are grouped into two categories or dimensions, potential absorptive capacity (consisting of components of knowledge acquisition and assimilation) and realized absorptive capacity, consisting of components of knowledge transformation and exploitation (Zahra & George, 2002). Knowledge acquisition refers to the company's capability in identifying and obtaining external knowledge that can support the company's operations. When new knowledge is identified and perceived as having value, this knowledge will be disseminated throughout the company boundaries (Daspit & D'Souza, 2013). Whereas knowledge assimilation is defined as routine services and company processes that allow analyzing, process, interpret and understand information obtained from external resources. This capability helps companies analyze and interpret new knowledge in the context of existing knowledge (Jansen et al., 2005). In this stage, the company assesses whether the structure of the new knowledge is following the existing knowledge structure in the company (Daspit & D'Souza, 2013). Furthermore, knowledge transformation is the capability of the company to develop and filter routines that facilitate combining existing knowledge with new knowledge and assimilating knowledge. This stage consists of modifying and adapting new knowledge and combining it with existing knowledge to explore new possibilities. This stage is considered the most relevant, which can be achieved by adding or removing knowledge, or by interpreting knowledge differently. Meanwhile, knowledge exploitation refers to routines that allow companies to filter, expand, and improve existing competencies or create new competencies by entering and transforming knowledge into company operations (Zahra & George, 2002). Operationally, this stage uses knowledge to create value that is beneficial to companies and customers (Daspit & D'Souza, 2013; Jansen et al., 2005; Zahra & George, 2002). The potential absorptive capacity helps the realized absorptive capacity in developing various organizational and strategic capabilities (Duchek, 2013; Lev et al., 2009). The potential absorptive capacity represents the capability of creating knowledge, while the realized absorptive capacity allows companies to make new offerings based on the knowledge base that has been created (Flor & Oltra, 2013).

Innovation capability is defined as the ability to continuously transform knowledge and ideas into new products, processes, and systems that provide benefits to the company and its interested parties (Lawson & Samson, 2001). With innovation capabilities, companies can utilize the resources they have to develop new products or services (Tang et al., 2015). Choudhury (2010) states innovation capability as the ability to create new and useful knowledge based on previous knowledge. From a business perspective, useful knowledge is the knowledge that can produce new products or services that are beneficial to all parties.

Innovation capability is the company's ability to develop new products and/or new markets, through aligning strategic innovation orientation with innovative behavior and processes (Wang & Ahmed, 2004), introducing new processes, products, or ideas in the organization to achieve success (Baregheh et al., 2009). For example, flexible organizational structure and design refer to organizational capabilities as dynamic capabilities, whereas individual creativity is the starting point for innovativeness (Amabile et al., 1996), and it is the firm capacity that constantly integrates, updates, builds, moves, and configures. Competencies and internal and external resources to seize and exploit opportunities (Teece, 2007).

Lawson and Samson (2001) state that organizational innovation capabilities arise from the skills and abilities that allow the application of resources, and reflect an ability to continuously transform knowledge and ideas into new products, new processes, and new systems that are beneficial to the company and all interested parties. Koc (2007) considers innovation capacity as a continuous improvement of all capabilities and resources owned by the company to explore and exploit opportunities to develop new products under market needs.

Meanwhile, Chen (2009) states that innovation capability is a company's capability, which is inherent in processes, systems, and organizational structures, which can be applied to product and process innovation activities. A comprehensive definition from Ngo and O'Cass (2009) states that innovation capability is an integrative process of applying knowledge, skills, and collective company-owned resources to build innovation activities, in the form of technical innovations (products and/or services, and production process technology) as well as non-technical innovations (managerial, market, and marketing).

Innovation capability is a crucial factor in gaining a competitive advantage in turbulent market conditions. This capability directs the organization to develop continuous innovation, to respond to changes in the market environment (Slater et al., 2010). Innovation capabilities are embedded in all strategies, systems, and structures that support innovation in organizations (Gloet & Samson, 2016). Innovation capabilities are structured through the main processes within the company and cannot be separated from other practices (Lawson & Samson, 2001). Thus, the presence of this capability is considered a valuable asset for the company to provide and maintain a competitive advantage and is required in executing the company's strategy.

Innovation capabilities facilitate companies to rapidly introduce new products and adopt new systems and are also important as bait when the competition is ongoing. When hypercompetition is happening, this capability will provide a solution to win the competition. Innovation capability will be an asset to create innovative, competitive solutions. Sen and Egelhoff (2000) stated that innovation performance can be explained as a combination of assets and resources. This means that innovation requires resources, assets, and capabilities to direct the company to be successful in a turbulent environment. Therefore, Adler and Shenbar (1990) define innovation capability as the capacity to develop new products that satisfy market needs, the capacity to apply appropriate process technology to produce new products, the capacity to develop and adopt new products and process technologies to satisfy needs, in the future, and the capacity to respond to technological activities that can come at any time, and the capacity to respond to unexpected opportunities created by competitors.

Evidence states that innovation capability has a positive relationship with financial performance (Al-kalouti et al., 2020; Rajapathirana & Hui, 2018; Han et al., 1998; Calantone et al. 2002; Lau et al. 2010; Tuominen & Hyvönen, 2004; Hull & Rothenberg, 2008; Jansen et al., 2006), as well as market share and innovation (Calantone et al. 2002; Lau et al. 2010; Tuominen & Hyvönen, 2004). Companies with high innovation capabilities can develop innovative services and products and can cope with environmental changes during different phases of the business cycle (Matsuo, 2006). Experts argue that such companies will survive and succeed in various environmental conditions (Gao et al., 2007). Capability theory assumes that there are differences in capabilities that allow organizations to achieve lasting competitive advantage through a distinctive range of capabilities (Weerawardena & McColl-Kennedy, 2002). In summary, in general, all capabilities are considered to be precursors of better performance (Zheng et al. 2011). Therefore, all modern companies need innovation capabilities (Aragón et al., 2014).

## **Hypothesis Development**

### **Relationship between Potential and Realized Absorptive Capacity**

Researchers argue that the ability to exploit external knowledge effectively is a critical factor for companies that want to improve innovation outcomes and company performance (Cohen & Levinthal, 1990; Zahra & George, 2002; Lane et al., 2006; Van Den Bosch et al., 2003; Lichtenthaler, 2009; Leal-Rodriguez et al., 2014). Some organizations must acquire knowledge from outside the organization if they are to maintain the rhythm of their activities (Zahra & George, 2002). The stages are recognizing the value of external knowledge, acquiring external knowledge, recognizing the benefits of external knowledge, and acquiring it. Thus, the level of absorptive capacity is the result of developing potential absorptive capacity; although the potential absorptive capacity and the realized absorptive capacity are independent, they both perform complementary functions in absorbing new knowledge acquired from outside the organization.

Companies that have a high level of potential absorptive capacity do not always see an increase in performance (Zahra & George, 2002). Conversely, the realized absorptive capacity or the ability of the

organization to transform and exploit knowledge will be the mediator between the two variables, the potential absorptive capacity, and performance. Without the acquisition and assimilation of previous knowledge, the process of transformation and exploitation of previous knowledge would not be possible (Zahra & George, 2002; Albort-Morant et al., 2018; Ali & Park, 2016; Ben-Oz & Greve, 2015; Leal-Rodriguez et al., 2015). In summary, the ability to absorb looks like a funnel, where the potential dimension ensures the novelty and diversity of the required knowledge, while the realized absorptive capacity is a symbol of the operation of new knowledge (Harmaakorpi & Melkas, 2008).

Also, studies developed by Zahra and George (2002), Jansen et al. (2005), and Cepeda-Carrión et al. (2012) provide empirical evidence that the potential absorptive capacity is a precursor to the realized absorptive capacity. Concretely, they state that the organizational mechanism which refers to the potential absorptive capacity has a significant positive effect on the realized absorptive capacity. Zahra and George (2002) as well as Cohen and Levinthal (1990), state that the realized absorptive capacity is directed by the potential absorptive capacity. Therefore, based on the arguments previously described, the following hypothesis can be developed.

Hypothesis 1: The potential absorptive capacity is positively related to the realized absorptive capacity.

### **Relationship between Realized Absorption Capacity and Innovation Capability**

Cohen Levinthal (1990) proposed that the use of external knowledge acquired by an organization is a major determinant of innovation capabilities. The study of Zahra and George (2002) states that there is a significant positive relationship between absorptive capacity and innovation, and together these two concepts are the basic foundation of organizational competitive advantage. The results of the empirical study of Knudsen and Roman (2004) also found the ability of absorptive capacity to predict innovation capabilities. On the other hand, Caloghirou et al. (2004) investigated the extent to which the interaction of the organization's internal capabilities and external knowledge resources affects the level of organizational innovativeness. They found that absorptive capacity played a significant role.

Next, Nieto and Quevedo (2005) analyzed the effect of three variables related to industrial structure (capacity to absorb, technological opportunities, and abundance of knowledge) on innovation efforts developed by companies, carried out on 406 innovative companies in Spain. As a result, absorptive capacity determines innovation effort more than the other two industrial structure variables. Besides, absorptive capacity is also a moderating variable between technological opportunities and innovation efforts. Absorptive capacity facilitates the transfer of knowledge, which will be utilized to build technical and managerial innovation capabilities (Minbaeva et al., 2003). In other words, the study proved the positive effect of absorptive capacity on innovation capabilities.

Other empirical studies also provide support for the relationship between absorptive capacity with innovation capabilities and innovation performance (Hughes et al., 2014; Wu & Shanley, 2009; Subramaniam & Youndt, 2005; Daghfous, 2004b). One reason is that absorptive capacity promotes the speed, frequency, and magnitude of innovation (Kostopoulos et al., 2011). High absorptive capacity coupled with the advantages of first movers, rapid response to customers, and avoidance of the "locking" and "competency trap" effects (Zahra & George, 2002; Hamel, 1991), will facilitate companies in obtaining superior innovation performance. In fact, of the four components of absorptive capacity, the last two components, namely: transformation and exploitation, are components that directly affect innovation capabilities (Zahra & George, 2002). That is, the dimension of realized absorptive capacity has a relationship with innovation capability (Cepeda-Carrión et al., 2012; Xun & Xuehan, 2014). Therefore, a hypothesis can be made as follows.

Hypothesis 2: Realized absorptive capacity is positively related to innovation capability.

### **Relationship between Potential Absorptive Capacity and Innovation Capability**

Potential absorptive capacity is a source of competitive advantage over innovation, especially when an efficient internal knowledge flow exists to reduce the gap between potential and realized absorptive capacity. The potential absorptive capacity allows the company to identify and assimilate the external knowledge flows required in the innovation process. The potential absorptive capacity is conceptualized as a mapping from the flow of useful

external knowledge to the information available internally (Fosfuri & Tribó, 2008). Zahra and George (2002) admit that the potential absorptive capacity gets less empirical studies than the realized absorptive capacity.

Fosfuri and Tribó (2008) stated that companies with high potential absorptive capacity get more sales from new products or products that have been perfected. This influence will be greater when the internal information flow becomes more efficient. This study supports the argument of Zahra and George (2002) which states that the potential absorptive capacity is a necessary condition for achieving a competitive advantage in innovation, but companies also need to develop the ability to transform and exploit external knowledge to fully benefit from absorptive capacity.

The accumulation of potential absorptive capacity will be faster if it is supported by internal events. For example, major changes that include serious modifications in organizational design, strategy, and marketing can improve the potential level of absorptive capacity. Furthermore, proper internal reshaping will make the company more outward-looking and more "welcome" to internal information. So, when a company experiences a crisis, it is not always negative (Kim, 1998). Crises can trigger changes in attitudes towards external knowledge (Winter, 2000; Huber, 1991). This is especially useful for companies that have a "not found here" syndrome (Allen & Katz, 1982). Based on these studies, the following hypothesis can be developed.

Hypothesis 3: Potential absorptive capacity is positively related to innovation capability

## **METHOD**

This cross-sectional study is descriptive and associative, with the unit of analysis being mini market employees in West Java. The study population was all employees who worked in mini markets in West Java. The sample is determined based on the analysis technique used, namely: multiple regression (Hair et al., 1998; 2010), with a minimum quota of 500 respondents. This amount has met the requirements for multivariate research (Hair et al., 1998; 2010). Samples were obtained by the accidental sampling technique, by visiting each mini market and asking the employees' willingness at that time to participate in this research.

A Likert scale questionnaire (Soedibjo, 2013) was used to obtain primary data, with a value of 1= strongly disagree and 5= strongly agree. The absorptive capacity (AC) variable is divided into four components, namely: acquisition and assimilation, referred to as potential AC; and transformation and exploitation, referred to as realized AC (Zahra & George, 2002). The acquisition component consists of four statement items, examples of items are: The employees of this mini market are happy to accept suggestions from consumers/the public. The assimilation component consists of three statement items, for example, Employees at this mini market participate in solving problems. Meanwhile, the transformation component consists of three statement items, for example, Employees in this mini market are trying to improve existing business processes. The exploitation component, consists of three statement items, for example, Employees take advantage of information/knowledge to get new opportunities. Finally, the variable innovation capability is mono-dimensional, modified from Lin (2007), consisting of seven statement items, for example, This mini market often generates new ideas.

To test the validity of the measuring instrument, two kinds of tests were made, validity, and reliability tests. Furthermore, the identification of relationship patterns between variables can be obtained from the empowerment of multiple regression analysis (Santoso, 2002; Hair et al., 1998; 2010); useful for proving the three research hypotheses developed in this study.

## **RESULT AND DISCUSSION**

This research was conducted on mini market employees in West Java, covering six districts and five cities. The total respondents were 597 people. The respondents work in Alfamart mini market as much as 47.7%; Indomaret 35.3%; Yomart 10.2%; and the rest in other mini markets. Based on gender, the number of male respondents did not differ much from female respondents, respectively 52.3% and 47.7%. Mini market employees who were respondents in this study were dominated by those who had a service period of <2 years, as much as 57.6%. Respondents with a work period of 2-5 years amounted to 37.5%, and the rest had a working period of more

than five years. This means that almost half of the respondents have sufficient work experience. Also, respondents are part of the millennial generation, because they are dominated by those aged <30 years, as much as 93%; the rest was over thirty. Finally, based on education level, respondents generally graduated from SMA/SMK, as much as 92.8%; the rest are Diploma or Bachelor's graduates.

Table 1 shows the three variables used in this study are reliable because they have a value of  $\alpha > 0.70$  (Sekaran, 2007; Robinson et al., 1991). Besides, the table shows the potential absorptive capacity (potential AC) has an average value of 4.04; realized absorptive capacity (realized AC) 3.98, and innovation capability 3.5; all are included in the "high" class if they are classified into five classes (included in the range 3.41-4.20). Judging from the standard deviation, all variables has a standard deviation that is within a tolerable range, namely: a maximum of 20% of the average value (Santoso, 2002). This means that the answers of mini market employees in West Java tend to be homogeneous, not too diverse. Next, the correlation between variables is significant, this shows that this study meets the requirements of criterion-related validity or predictive validity; because all independent variables have a significant relationship with the dependent variable (Das et al., 2008). Potential AC has a positive and significant correlation with realized AC (0.625;  $p < 0.01$ ) and with innovation capability (0.548;  $p < 0.01$ ). Realized AC has a positive and significant correlation with innovation capability (0.666;  $p < 0.01$ ).

**Table 1.** Reliability, Average, and Correlation among Variables

	<i><math>\alpha</math></i> <b>Cronbach</b>	<b>Aver.</b>	<b>Dev.</b> <b>Stand.</b>	<b>1</b>	<b>2</b>	<b>3</b>
<b>1</b> P. AC	0.772	4.04	0.45	1	0.625**	0.548**
<b>2</b> R. AC	0.754	3.98	0.47		1	0.666**
<b>3</b> IC	0.825	3.95	0.51			1

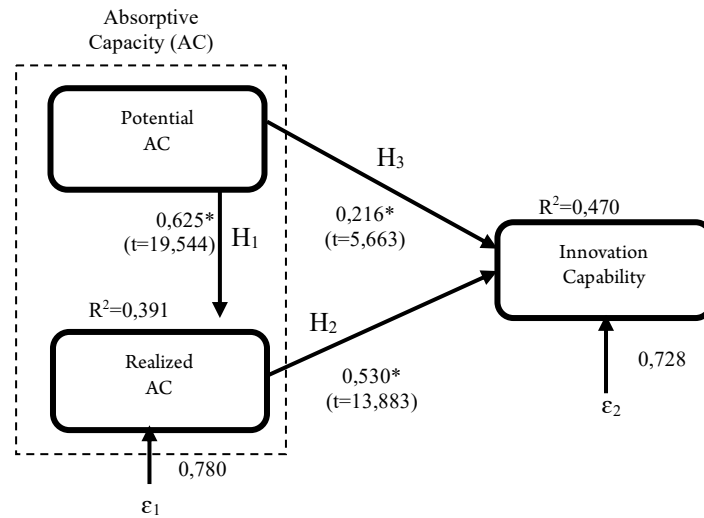
\*\* The correlation is significant at the 0.01 level (2-tailed); N=597; Scale: 1-5

P. AC: Potential AC; R. AC: Realized AC; IC: Innovation Capability

The next step is to test the three hypotheses proposed in this study. Figure 1 shows the results of multiple regressions between variables made in the form of a structural model with path coefficients. It is seen that the potential AC significantly affects realized AC ( $\beta = 0.625$ ;  $t = 19.544$ ;  $p < 0.05$ ), and can explain 39.13% of the variation in realizing AC, the rest is explained by other variables. Potential AC also has a significant effect on innovation capability ( $\beta = 0.216$ ;  $t = 5.663$ ;  $p < 0.05$ ), and together with realized AC was able to explain 47.0% of the variation in innovation capability; the rest is explained by other variables. As hypothesized, realized AC also significantly affected innovation capability ( $\beta = 0.530$ ;  $t = 13.883$ ;  $p < 0.05$ ). In other words, all hypotheses are supported by empirical data.

The study developed by Jansen et al. (2005) also provides empirical evidence that the potential absorptive capacity is a precursor to the realized absorptive capacity. Concretely, they state that the organizational mechanism which refers to the potential absorptive capacity has a significant positive effect on the realized absorptive capacity. Zahra and George (2002) and Cohen and Levinthal (1990) stated that the realized absorptive capacity is directed by the potential absorptive capacity. Potential absorptive capacity is an organizational process of absorbing external knowledge through acquisition and assimilation, but the transformation and application of this knowledge will not automatically occur (Kang & Lee, 2017). Meanwhile, the realized absorptive capacity combines processes that utilize external knowledge to support organizational goals, which can be achieved through transformation and exploitation activities. Cassol et al. (2016) explained that the potential absorptive capacity is an instrument for obtaining and assimilating knowledge at a relatively dormant level until there is a reason to use it, then the knowledge will be at an active level, called the realized absorptive capacity.

This study proves that there is a positive and significant effect of the realized absorptive capacity on innovation capabilities ( $\beta = 0.530$ ;  $t = 13.883$ ;  $p < 0.05$ ), and together with the potential absorptive capacity, it can explain 47% of the variation in innovation capabilities. In line with the results of the study by Cepeda-Carrion et al. (2012), which proved that there was a significant and positive influence on innovativeness, with a path coefficient of 0.529 and was able to explain 28% of the variation in innovativeness. That is, the results of this study are similar to their results. The difference is that this study uses two dimensions of absorptive capacity to explain the existing variations in innovation capabilities.



**Figure 1.** Structural Model with Path Coefficients

The realized absorptive capacity is one of the two dimensions of absorptive capacity suggested by Zahra and George (2002). According to their model, the realized absorptive capacity is a precursor to innovation. So, because innovation will only occur if there is innovation capability, the realized absorptive capacity is a precursor to innovation capability. Thus, this research is in line with the original model from Zahra and George (2002), which assumes the process of absorptive capacity as a sequential or linear process, starting from acquisition, assimilation, transformation, and exploitation. Kostopoulos et al. (2011) stated that absorptive capacity determines the speed, frequency, and magnitude of innovation capability.

This empirical study was successful in proving the existence of a positive and significant effect of potential absorptive capacity on innovation capabilities in mini markets ( $\beta = 0.216$ ;  $t = 5.663$ ;  $p < 0.05$ ). This study supports the argument of Zahra and George (2002) which states that the potential absorptive capacity is a necessary condition for achieving a competitive advantage in innovation. In the context of this research, competitive advantage is not in the form of innovation but in innovation capability, which has been known as a precursor to innovation (Laforet, 2011; Chen, 2017). The difference is that the absorptive capacity model from Zahra and George (2002) does not explicitly explain the direct route from the potential absorptive capacity to innovation capability, but must go through the realized absorptive capacity mediator. The results of research by Fosfuri and Tribó (2008) identified companies with a high potential absorptive capacity that had a good performance in producing new products and enhanced products, and the outcome was better sales. The results of the study by Xun and Xuehan (2014) also prove that there is a positive and significant effect of the four components of Zahra and George's (2002) absorptive capacity on knowledge transfer efficiency and innovation performance.

This can happen because the absorbing capacity is not linear as suggested by Zahra and George (2002). This non-linear process is supported by Todorova and Durisin (2007), Volberda et al. (2010), as well as Aribi and Dupouët (2016). Todorova and Durisin (2007) state that the transformation process, which is a component in the realized absorptive capacity of Zahra and George (2002), is complementary to the assimilation process. When the assimilation process cannot be carried out because the cognitive structure does not change, or when new knowledge does not match the existing knowledge structure, it is not assimilation that occurs but transformation. That is, empirically what happens between mini market employees in West Java is knowledge exploration and exploitation (March 1991). In other words, the potential absorptive capacity of Zahra and George (2002) is also perceived to contain a transformation component (from Todorova & Durisin, 2007), so that it can significantly influence innovation capabilities. Although this effect is not as big as the effect of realized absorptive capacity on innovation capability ( $\beta = 0.216$  compared to  $\beta = 0.530$ ); however, it is in line with the statement of Zahra and George (2002) which states that the contribution of the realized absorptive capacity to innovation capability is greater than the potential absorptive capacity. However, they made no further explanation. According to Xun and Xuehan (2014), this can happen because the components of the potential and realized absorptive capacity have different effects on knowledge transfer activities.

## CONCLUSION AND RECOMMENDATION

Empirically, the research has succeeded in proving all the hypotheses built to explore the relationship between the dimensions of absorptive capacity and innovation capabilities among mini market employees in west java. First, the potential absorptive capacity positively and significantly affects the realized absorptive capacity. Furthermore, the realized absorptive capacity also positively and significantly affects innovation capabilities. Third, this study shows empirical evidence of a positive and significant effect of potential absorptive capacity on innovation capabilities. This latter empirical evidence is scarce. However, this also has the consequence of providing a more robust database of absorptive capacity concepts. This includes exploring the absorptive capacity dimension of other researchers. Especially researchers who state that absorptive capacity is non-linear.

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## Effectiveness of The Board of Directors and Company Performance: Corporate Governance Perspective in Indonesia

Ririh Dian Pratiwi<sup>1</sup>, Anis Chariri<sup>2</sup>

<sup>1</sup> Doctoral (PDIE) Student, Diponegoro University, Indonesia

<sup>2</sup> PDIE, Diponegoro University, Indonesia

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
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### Abstract

*The purpose of this study was to determine the effect of board size, board independence, and board activity on company performance from a corporate governance perspective. This study uses a quantitative approach. IDX issuers in the manufacturing sector registered in 2017-2018 are the research population. The samples were obtained using the purposive sampling method. Based on the criteria, the samples in this study were 146 companies. This study uses multiple linear regression analysis. This study found that board size has a negative effect on ROA, but has an effect on and is positively correlated with ROE. Board independence has a positive effect on the achievement of company ROA and ROE. While the third variable, namely board activity does not affect the achievement of ROA and ROE of the company. Based on the limitations, further research is expected to be able to explore other factors that are relevant in influencing company performance during and after the COVID 19 pandemic, for example, namely external factors.*

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correspondence address:

Program Doktor Ilmu Ekonomi Universitas Diponegoro  
Jl. Erlangga Tengah No.17, Semarang 50241  
E-mail: [ririh.dian.pratiwi@dsn.dinus.ac.id](mailto:ririh.dian.pratiwi@dsn.dinus.ac.id)

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## INTRODUCTION

Corporate governance is important in business (Shahid et al., 2020). According to Zabri et al. (2016), the issue of corporate governance in Asia became a concern after the Asian crisis in 1997. This problem is also increasingly interesting for academic research, after the Enron case in 2008. Shahwan (2015) and Jo & Harjoto (2011) argue that corporate governance can affect company performance. The quality of corporate governance is based on the principles of transparency, stakeholder relations, the board of directors, and the company's ownership structure. According to Larcker (2007) in Arayssi & Jizi (2019) good corporate governance shows an indication of their transparency and responsibility. This means that a company that has good management will produce a good performance.

The implementation of corporate governance can be seen from the perspective of agency relations. In an agency relationship, there is a separation of interests between owners and managers (Jensen dan Meckling, 1976). Agency conflicts will occur because company owners and managers have different interests. Agency theory explains that companies with strong governance will do better than companies with weak governance (Bhatt & Bhatt, 2017). Zabri et al. (2016) stated that there are two governance mechanisms, namely internal and external mechanisms. Internal mechanisms include the size of the board and the independent board of commissioners. External mechanisms include market competition and the labor market. According to Tristiarini et al., (2017); Setiawanta & Purwanto (2019); Krishnan et al., (2017); Utama et al., (2017); Nurazi et al., (2020); Jaffar & Abdul-Shukor (2016); Kao et al., (2019) corporate governance mechanisms can improve company performance.

The involvement of the board of directors consistently will affect company performance (Bhagat & Bolton, 2019; Goyal et al., 2019). This study uses internal mechanism indicators, namely the effectiveness of the board of directors, which includes board size, board independence, and board activity. Research on corporate governance has been carried out in several countries with different findings. Research by Zabri et al. (2016) found a negative influence between board size on company performance as measured by ROA. Arayssi & Jizi (2019), in their research using board characteristics and ownership structure in controlling and analyzing company performance. The result found is that concentrated family ownership can replace board independence by forming a governance committee. In contrast to research conducted by Narwal & Pathneja (2016), who found no effect between board size and the number of board meetings on banking performance. Similar results were also found by Shahwan (2015), in his research, there is no influence between corporate governance and company performance in Egypt.

Indonesia is one of the countries that supports the implementation of good corporate governance (OECD, 2019 and Siagian et al., 2013). This study will examine board effectiveness and company performance from the perspective of corporate governance practices in Indonesia. Specifically, this research aims to answer the relationship and influence of corporate governance as measured by the number of boards, board independence, and board activity on company performance in Indonesia.

### Hypotheses Development

Related to agency theory, a larger board size will have a good effect on firm performance. This is because the larger the board size will have the ability to pressure management to minimize debt costs and improve company performance (Ofoeda, 2017). Zabri et al., (2016) and Orozco et al., (2018) stated that the size of the board of directors is very important in managing a company. The standard size of the board of directors from one country to another will be different. This is due to the different cultures in each of these countries. According to previous researchers, board size will affect the quality of corporate governance, so that it will have an impact on company performance. Leblanc & Gillies (2003) argue that about eight to eleven people on the board of directors are the optimal size. Ofoeda (2017) and Johl et al., (2015), in their research, found evidence that board size has a positive relationship with company performance. More and more boards of directors will have a variety of expertise that will support corporate governance, to improve company performance. This description can support the hypothesis of this study.

H<sub>1a</sub>: Board size has a positive effect on ROA.

H<sub>1b</sub>: Board size has a positive effect on ROE.

Jensen & Meckling (1976) explained that in agency theory, the interests of managers will be achieved by ignoring the interests of owners. Agency problems can be reduced by the independence of the board of directors. Corporate governance mechanisms related to board independence are measured by the composition of the independent board of directors. According to Prabowo & Simpson (2011), Board independence is a percentage of the ratio of the number of independent boards of directors to the entire board of directors. This means that the

more independent boards of directors, the more independence that can be achieved (Zabri et al., 2016). Based on this description, the following hypothesis can be formed:

H2a: Board independence has a positive effect on ROA.

H2b: Board independence has a positive effect on ROE.

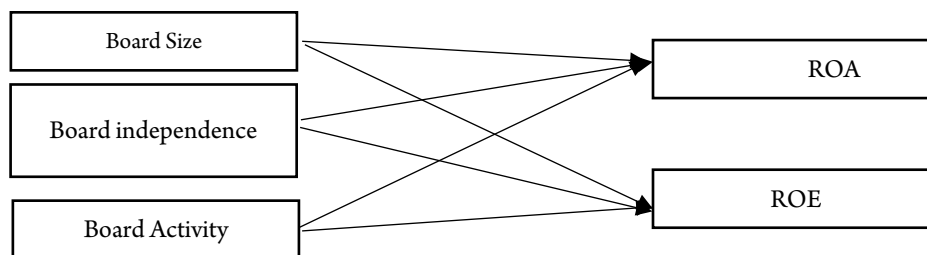
Good corporate governance mechanisms in the company are shown by the efficiency of the board of directors. According to Ofoeda (2017), the intensity of the meetings can show the effectiveness of their performance in monitoring managers, so it will have an impact on company performance. Board activity can be measured using the frequency of meetings held (Brick & Chidambaran, 2010). Research on the effect of board activity on company performance was conducted by Ntim & Osei (2011) in South Africa and Brick & Chidambaran (2010). Their research found that a board that meets frequently will result in high company performance.

H3a: Board activity has a positive effect on ROA

H3b: Board activity has a positive effect on ROE.

## METHOD

The approach used in this study is a quantitative method, which shows a causal relationship. This study uses three independent variables and two dependent variables. The independent variable used is corporate governance as proxied by board size, board independence, and board activity. The dependent variable used is company performance as measured by Return on Assets (ROA) and Return on Equity (ROE). The conceptual framework in this study is described as follows:



**Figure I. Conceptual Framework**

The population used is issuers on the Indonesia Stock Exchange in 2017-2018, which includes companies in the manufacturing sector. Through the sample selection with the purposive sampling method, there were as many as 146 companies. This study obtained data sourced from the annual report, which is displayed on the website [www.idx.co.id](http://www.idx.co.id). Measurement of variables in this study is described in the following table:

**Table 1. Variable Measurement**

Variable type	Variable	Measurement	Source
Independent Variable	- Board Size	The number of board members in a company	Arayssi & Jizi (2019)
	- Board Independence	The number of independent directors to total directors	Arayssi & Jizi (2019)
	- Board Activity	Frequency of board meetings during the financial reporting period	Ofoeda (2017)
Dependent Variable	- Return on Asset	Net income to total asset	Arayssi & Jizi (2019)
	- Return on Equity	Net income to total shareholders' equity	Zabri et al., (2016)

Source: Previous Research



The statistical method used is quantitative statistics. This study uses multiple linear regression to test the hypothesis. This research model is shown in the following equation:

$$\text{Equation I : } Y = \alpha + \beta_1X1 + \beta_2X2 + \beta_3X3 + \varepsilon$$

Information:

Y = ROA

$\alpha$  = constant

$\beta_1$  = regression coefficient X1

$\beta_2$  = regression coefficient X2

$\beta_3$  = regression coefficient X3

X1 = Board Size

X2 = Board independence

X3 = Board Activity

$$\text{Equation II : } Y = \alpha + \beta_1X1 + \beta_2X2 + \beta_3X3 + \varepsilon$$

Information:

Y = ROE

$\alpha$  = constant

$\beta_1$  = regression coefficient X1

$\beta_2$  = regression coefficient X2

$\beta_3$  = regression coefficient X3

X1 = Board Size

X2 = Board independence

X3 = Board Activity

## RESULT AND DISCUSSION

### Descriptive Statistics

Descriptive test results are shown in the following table:

**Table 2.** Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Size	146	3	10	5.89	1.923
Indepn	146	.20	.67	.4012	.13531
Activ	146	2	9	4.36	1.904
ROA	146	.14	.89	.3993	.19774
ROE	146	.04	4.46	1.2622	.82191
Valid N (listwise)	146				

Source: data processing

The table shows the mean board size score of 5.89 (approximately 6 people), with a lower standard deviation of 1.923 (approximately 2 people). A lower standard deviation of the mean indicates that the board size data are closer to the mean. The average value of board independence is 0.4012 with a smaller standard deviation. Looking at this comparison, it can also be concluded that the condition of the board independence data is close to the average value. The mean values of the board activity variables, ROA and ROE are also each greater than the standard deviation. A standard deviation value that is smaller than the mean indicates that the data in the study are close to the average.

### Classic Assumptions

The first classical assumption test is the normality test with the following test results:

**Table 3.** Normality of Equation I

	Unstandardized Residual
N	146
Asymp. Sig. (2-tailed)	.059 <sup>c</sup>

a. Test distribution is Normal.  
 b. Calculated from data.  
 c. Lilliefors Significance Correction.

Source: data processing

**Table 4.** Normality of Equation II

	Unstandardized Residual
N	146
Asymp. Sig. (2-tailed)	.070 <sup>c</sup>

a. Test distribution is Normal.  
 b. Calculated from data.  
 c. Lilliefors Significance Correction.

Source: data processing

The table above shows the results of the normality test in equations I and II. The significance value of the two Kolmogorov-Smirnov tests, each is greater than the significant value of 0.05 (5%), so it can be concluded that the data in this study were normally distributed. The next classic assumption test is the heteroscedasticity test. The following is a table of heteroscedasticity test results:

**Table 5.** Heteroscedasticity of Equation I

Model		Sig.
1	(Constant)	.000
	Size	.418
	Indepn	.537
	Activ	.341

Source: data processing

**Table 6.** Heteroscedasticity of Equation II

Model		Sig.
1	(Constant)	.042
	Size	.418
	Indepn	.621
	Activ	.301

Source: data processing

The results of the heteroscedasticity test of the two equations are shown in the table above. Based on the table, it can be seen that the significance value of all variables in equations I and II is above 0.05 (5%). Thus, it can be interpreted that the two regression models in the study did not have heteroscedasticity symptoms.

**Table 7.** Multicollinearity of Equations I and II

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	Size	.132	7.582
	Indepn	.132	7.576
	Activ	.998	1.002

Source: data processing

The third classical assumption test performed in this study is the multicollinearity test. The test results in the below table concluded that there was no strong correlation between the independent variables used in this study. This conclusion is based on a tolerance value for each variable more than 0.1 and a VIF value less than 10. The last classic assumption test is the autocorrelation test. The Durbin-Watson test values in the two equations are respectively free of autocorrelation. The test results are shown in the following table:

**Table 8.** Autocorrelation of Equation I

Mode 1	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin- Watson
1	.623 <sup>a</sup>	.388	.375	.15634	1.911

a. Predictors: (Constant), Activ, Indepn, Size  
b. Dependent Variable: ROA

**Table 9.** Autocorrelation of Equation II

Mode 1	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin- Watson
1	.260 <sup>a</sup>	.067	.048	.80206	1.956

a. Predictors: (Constant), Activ, Indepn, Size  
b. Dependent Variable: ROA

Coefficient of Determination

The ability of the independent variable in explaining the dependent variable can be tested by using the coefficient of determination test. The coefficient of determination is shown by the Adjusted R Square value as follows:

**Table 10.** Coefficient of Determination of Equation I

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin- Watson
1	.623 <sup>a</sup>	.388	.375	.15634	1.911

a. Predictors: (Constant), Activ, Indepn, Size  
b. Dependent Variable: ROA

**Table 11.** Coefficient of Determination of Equation II

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin- Watson
1	.260 <sup>a</sup>	.067	.048	.80206	1.956

a. Predictors: (Constant), Activ, Indepn, Size  
b. Dependent Variable: ROE

The testing equation I has an Adjusted R Square value of 0.375 (37.5%). This figure shows that the variation of the ROA variable is explained by 37.5% of the variables of board size, board independence, and board activity. Whereas equation II, it is obtained an Adjusted R Square of 0.048 (4.8%), which means that board independence and board activity can explain the ROE variable of 4.8%.

Statistics F

The simultaneous effect of all independent variables on the dependent variable was tested with the F statistical test. The following table is the test output of the two models:

**Table 12.** Test Model Equation I

Model	Sum of Squares	Df	Mean Square	F	Sig.
1 Regression	2.199	3	.733	29.985	.000 <sup>b</sup>
Residual	3.471	142	.024		
Total	5.670	145			

a. Dependent Variable: ROA

b. Predictors: (Constant), Activ, Indepn, Size

**Table 13.** Test Model Equation II

Model	Sum of Squares	Df	Mean Square	F	Sig.
1 Regression	6.604	3	2.201	3.422	.019 <sup>b</sup>
Residual	91.349	142	.643		
Total	97.953	145			

a. Dependent Variable: ROE

b. Predictors: (Constant), Activ, Indepn, Size

Both tables show that the significance values in the first and second models are 0.000 and 0.019. This value is smaller than the real level of 0.05 (5%). All independent variables in the equation I jointly affect the ROA variable. All the independent variables in the second equation also jointly affect the ROE variable.

**Hypothesis Testing**

**Table 14.** Hypothesis Test of Equation I

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.078	.052		1.495	.137
	Size	-.049	.019	-.477	-2.640	.009
	Indepn	1.524	.264	1.043	5.769	.000
	Activ	.000	.007	-.002	-.032	.974

a. Dependent Variable: ROA

Testing on equation I can answer the hypothesis H1a, H2a, and H3a. The significance value of the variable board size is 0.009, significant at 5%. This means that board size has an effect on company performance. The board independence variable is also proven to have an effect on corporate performance. However, the variable board activity has no effect on corporate performance, because it has a significant value above 5%.

**Table 15.** Hypothesis Test of Equation II

	Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	.894	.267		3.344	.001
	Size	.224	.095	.525	2.354	.020
	Indepn	-2.032	1.355	-.335	-1.500	.136
	Activ	-.032	.035	-.074	-.910	.364

**a. Dependent Variable: ROE**

Hypothesis testing of H1b, H2b, and H3b can be answered through the output results in the table above. The significance value of the variable board size is significant at the 5% level of significance, while the variables of board independence and board activity are not significant at the 5% level. Thus, it can be concluded that in equation II, the variable board size has an effect on ROE, while the variable board independence and board activity have no effect on ROE.

**Results for Hypothesis 1**

H1a in this study states that board size has a positive effect on ROA. This study found evidence that board size affects company performance as measured by ROA. Viewed from the point of view of agency theory, the greater the size of the board, the better it will be able to oversee the performance of managers so that they can make decisions that are in line with improving company performance. This study found a negative correlation between board size and ROA. This means that the smaller the board size, the more effective it is in overseeing the use of assets to generate profits. The smaller the board size will have the more appropriate contribution in increasing performance by optimizing the use of assets. The results of this study support the research conducted by Zabri et al., (2016), Nyamongo & Temesgen (2013), and Byard et al., (2006), who found that smaller board size is more effective in influencing ROA. Guest (2009) also found that board size has a negative effect on profitability in the UK. But, the results of this study are different from those found by Ofoeda (2017) and Narwal & Pathneja (2016). Ofoeda (2017) found that board size has a positive effect on ROA, and Narwal & Pathneja (2016) found that board size has no effect on company performance.

H1b in this study states that board size has a positive effect on ROE. This study finds evidence that board size is positively correlated with corporate performance as measured by ROE. The higher the board size, the more optimal it is supervising managers in the efficient use of capital to generate profits. The data in this study show that the average number of boards in each company is six people. Most of the sample firms have board numbers close to average. This study found that an average board size of six people can influence the achievement of company performance as assessed by ROE. Board size can control managers in optimizing the use of capital to generate profits. The results of this study do not support Zabri et al., (2016) and Nyamongo & Temesgen, (2013), who found a negative correlation between board size and corporate performance as measured by ROE. The results of this study support Johl et al., (2015), who found that board size has an effect on company performance. Leblanc & Gillies (2003) state that the more the size of the board, the more optimal, about eight to eleven people on the board of directors are the optimal size.

**Results for Hypothesis 2**

The agency conflict proposed by Jensen & Meckling (1976) can be reduced by board independence. The higher the independence of the board, the higher the supervised performance of managers, so that the more trying to improve company performance. This description is the basis for hypothesis 2a which states that the independence of the board of directors has a positive effect on ROA. This study found that the greater the percentage of the composition of the independent board of directors will increase the company's ROA. The more independent directors who are on the board, the more managers will be in achieving better company performance. The independence of the board can support managers to optimize the use of assets to generate maximum profits. These findings support research from Ofoeda (2017) which found that board independence has a positive effect on company performance as measured by ROA. However, these results are not following the results found by Zabri

et al., (2016) which states that board independence has no effect on ROA. The results of this study are also not following the results found by Arayssi & Jizi (2019) which states that board independence has a negative effect on ROA.

H2b states that board independence has an effect on company performance as measured by ROE. The greater the independence of the board, the greater the ability to oversee the manager's performance in maximizing profits using the equity held. However, the results of the study show no influence between board independence on ROE. The existence of an independent director on the board does not have a significant effect on the achievement of ROE. These results are in line with research conducted by Zabri et al., (2016) and Adams & Mehran (2012), which found no effect of board independence on company performance. Achievement of company performance as measured by the company's ability to optimize equity in generating profits is not necessarily due to the influence of the number of independent commissioners on the board.

#### Results for Hypothesis 3

Hypothesis H3a states that board activity affects ROA. More meetings held by the board of directors will contribute to the manager's decision-making to improve company performance. This study found that board activity had no effect on ROA. The number or frequency of meetings does not motivate managers to maximize ROA.

The results of this study also reject H3b which states that board activity has an effect on ROE. This means that the frequency of board meetings cannot encourage managers to maximize profits by using the equity. The results of this study are inconsistent with the results of research conducted by Narwal & Pathneja (2016) and Ofoeda (2017) which found a positive influence between the frequency of board meetings on company profitability in the banking sector.

## CONCLUSION AND RECOMMENDATION

This study examines the effectiveness of the board of directors as part of a corporate governance mechanism in influencing company performance. Board effectiveness is measured by board size, board independence, and board activity. Manufacturing companies in the Indonesia Stock Exchange have an average of 6 boards of directors, where this number can influence company performance as measured by ROA and ROE. The second mechanism is board independence. Board independence, indicated by the presence of independent directors on the board, is proven to be able to influence the company's ROA, but it has no effect on ROE. The independence of the board is not able to influence managers' decisions in equity management that can generate profits. The third governance mechanism is board activity. This study found that the frequency of board meetings has no effect on manager performance achievement.

The limitation of this study is that the data used ends in 2018. The concern experienced is that the end of 2019 will be the initial year of the COVID 19 pandemic, where the pandemic has an impact on the financial conditions of all companies in the world. Of course, many factors can be examined again in influencing company performance, one of which is external factors such as an economic recession. Thus the accuracy of the research data will be better by considering other factors. Based on these limitations, further research is expected to be able to explore other factors that are relevant in influencing company performance during and after the COVID 19 pandemic, for example, namely external factors.

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## The Effect of Oil Price Shock and Inflation on Stock Returns: A Comparative Study on ASEAN-3

Agatha Canonia Kristyaningrum<sup>1</sup> and Hersugondo<sup>2</sup>✉

<sup>1</sup>Department of Management, Faculty of Economics and Business, Diponegoro University, Indonesia

<sup>2</sup>Department of Management, Faculty of Economics and Business, Diponegoro University, Indonesia

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### Abstract

*This study aims to examine the effect of the WTI type oil price shock and inflation on stock returns from the ASEAN-3 capital markets, namely Indonesia, Thailand, and Philippines. The data used are monthly data from 2015 to 2019. The data analysis technique used is multiple linear regression. The results showed that oil price shocks had a significant positive effect on stock returns on the JASICA Mining index and the SET Resources index, but had no significant effect on the PSE Mining and Oil index. Furthermore, inflation had a significant positive effect on stock returns of Indonesia seen from the JASICA Mining index. Whereas, inflation had no significant effect on the SET Resources index of Thailand and the PSE Mining and Oil stock index of Philippines.*

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✉correspondence address:

Fakultas Ekonomi dan Bisnis Universitas Diponegoro  
Jl. H. Prof. Soedarto, SH, Tembalang, Semarang 50275  
E-mail: [Gondoarum65@gmail.com](mailto:Gondoarum65@gmail.com)

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## INTRODUCTION

The economy of a country can be an indicator of the success of a country's economic development. The success of a country's development can be increased through the economic growth of a country. One of the components that can encourage the country's economic growth is the capital market. The growth of the capital market can affect macroeconomic indicators, including economic growth measured by gross domestic product (GDP). The country's economic development requires adequate financing to realize a good economic development in the country. The source of government revenue can be through taxes, capital market and money market.

Macroeconomic variables can affect the country's economy. According to Tandelilin (2010), stock returns can be influenced by microeconomic factors, such as financial and macroeconomic ratios. One of the macroeconomic ratios is inflation, which is a variable used in this study. An investor, when going to invest, needs to look at the factors considered as risk, both microeconomic and macroeconomic factors. According to Tandelilin (2010), macroeconomic factors are proven to have an influence on investment development in a country.

At present, the economic growth of a country is influenced by the presence of energy, one of which is crude oil. The role of energy is important because it can be an input that supports the production processes of companies in a country. The availability of good energy as input will result in a good output. The availability of good output has an impact on the country's sound economic growth. However, because world oil prices are not always stable, it can affect the country's economy. High inflation or even hyperinflation has a bad impact on the economy of a country. It causes the companies go bankrupt and make the company's stock price falling which is finally affect the stock returns received by investors.

The explanation of several things above was triggered by several things, one of which was reported by tirtoid (2017) when the ASEAN economic crisis that occurred in 1997, many ASEAN countries were in a bad condition. Starting from the Thai government, which issued a floating exchange rate policy against the baht currency with the aim of securing foreign exchange reserves and to stimulate income from export activities. However, these efforts failed to be achieved and resulted in an economic crisis that had a negative impact on the Asian region, particularly Southeast Asia and countries that were included in the Asian Economic Miracle countries. Continued in 2008, the world was hit by the global financial crisis, but the macroeconomic and political conditions in Southeast Asia were more ready than in 1997. The impact of the crisis was the depreciation of money which resulted in the price of imported goods becoming high value and demand for domestic production soaring, but the availability was not matched. This was followed by weakening purchasing power globally. In addition, it creates fluctuating and unstable inflation which causes the country's economic growth to be shaken.

This study aims to see the effect of oil price shocks and inflation of each country, namely Indonesia, Thailand and Philippines, on stock returns of each stock index related to the mining sector. Moreover, this study aims to assist investors in deciding their investment activities by looking at factors that can be considered as investment risks.

Arbitrage Pricing Theory (APT) is an asset pricing model and was first introduced by Ross in 1976. According to Lekovic (2017) APT makes a significant contribution to understanding the relationship between returns and risks in the capital market. The APT model is a multi-factor asset valuation model that is usually associated with macroeconomic factors and stock returns. APT is used in research because in APT it is necessary to identify risks that can affect stock returns, for example macroeconomic factors. One of the factors according to Solomon Brothers in Bina Ekonomi Magazine (2010) is that the rate of change in oil prices affect the stock returns. In addition, one of the macroeconomic factors commonly used in several studies using APT analysis is inflation according to Gusni & Riantani (2017).

According to Harerio (2009) the multifactor model is a model that can be used to identify several economic factors that have a significant influence on investment risk, but analysts and investors cannot overcome this. There are two economic factors, namely microeconomics which focus on internal conditions and macroeconomics which focus on external factors, for example inflation, GDP, exchange rates or even world oil prices. According to Yustari (2010) the multifactor model can be used to describe the effect of various factor changes on the level of stock returns. The advantage of the multifactor model according to Bodhi (2009) in Yustari (2010) is that the model is better able to explain returns by identifying several factors than the single-factor model, in this study using two factors, namely oil price shock and inflation.

The effect of oil shock can have an impact on economic activity, one of which is on stock prices and leads to investment activities. The impact of rising oil prices or fluctuating prices can have a negative effect on stock prices and investment activities. Oil shock affects investment by increasing the cost of a company (Sadorsky, 1999; Kilian, 2009 and Henriques & Sadorsky, 2011).

According to Labonte (2011) inflation can be defined as a continuous increase in the price of goods in general, the increase in prices over a long period. The causes of inflation according to Suseno & Astiyah (2009) are divided into three, namely demand inflation, supply inflation and expectation inflation.

### **Hypothesis Development**

#### **Effect of Oil Price Shock on Stock Return of JASICA Mining Index**

According to Algia & Abdelfatteh (2018) oil price shock can be caused by financial shocks which cause a decline in stock prices and affect the stock returns received by investors. Oktavia (2015) in Salim (2018) oil price shock can affect a company's finance in terms of production costs. The impact of an increase in production costs is an increase in product prices and a decrease in the profits received by the company which affects the stock prices and stock returns received by investors. This is supported by the results of research by Hadi, et al. (2009) and Sehgal & Kapur (2012) showing that the oil price shock can affect stock returns from the Indonesian stock market index. Then the hypothesis is formulated as follows.

H1: Oil price shock has a positive effect on stock returns of JASICA Mining Index (IDX)

#### **The Influence of Indonesian Inflation on the Stock Return of JASICA Mining Index**

Tandelilin (2010) in Salim (2018) states that inflation is an increasing on price that occurs continuously which results in weak people's purchasing power. Inflation can affect the companies in producing goods. The companies might earn a small income which makes investors reluctant to invest in the company. The next impact is declining in the company's stock price which results in lower stock returns received by investors

Salim (2018) and Anisa & Darmawan (2018) analyzed the influence of one of the macroeconomic factors, namely inflation on stock returns in the mining sector and the results explained that Indonesia's inflation had a significant negative effect on stock returns in the mining sector listed on the IDX. Through the existing explanations, the following hypothesis is formulated.

H2: Indonesia's inflation has a negative effect on stock returns on the JASICA Mining Index (IDX)

#### **Effect of Oil Price Shock on Stock Return of SET Resources Index**

Mugableh's (2017) research regarding changes in world oil prices on stock returns on the capital market in Southeast Asia shows that changes in world oil prices for the WTI type have a significant positive effect on the Thai capital market represented by the SET index. Furthermore, the research of Tchatoka, et al. (2019) regarding the effect of oil price shock on stock returns in the capital markets of countries that are quite dependent on world oil, one of which is Thailand and the result is that the oil price shock has a positive effect on the stock return of the Thai capital market. So, the following hypothesis is formulated.

H3: Oil price shock has a positive effect on stock returns on SET Resources Index (SET)

#### **The Influence of Thailand's Inflation on the Stock Return of SET Resources Index**

Research by Tarazi & Gallato (2012) looks at the influence of macroeconomic factors, one of which is inflation on stock returns in the Thai capital market, the results show that inflation has a negative effect on stock returns on the Thai capital market. Furthermore, Wulandari (2015) examined the effect of monetary variables on the stock prices of the five ASEAN-5 stock indices, one of the variables is inflation and the results found that inflation has a negative effect on the SET Index stock price which will also have an impact on the SET Index stock return. So, the following hypothesis is formulated.

H4: Thailand's inflation has a negative effect on stock returns on the SET Resources Index (SET)

#### **The Effect of Oil Price Shock on the Stock Return of the PSE Mining and Oil Index**

Research by Nandha & Hammoudeh (2007) shows the sensitivity of stock returns from 15 countries in the Asia Pacific region to changes in world oil prices. The results show that the Philippine capital market is very sensitive to changes in world oil prices. Thus, the result is that there is a significant positive relationship from changes in world oil prices to stock returns from the Philippine capital market. Furthermore, research by Aloui, et al. (2012) classifies the Philippines as a country that is quite dependent on world oil and this study proves that there is a significant and positive relationship between world oil price shocks and stock returns in emerging markets, one of which is the Philippine capital market. The hypothesis is formulated as follows.

H5: Oil price shock has a positive effect on stock returns on the PSE Mining and Oil Index (PSE)

### The Influence of Philippine Inflation on the Stock Return of the Mining and Oil PSE Index

Research by Ho & Odhiambo (2018) which examines the inflation rate, developments in the banking sector, economic growth, exchange rates, and stock market liquidity on the growth of the Philippine capital market. Using ARDL analysis, the results of the study explain that inflation has a negative impact on the growth of the Philippine capital market because it has an impact on stock prices and stock returns. Another study from Carino, et al. (2013) which examines the effect of macroeconomic factors, namely the amount of money supply, interest rates, CPI (inflation), t-bills rate, PSEi stock price and exchange rate on stock returns on stock indices from the market. the capital of the Philippines. Analysis using VECM results that inflation negatively affects the stock return of the Philippine capital market index. Therefore, based on the previous explanation, the following hypothesis can be formulated.

H6. Inflation in the Philippines has a negative effect on stock returns on the PSE Mining and Oil Index (PSE)

### METHOD

The data analysis technique of this research uses quantitative analysis with multiple linear regression which is processed using the EViews 10 application. The steps to carry out research data analysis are descriptive statistics, classical assumption tests consisting of multicollinearity test, autocorrelation test, normality test and heteroscedasticity test. Followed by hypothesis testing with the coefficient of determination (R<sup>2</sup>), simultaneous test (F test) and partial test (T test).

The data used is secondary data sourced from Bloomberg, the investing website, the Bank Indonesia (BI) website, the trading economics website and the Philippine Statistics Authority website. The population of this study is the mining sector stock index price data published by the Indonesia Stock Exchange (IDX), the SET Resources index published by the Stock Exchange of Thailand and the PSE Mining and Oil index published by the Philippine Stock Exchange. In addition, the world oil price of West Texas Intermediate (WTI) type and inflation rates in Indonesia, Thailand and Philippines.

Selection of research samples using purposive sampling technique. The sample selection criteria that can be used as data for this research are the monthly closing price of WTI oil from January 2015 to December 2019, the closing price of the mining sector stock index on the IDX, the PSE Mining and Oil index from PSE and the SET Resources index. Then, the inflation data of Indonesia, Thailand and Philippines on a monthly basis from January 2015 to December 2019.

### RESULT AND DISCUSSION

Table 1 below describes the results of descriptive statistics which include minimum value, maximum value, average, median, standard deviation, skewness and kurtosis.

**Table 1.** Descriptive Statistics Results

	JASICA Mining Index			SET Resources Index			PSE Mining and Oil Index		
	X1	X2	Y	X1	X2	Y	X1	X2	Y
Mean	0.00094	0.0399	0.00435	0.00094	0.00375	0.00597	0.00094	-0.0094	0.02497
Median	0.00579	0.03405	-0.0078	0.00579	0.004	0.01353	0.00579	-0.0026	0.0245
Maximum	0.09939	0.0726	0.24967	0.09939	0.0162	0.09875	0.09939	0.17334	0.067
Minimum	-0.1084	0.0248	-0.1265	-0.1084	-0.0127	-0.0938	-0.1084	-0.136	-0.004
Std.Dev.	0.04077	0.01372	0.06948	0.04077	0.00792	0.04684	0.04077	0.05876	0.01775
Skewness	-0.3504	1.43463	0.85799	-0.3504	-0.4899	-0.2568	-0.3504	-0.0477	0.63584
Kurtosis	3.44048	3.65913	4.1963	3.44048	2.29554	2.2151	3.44048	3.61409	2.78977

Source: E-Views 10 output, processed 2020

Information :

X1 : Oil price shock

X2 : Inflation of each country

Y : Return stocks from each stock index

Oil price shock has a skewness value of -0,3504 which indicates a negative value that can be interpreted that the data distribution has a long tail on the left side and kurtosis worth 3.44048 which has leptocurtic properties. Furthermore, Indonesia's inflation has a skewness value of 1.43463 which shows a positive value and means the data has a long tail on the right and kurtosis worth 3.65913 which means it has leptocurtic properties. Then, the stock return of JASICA Mining Index has a skewness value of 0.85799 which shows a positive value and is interpreted as having a long tail on the right and a kurtosis worth 4,1963 which means it has leptocurtic properties.

Furthermore, Thailand's inflation has a skewness value of -0.4899 which indicates a negative value which is defined as having a long tail value on the left and kurtosis having a value of 2,29554 which means having a platykurtic nature. Return on stock SET Resources has a value of skewness -0.2568 which has a negative value so it can be interpreted that the data has a long tail on the left and kurtosis has a value of 2,2151 which means it has platykurtic properties. Furthermore, Philippine inflation has a skewness value of -0.0477 which indicates a negative value, so it can be interpreted that the data has a long tail on the left and has a kurtosis value of 3.61409 which is leptocurtic because it has a value of more than 3. Finally, PSE Index stock return Mining and Oil has a skewness value of 0.63584 which indicates a positive value which means that the data has a long tail on the right and a kurtosis of 2.78977 which is platykurtic.

Hypothesis testing using the coefficient of determination (R<sup>2</sup>), F test and T test after the fulfillment of the classical assumption test which consists of normality test, autocorrelation, multicollinearity and heteroscedasticity are as follows.

Table 2 presents the results of the coefficient of determination which is useful for measuring how far the independent variable affects the dependent variable. The results obtained on the JASICA Mining Index have the meaning that the independent variables (oil price shock and inflation in the State of Indonesia) have an effect on stock returns of the JASICA Mining Index by 13.10%, while at 86.90% other variables are obtained. Then, the SET Resources Index means that the independent variables (oil price shock and inflation in Thailand) have an effect on stock returns of the SET Resources Index by 23.45%, while 76.55% is influenced by other variables. Finally, the PSE Mining and Oil Index means that the independent variables (oil price shock and inflation in the Philippines) have an effect on stock returns on the PSE Mining and Oil Index by 4.36%, while 95.64% is influenced by other variables outside of the study.

**Table 2.** Determination Coefficient Test Results

Index Name	Coefficient of Determination (R <sup>2</sup> )
JASICA Mining	0,131015
SET Resources	0,234481
PSE Mining and Oil	0,043574

Source: E-Views 10 output, processed 2020

Table 3 presents the results of the F test which is useful for seeing whether there is a significant effect of the independent variable on the dependent variable simultaneously. The results show that the JASICA Mining Index has a probability value of F-Statistic less than the significance value ( $\alpha = 5\%$ ), which is 0.018275. It means that the oil price shock and inflation in the Indonesian State simultaneously have a significant effect on stock returns on the JASICA Mining Index. Furthermore, SET Resources Index has a probability value of F-Statistic less than the significance value, which is 0.000493. It means that the oil price shock and inflation in Thailand simultaneously have a significant effect on stock returns on SET Resources Index. Finally, the PSE Mining and Oil Index has an F-Statistic probability value of more than the significance level, which is 0.280910. It means that the oil price shock and inflation in the Philippines simultaneously do not have a significant effect on stock returns on the PSE Mining and Oil Index.

**Table 3.** Simultaneous Test Results (F-test)

Index Name	Prob. (F-Statistic)
JASICA Mining	0,018275
SET Resources	0,000493
PSE Mining and Oil	0,280910

Source: E-Views 10 output, processed 2020

Table 4 presents the results of the T test which is useful for determining the effect of each independent variable on the dependent variable. The results of the JASICA Mining Index show that the oil price shock variable using a significance value of 10% has a significant effect on stock returns. JASICA Mining Index is evidenced by the prob value. The T-Statistic is less than the significance value. Indonesia's inflation has a significant effect on stock returns of JASICA Mining. Furthermore, the SET Resources Index shows that the oil price shock variable has a significant effect on stock returns of the SET Resources Index. However, inflation in Thailand has no significant effect on stock returns because it has a prob value. The T-Statistic is more than the level of significance. Finally, the PSE Mining and Oil Index states that the oil price shock variable does not have a significant effect on stock returns of the PSE Mining and Oil Index, as well as inflation in the Philippines also has no significant effect on stock returns on the PSE Mining and Oil Index as evidenced by the prob value. The T-Statistic is more than the level of significance.

**Table 4.** Partial Test Results (T-test)

	RETJM		RETSR		RETPMO	
	OPS	INFIN	OPS	INFTH	OPS	INFIL
<b>Prob. t-Statistic</b>	0,0583	0,0630	0,0001	0,5769	0,1414	0,5766
<b>Coefficient</b>	0,4110	-1,1985	0,5458	0,3856	0,2786	-0,2409

Source: E-Views 10 output, processed 2020

## CONCLUSION AND RECOMMENDATION

Hypothesis 1 (H1) is proven, namely oil price shock has a significant positive effect on stock returns on the JASICA Mining index. Then, hypothesis 2 (H2) is proven, Indonesia's inflation has a significant negative effect on stock returns on the JASICA Mining index. Furthermore, hypothesis 3 (H3) is proven, namely that the oil price shock has a significant positive effect on stock returns on the SET Resources index. Hypothesis 4 (H4) is not proven, because inflation in Thailand has no significant effect on stock returns on the SET Resources index. Hypothesis 5 (H5) is not proven, because the oil price shock has no significant effect on stock returns on the PSE Mining and Oil index. Finally, hypothesis 6 (H6) is not proven, because inflation in the Philippines has no significant effect on stock returns on the PSE Mining and Oil index.

The results of this study can provide as an input for investors who will carry out investments. Firstly, investors should be able to see the conditions of stock returns on each stock index. Secondly, investors should also be able to know and observe factors that affect stock returns from a stock index, including oil price shocks and inflation.

Further research can add other macroeconomic variables, apart from inflation which can affect stock returns. Besides that, it is can also include other countries in ASEAN, apart from only three countries, Indonesia, Thailand and the Philippines.

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## The Effect of Non Performing Financing and Bank Indonesia Sharia Certificates (SBIS) on Financing of Natural Uncertainty Contract (NUC) with Third Party Fund (DPK) as a Moderating Variable

Tri Utami<sup>1</sup>✉, Dila Angraini<sup>2</sup>, Dea Annisa<sup>3</sup>, Wiwit Irawati<sup>4</sup>

<sup>1</sup> Bachelor of Accounting Study Program, Faculty of Economics , Universitas Pamulang, Indonesia

<sup>2</sup> Bachelor of Accounting Study Program, Faculty of Economics , Universitas Pamulang, Indonesia

<sup>3</sup> Bachelor of Accounting Study Program, Faculty of Economics , Universitas Pamulang, Indonesia

<sup>4</sup> Bachelor of Accounting Study Program, Faculty of Economics , Universitas Pamulang, Indonesia

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### Abstract

*This type of research is quantitative associative and the data used is the annual data on the financial statements of Islamic Commercial Banks registered with the Financial Services Authority for the 2015-2018 period, totalling 14 BUS. The sample is determined using a purposive sampling method. The number of Islamic Commercial Banks studied was 8 with a research period of 4 years to obtain 32 samples. This study uses the Multiple Linear Regression method, using the help of the EViews 9 program. From the results of hypothesis testing, it is found that the variable financing problems and SBIS have a joint effect on NUC. However, partially problematic financing has no effect on NUC and SBIS has a positive effect on NUC. With TPF as a moderating variable, the test results using the Moderated Regression Analysis technique show that TPF does not moderate the effect of non-performing financing (NPF) on NUC but TPF can moderate the effect of the SBIS variable on NUC.*

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✉correspondence address:

Faculty of Economics , Universitas Pamulang, Indonesia  
Jalan Surya Kencana No. 1 Tangerang Selatan, Indonesia  
E-mail: [gendisutami27@gmail.com](mailto:gendisutami27@gmail.com)

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**INTRODUCTION**

In its development, Islamic Banking has progressed quite rapidly. Islamic banking is a bank that implements financial transactions following the values and principles of sharia in Islam. Currently, Islamic banking in Indonesia has developed and is progressing well. We can prove this with the increasing number of offices of Islamic financial institutions in Indonesia. In 2018, there were 14 Islamic Commercial Banks with a total of 1,875 offices, 20 Sharia Business Units with 354 offices, and a BPRS with 167 banks and 495 offices. (Otoritas Jasa Keuangan, 2018).

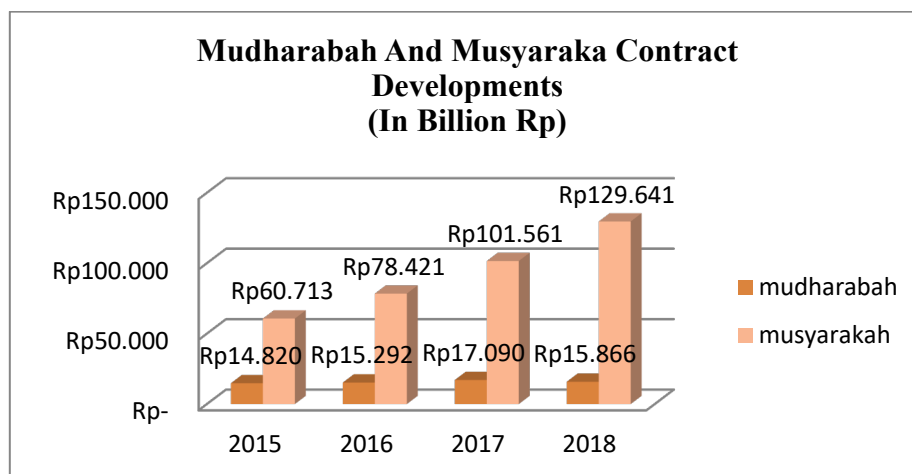
The objective of Islamic banking is to support the implementation of national development, such as providing support to the real sector through financing according to sharia principles and real transactions (intermediation function), in the context of equitable distribution of people's welfare. Financing as an effort by financial institutions to move the real sector has received high attention from Islamic banking. In channeling financing, Islamic banks can provide various types of contracts, namely: mudaraba, musyarakah, murabahah, salam, istishna', ijarah, and qardh (Wardiantika, 2014)

In operation, in Islamic commercial banks, there are two concepts in the use of a contract, the first is the concept of a natural certainty contract (NCC), the concept of a natural certainty contract is a concept in which there are two parties who exchange their assets so that the object of exchange is good. goods or services must also be determined at the beginning of the contract with certainty, in terms of quantity, quality, price, and time of delivery (Karim, 2014)

These contracts offer a fixed and definite return. The contract in the contract is a sale and purchase contract, which uses the following contracts: Murabahah, Salam, and Istishna. Meanwhile, the lease agreement is Ijarah and IMBT. As well as Qard is used in social transactions. And the second concept is the natural uncertainty contract (NUC), which is a concept in which the transaction mixes the assets of the parties involved (both real assets and financial assets) into a single unit and takes the risk together for profit. In the NUC concept, the advantages and disadvantages are shared. Therefore, this contract does not provide certainty of income (return), both in terms of quantity and time. Included in this contract are investment contracts that do not offer fixed and definite returns. In Islamic banking, the contract is in the concept of the NUC (profit sharing), namely: Musharaka and Mudharabah (Karim, 2014)

These two types of financing, namely Musharaka and Mudharabah, are financing following the main characteristic of Islamic banking, namely profit-sharing-based financing, but in its development, this natural uncertainty contract financing has not yet dominated sharia reform. As of December 2018, the financing that still dominates Islamic banking is Murabahah financing or financing in terms of buying and selling. Therefore, Islamic banking must continue to increase the distribution of funds on the profit-sharing principle where the Islamic banking policy in determining the nominal amount of financing needs to consider internal factors that can pose risks so that Islamic banking can also minimize risk.

In Figure 1, you can see that there are two profit-sharing contracts in the natural uncertainty contract concept used in Islamic banking, namely the Mudharabah contract and the Musyarakah contract. Judging from the graph, the musyarakah contract has always increased from 2015 to 2018. While the mudharabah contract has increased gradually from 2015 to 2017 and in 2018 has decreased.



**Figure1.** Mudharabah and Musyarakah Contract Developments  
 Source: OJK, 2019

Profit-sharing financing with the mudharabah contract is still far behind from the musyarakah contract, so it is necessary to examine what factors can affect the amount of financing using the NUC contract to increase the distribution of funds in financing with the profit-sharing principle where the bank's policy is to determine the amount of disbursement of funds in financing for the results also need to consider various factors so that the possible risks that occur can be avoided or minimized. Mudharabah and musyarakah financing has differences in the distribution of capital and business management, as well as profit sharing. If mudharabah financing, the bank contributes 100% of the capital, while the customer only manages the business. Profit-sharing is based on the amount of capital contributed. For musharaka financing, the bank and the customer both contribute capital and manage the business, usually 60%:40%. Profit-sharing is also based on the amount of capital included in the business (Permata, 2014).

The ability to channel funds is influenced by several factors that can be measured from the internal and external sides of a bank. From the internal side, one of them is influenced by the ability of banks to collect public funds (Husaeni, 2017). Third-Party Funds (DPK) are the main reason for a bank institution to maintain its liquidity level. Third-party funds are a very important source of funds for Islamic banks because these funds will be channeled in the form of financing to people who are short of funds (Umarih, 2020). Previous research was conducted by Pradesyah, (2015) who tested the influence of NPF and DPK on Mudharabah financing. Meanwhile, research conducted by (Angraini & Sumantri, 2019) with partial NPF results has no effect on profit-sharing financing, while TPF has a positive effect on profit-sharing financing. In a study conducted by (Badruzaman, 2009), it was found that the Bank Indonesia Wadiah Certificate had an effect on mudharabah financing.

**Table 1.** Composition of Non-Performing Financing, SBIS, and TPF in Islamic Banking in Indonesia for the Period 2015-2018

<b>Period</b>	<b>DPK (Billion Rp)</b>	<b>Non-Performing Financing / NPF (%)</b>	<b>SBIS (Billion Rp)</b>
2015	174.895	4,84	25.797
2016	206.407	4,42	34.755
2017	238.393	4,76	41.162
2018	257.606	3,26	37.800

Source: Sharia Banking Statistics (SPS) December 2018, Processed

In table 1, it can be seen that Third Party Funds have increased each year, namely Rp. 174,895 billion in 2015 and then increased in 2016 by Rp. 206,407 billion and in 2017 it increased by 13.41% to Rp. 238,393 billion and increased again by 7.45% in 2018 to IDR 257,606 billion. In problem financing, it fluctuates where in 2015 the percentage was 4.84%, in 2016 it decreased 0.42% to 4.42% and in 2017 it increased by 0.34% to 4.76%, and in 2018 decreased to 3.26%. The data also fluctuates in SBIS, namely, in 2015 the number of SBIS was IDR 25,797 billion, in 2016 it increased to IDR 34,755 billion, and in 2017 SBIS increased to IDR 41,162 billion, and in 2018 SBIS decreased to IDR 37,800 billion.

There are several results from previous studies, including The variable Third Party Funds (DPK) has an effect on Mudharabah and Musyarakah Financing (Untari, 2017). The variable of Third Party Funds (DPK) has an effect on profit-sharing financing (Gumilarty, 2016). The results of these two studies imply that the greater, the third-party funds collected by Islamic banks, the greater the amount of revenue sharing financing distributed. The SBIS variable in previous research, namely (Gumilarty, 2016) research, the placement of funds in SBIS has an effect on profit-sharing financing. (Nurbaiti, 2017) Non-Performing Financing (NPF) has an effect on profit-sharing financing. Whereas in Robiyah's (2016) research, NPF has an effect on mudharabah financing in a positive direction. Based on differences in the results of previous studies, this study takes the NPF and SBIS variables as independent variables with DPK as a moderating variable towards NUC.

According to (Karim, 2014) Mixed theory is a theory that discusses how contracts are used in transactions or products in Islamic banking. In this type of contract, the transacting parties mix their assets, both real assets, and financing assets, into one unit, and then assume the risk together for profit. Here, profits and losses are shared according to the agreement at the beginning of the contract.

In this theory, there are two pillars, namely: Mixing Object consists of 'Ayn (real assets) in the form of goods and services and Dayn (financial assets) in the form of money and securities. From these two objects, three types of mixing can be identified, namely Mixing real assets ('Ayn) with real assets ('Ayn) and Mixing real assets ('Ayn) with financial assets (Dayn). Mixing financial assets (Dayn) with financial assets (Dayn) consist of 'Ayn (real assets) in the

form of goods and services and Dayn (financial assets) in the form of money and securities. From these two objects, three types of mixing can be identified, namely: (1) Mixing real assets ('Ayn) with real assets ('Ayn), (2) Mixing real assets ('Ayn) with financial assets (Dayn), and (3) Mixing financial assets (Dayn) with financial assets (Dayn). The second is Mixing Time. In terms of time, this theory is divided into two times of submission, namely Naqdan (Immediate delivery), namely delivery right away, and Ghairunaqdan (Deferred delivery) namely later delivery.

Natural Uncertainty Contract (NUC) is a contract or contract with a business that does not provide certainty of income (return), both in terms of quantity and time. The income level can be positive, negative, or zero. Included in this contract are investment contracts, this contract does not offer a fixed and definite return. In this type of contract, the transacting parties mix their assets (both real assets and financial assets) into a single unit and share the risk for profit. In this contract, the profits and losses are shared (Karim, 2014). In this case, according to (Soemitra, 2019), the financing of the NUC contract includes the financing of the Musyarakah and Muudharabah contracts.

Law No. 21, 2008 concerning Islamic banking states that, "Deposits are funds entrusted by customers to Sharia Banks and/or laws based on Akadwadi'ah or other contracts that do not conflict with sharia principles in the form of Giro, Savings, or other forms equivalent ". Non-Performing Financing (NPF) is a ratio that compares the level of non-performing financing (qualified financing) to the total financing provided (Bank Indonesia, 2018). Based on BI Regulation Number 15/2 / PBI / 2013, banks are considered to have potential difficulties that endanger their business continuity if one of them has a net non-performing loan / non-performing financing ratio of more than 5% of total credit (Utami, 2018). Based on Bank Indonesia Regulation Number 10/11 / PBI concerning Bank Indonesia Sharia Certificates are short-term securities based on sharia principles in rupiah currency issued by Bank Indonesia. According to (Arifin, 2009). What is meant by Sharia Bank Indonesia Certificate (SBIS) is a certificate issued by Bank Indonesia as evidence of short-term deposits of funds. SBIS is a monetary instrument that conforms to the principles of Islamic banks created in the context of implementing monetary control.

Figure 2 explains partially through H2 and H3 the effect of each NPF and SBIS variable on the NUC variable, and also explains simultaneously through H1 the effect between the NPF and SBIS variables on the Y variable. and H5 the effect of the DPK variable as moderating SBIS on NUC. The following is a picture description of the framework in this study:

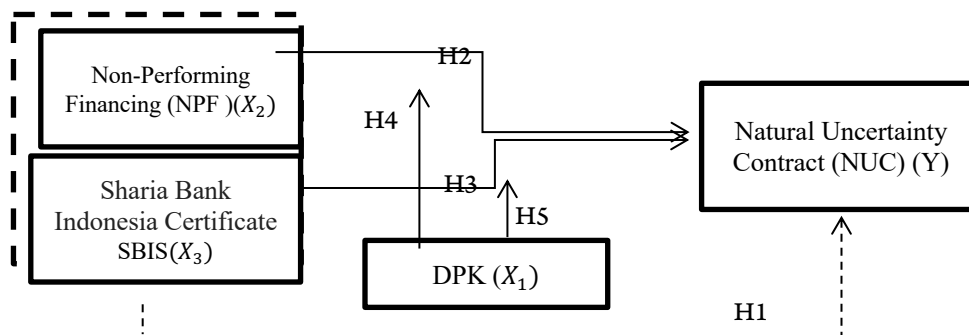


Figure 2. Research Framework

**METHOD**

In this research, the type of research used is quantitative research. Operational data used in this study uses panel data. According to Ghozali (2017) Panel data is a combination of time series data and cross-section data. The population in this study were 14 Islamic commercial banks registered with the OJK for the 2015-2018 period. The technique used in determining the sample is purposive sampling with the following criteria: 1) Islamic Commercial Banks registered with the Financial Services Authority. 2) Islamic Commercial Banks in the financial statements for the 2015 - 2018 period, there are variables used by researchers. 3) Islamic commercial banks that regularly publish annual financial reports during the observation period, namely 2015 to 2018, and in the processing there are 2 outliers of data so that 32 sample units are obtained consisting of 8 Islamic commercial banks with 4 research periods. year. The data analysis technique used in this study is the Multiple Linear Regression analysis technique using the EVIEWS 9 program and Microsoft Excel 2010.

According to Sugiyono (2017), the dependent variable is the variable that is influenced or becomes the result because there are independent variables. The dependent variable in this study is the Natural Uncertainty Contract which is a contract or contract in a business that does not provide certainty of income (return), both in terms of quantity and time. The income level can be positive, negative, or zero. Included in the Natural Uncertainty Contract financing variable are Mudharabah financing and Musyarakah financing. So to determine the financing of the NUC contract using the formula:

$$\text{Natural Certanty Contact (NUC)} = \text{Musyarakah Financing} + \text{Mudharabah Financing}$$

The independent variable affects the emergence of a dependent variable. The independent variables used in this study are non-performing financing (NPF), and Bank Indonesia Syariah certificates. Here is the formula for measuring the NPF level:

$$NPF = \left( \frac{\text{Bad Financing}}{\text{Total Financing}} \times 100 \% \right)$$

Bank Indonesia publishes monetary instruments based on sharia principles and can be used by Islamic banks to overcome excess liquidity levels. The following formula can be used :

$$SBIS = LN (\text{Amount of Fund Placement in SBIS})$$

*Source: PBI No. 10/11/PBI/2008*

According to Sugiyono (2017), the moderating variable is a variable that affects (strengthens or weakens) the direct relationship between the independent variable and the dependent variable. The moderating variable is a type of variable that has an effect on the nature or direction of the relationship between variables. The nature or direction of the relationship between the independent variables and the dependent variables may be positive or negative, in this case depending on the moderating variable. The moderating variable (z) in this study is third-party funds. In the calculation, you can use the following formula (Soemitra, 2019) :

$$\text{Third-Party Fund} = \text{Giro Wadi'ah} + \text{Saving Wadi'ah} + \text{Saving Mudharabah} + \text{Deposit Mudharabah}$$

Because there is a moderating variable, one of the hypothesis testing in this study was carried out using Moderated Regression Analysis (MRA). MRA is a special tool in multiple linear regression testing, which in the regression equation contains an element of interaction (Ghozali, 2012).

## RESULT AND DISCUSSION

The first step in this research is descriptive statistical analysis. Based on descriptive statistical analysis, the following are the results of descriptive statistical calculations:

**Table 2.** Statistik Deskriptif

	NUC	C	NPF	SBIS	DPK
Mean	2995642.	1.000000	2.914375	27.55875	27.30656
Median	2257878.	1.000000	3.005000	27.69500	27.22000
Maximum	8040485.	1.000000	4.970000	29.39000	29.81000
Minimum	57611.00	1.000000	0.040000	24.29000	24.34000
Std. Dev.	2362751.	0.000000	1.525036	1.315821	1.498833
Observations	32	32	32	32	32

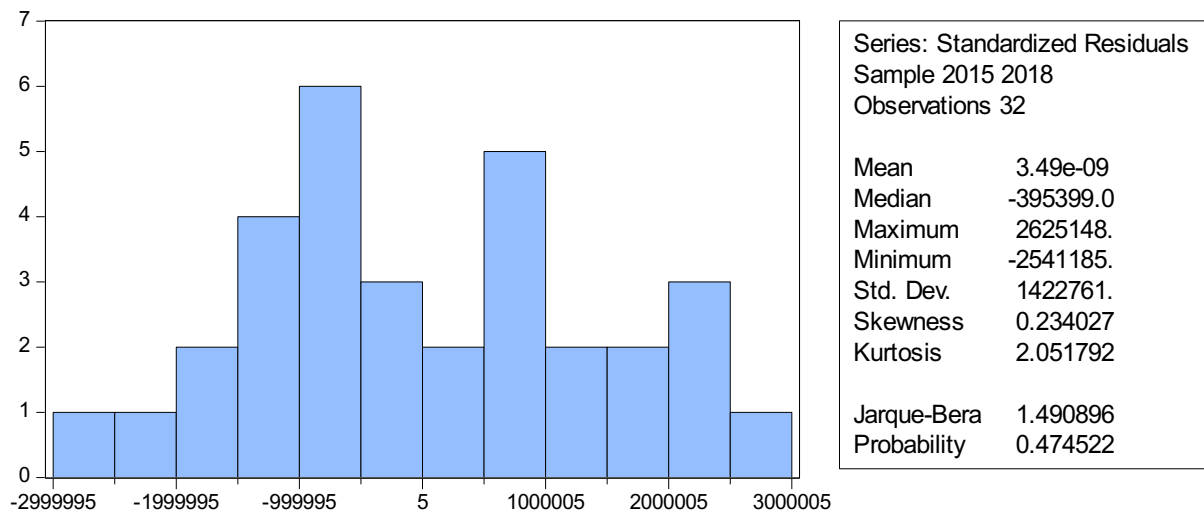
Source: *output EViews 9, 2020*

From the data above, it can be seen that the average value of the NUC is 2,995,642 with a standard deviation value of 2,362,751. The average value of TPF was 27.31 with a standard deviation of 1.49. The average value of Troubled Financing is 2.91 with a standard deviation of 1.52. The average value of LN SBIS was 27.56 with a standard

deviation of 1.31. A standard deviation value that is smaller than the average value indicates that the data is representative of the population. After that, panel data regression analysis was carried out for 32 observation data by performing the Chow test, Hausman test, and Lagrange Multiplier (LM) test. From the three models, the model is chosen between the common effect model, the fixed-effect model, and the random effect model, so after testing the most appropriate model is the random effect model. Furthermore, the classical assumption test analysis is carried out by performing the normality test, non-multicollinearity test, non-heteroscedasticity test, and non-autocorrelation test. From the test results that have been carried out, the observational data has no constraints on the classical assumption test, here are the results

From the results of the normality test, it is known that the prob value is  $0.474522 > 0.05$ , it can be concluded that the data is normally distributed.

**Table 3.** Normality Test



Source: *output EViews 9, 2020*

**Table 4.** Heteroscedasticity Test

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	22985055	10501138	2.188816	0.0401
NPF	165918.8	98467.60	1.685009	0.1068
SBIS	-221306.5	308698.7	-0.716901	0.4813
DPK	-584499.4	351046.1	-1.665022	0.1108

Source: *output EViews 9, 2020*

With the test results obtained the prob value of each independent variable  $> 0.05$ , it can be concluded that there is no heteroskedasticity problem.

**Table 5.** Multicollinearity Test

	NPF	SBIS	DPK
NPF	1.000000	-0.144595	-0.448570
SBIS	-0.144595	1.000000	0.480081
DPK	-0.448570	0.480081	1.000000

Source: *output EViews 9, 2020*

From the results shown in the table, the correlation value between independent variables and moderating variables is not more than 0.9, so there is no multicollinearity problem.

**Table 6.** Autokolerasi Test

R-squared	0.899106	Mean dependent var	1409005.
Adjusted R-squared	0.851062	S.D. dependent var	1060438.
S.E. of regression	409249.8	Akaike info criterion	28.94833
Sum squared resid	3.52E+12	Schwarz criterion	29.45217
Log-likelihood	-452.1732	Hannan-Quinn criter.	29.11534
F-statistic	18.71398	Durbin-Watson stat	1.941134
Prob(F-statistic)	0.000000		

Source: *output EViews 9, 2020*

From the results of the Durbin Watson value  $-2 < 1.941 < 2$ , there is no autocorrelation problem. The next stage is to test the hypothesis with the following table showing the results of the hypothesis testing:

**Table 7.** f Test

R-squared	0.384884	Mean dependent var	1221915.
Adjusted R-squared	0.318978	S.D. dependent var	1347023.
S.E. of regression	1111618.	Sum squared resid	3.46E+13
F-statistic	5.839947	Durbin-Watson stat	1.731497
Prob(F-statistic)	0.003137		

Source: *output EViews 9, 2020*

**Table 8.** t-Test

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-20393158	11027323	-1.849330	0.0750
NPF	-45837.78	164542.4	-0.278577	0.7826
SBIS	1537841.	393713.0	3.905995	0.0005
DPK	-690624.6	375266.1	-1.840360	0.0763

Source: *output EViews 9, 2020*

From the results of the MRA stage 1 test, it is known that the NPF variable is an independent, intervening, exogenous, antecedent, or predictor variable (Sugiono, 2017). Shown by the probability value of DPK against the NUC Akad of  $0.0001 < 0.005$  while the value of  $DPK * NPF$  against the NUC Akad is  $0.8415 > 0.05$ .

**Table 9.** Moderate Regression Analysis Step 1

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-49950885	12034219	-4.150737	0.0003
NPF	610119.2	2875183.	0.212202	0.8335
DPK	1935564.	439138.0	4.407645	0.0001
DPK*NPF	-21268.97	105356.3	-0.201877	0.8415

Source: *output EViews 9, 2020*

Meanwhile, the results of the second stage MRA analysis showed that the DPK variable moderated the effect of the SBIS variable on the NUC contract with a prob value of  $0.0004 < 0.05$ . From the following table, the SBIS and DPK variables partially have an effect on the NUC Akad. With these results, it can be said that TPF is a Quasi Moderator variable (Sugiono, 2017).

**Table 10.** Tabel 9. Moderate Regression Analysis Step 2

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	3.50E+08	99994433	3.504248	0.0016
SBIS	-13998303	3515450.	-3.981938	0.0004
DPK	-13311446	3791662.	-3.510716	0.0015
DPK_SBIS	532727.3	132509.3	4.020303	0.0004

Source: *output EViews 9, 2020*

Based on the results of hypothesis testing, the results show that problematic financing and Bank Indonesia Syariah Certificates simultaneously affect the Financing of Natural Uncertainty Contracts (NUC) at Islamic Commercial Banks in Indonesia in 2015-2018. These results are proven by a significance value of  $0.000000 < 0, 05$  which means that the independent variables have a simultaneous effect on the dependent variable. The results of this study are in line with research in (Gumilarty, 2016) research that the independent variables of DPK, NPF, ROA, SBIS, and TBHt-1 together have a significant effect on profit-sharing financing (2010-2014 period). And in Robiyah's research (2016) the results of his research show that Third Party Funds (DPK), Non-Performing Financing (NPF), Bank Indonesia Sharia Certificates (SBIS), and Financing to Deposit Ratio (FDR) simultaneously have a significant effect on mudharabah financing in Islamic banking in Indonesia (2012 - 2015 period).

Based on partial hypothesis testing, it is known that problematic financing has no effect on the financing of the Natural Uncertainty Contract (NUC) contract. This result is evidenced by the sig value. 0.261 indicates a significance value greater than the probability value 0.05 ( $0.261 > 0.05$ ). While the value of t count = 1.145 and t table of 2.04841 so that the value of t count  $< t$  table ( $1.104653 < 2.04841$ ).

This means that an increase in the ratio of non-performing financing (NPF) owned by a bank is not followed by a decrease in the financing of the NUC contract that the bank will distribute to the public. So that the bank continues to channel third-party funds collected in the bank in the form of financing to the community regardless of the ratio of non-performing financing up or down in each period. The results of this study are supported by (Arfiani & Mulazid, 2017) with the partial results Non-Performing Financing (NPF) has no significant effect on mudharabah savings and research (Umiyati & Ana, 2020) with NPF results have no effect on financing in BUS 2011-2015.

Based on partial hypothesis testing, it is known that the Bank Indonesia Syariah Certificate (SBIS) has an effect on the financing of the Natural Uncertainty Contract (NUC) contract. This result is evidenced by the sig value. 0.000 means that the significance value is smaller than the probability value 0.05 ( $0.000 < 0.05$ ). While the value of t-count is 5.506 and t table is 2.04841, so that the t-count  $> t$ -table ( $5.506 > 2.04841$ ).

From the test results, the analysis can be concluded that the SBIS is a monetary financial instrument used by Bank Indonesia following sharia principles. With the existence of SBIS, Islamic banks have several reserves of funds when the bank's financial condition is unstable, or there is a large-scale withdrawal by depositors of funds. This will affect the financing with profit-sharing contracts distributed by the bank. The greater the placement of SBIS funds, the smaller the risk of liquidation problems in Islamic banks. Thus, Islamic banks can still provide financing to the public with several savings funds available in Islamic banks.

Based on testing using the Moderate Regression Analysis technique, the results show that TPF does not moderate the NPF variable against the NUC Akad with a prob value  $> 0.05$ . From the results of this test, it is interpreted that NPF is a deposit of funds from the public which is then managed by the bank in the form of distribution of financing. However, the size of the funds received from the public does not affect the number of ratios from problem financing because the tendency for problem financing to emerging is caused by external factors from the bank, such as the character of customers and the country's economic conditions.

Based on testing using the Moderate Regression Analysis technique, the results show that TPF moderates the SBIS variable to the NUC Akad with a prob value  $> 0.05$ . From the test results, it can be interpreted that TPF, which is the deposit of funds from the public, is the main source of capital for banks in carrying out their operational activities apart from other sources of capital. Meanwhile, SBIS represents short-term deposits from commercial banks to Bank Indonesia, where the allocation of funds deposited depends on how much funds the commercial banks have before deciding the percentage of funds to be allocated for these short-term deposits. However, if the greater the amount of funds stored in the Central Bank, the ratio of funds to be allocated for financing, both buying and selling, leasing, or profit-sharing will be less, therefore SBIS has a negative influence on the NUC Akad. It is in this position that TPF as the main source of bank capital plays a very important role in deciding how much of the funds raised will be allocated for short-term deposits at the Central Bank and to be channeled in the form of financing.

## CONCLUSION AND RECOMMENDATION

Based on panel data regression analysis, it is concluded that Variable of Third Party Funds (DPK), Non-Performing Financing, and Bank Indonesia Sharia Certificate (SBIS) simultaneously or together have a positive and significant effect on the Financing of Natural Uncertainty Contracts (NUC) at Islamic Commercial Banks in Indonesia in 2015-2018. Partially problematic financing variables do not have an effect on Natural Uncertainty Contract (NUC) Financing. Partially the variable of Bank Indonesia Sharia Certificate (SBIS) has an influence on the Financing of Natural Uncertainty Contract (NUC) The DPK variable does not moderate the effect of NPF on the NUC. From the results of the MRA stage 1 test, it is known that the NPF variable is an independent, intervening, exogenous, antecedent, or predictor variable. Shown by the probability value of DPK against the NUC. The DPK variable moderates by strengthening the influence of SBIS on the NUC Akad. the DPK variable moderated the effect of the SBIS variable on the NUC contract. From the following table, the SBIS and DPK variables partially have an effect on the NUC Akad. With these results, it can be said that DPK is a Quasi Moderator variable.

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**The Impact of Gelora Manahan Solo Renovation on Persis Solo Potential Sport Tourism**Febrianur Ibnu Fitroh Sukono Putra <sup>1✉</sup>, Diana Aqmala <sup>2</sup>, Aflit Nuryulia Praswati<sup>3</sup><sup>1</sup>Management, Faculty of Economics and Business, Dian Nuswantoro University, Indonesia<sup>2</sup>Management, Faculty of Economics and Business, Dian Nuswantoro University, Indonesia<sup>3</sup>Management, Faculty of Economics and Business, Muhammadiyah Surakarta University, Indonesia**Article Information***Article history:*

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**Abstract**

Football is an extraordinary type of tourism in the sports sector which is very popular in the world, which the matches of football teams being tourist attraction objects that provide benefits for the organizers of the competition and the football club itself. Indonesian football competition has been participated by many professional teams, one of them is PERSIS Solo who participated in league 2. This research aims to analyze the potential interest in PERSIS Solo sports tourism in Surakarta after the renovation program of the Manahan Solo Stadium. This type of research is descriptive qualitative. The analysis method uses SWOT (strengths, weaknesses, opportunities, and threats). Internal environment analysis will focus on strengths and weaknesses, while the external environment will be the focus on opportunities and threats. The results showed that PERSIS Solo was in the quadrant I position, so the management of the club could take a policy with utilizing the strength of the internal environment to maximize existing market opportunities.

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✉Correspondence address:

Fakultas Ekonomi dan Bisnis Universitas Dian Nuswantoro, Jl. Imam Bonjol No.207,  
Pendrikan Kidul, Kec. Semarang Tengah, Kota Semarang, Jawa Tengah 50131  
E-mail: febrianur3@gmail.com

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**INTRODUCTION**

Global tourism sector development entering the 21st century has experienced a shift in tourist’s consumption patterns. The trend in the 80s in Europe, tourists visiting destinations together in large numbers (mass tourism) through programs provided from tour and travel services (Abujamous et al., 2019). Along with the times, the consumption pattern of tourism nowadays is changing to tourism with a more specific desire or often called special interest tourism. Special interest tourism comes with the aim of satisfying tourists according to the specific wishes that have been planned, so they will pay more or give "tips" to the tour organizers so that emotional stimulation such as optimal and varied experiences is formed. The limited available time makes tourists not only want to buy a product but also want to buy a valuable taste and experience (Mandulangi & Towoliu, 2019). The sports industry is one of the very important aspects and makes a significant contribution to economic development in a country. In various developed countries such as America, Britain, Germany, France, Italy, Korea, and China, sports have become one of the leading industries as a supplier of foreign exchange. Special interest tourism in the sports sector is a recreational experience that has a positive economic impact in various countries, based on research which shows that the contribution of sports to the gross domestic product in industrialized countries is between 1-2%, while the contribution of tourism is between 4-6%. Besides that, the sport has also been designed as a modern industry on a global scale. In building national character, the sport has become an industrial identity that authentically has added value and significant competitiveness (Seyidov & Adomaitienė, 2017).

The type of sport that is very popular nowadays in the world is football. Football is a special attraction with various atmospheres in every match held, so the public interest to watch it is very high. In fact, not only a few people travel to other countries just to enliven football events. Several football events such as inter-club leagues until international competitions provide special experiences for tourists or supporters who are present to watch. These tourists’ visits will certainly provide income for the organizers and the government concerned so that it has a positive economic impact (Rudkin & Abhijit, 2017). Football is a major player in city development even up to country- level because football fans do not only have a small and compartmentalized scope but have a very wide range throughout the world. Two clubs from Manchester in England, for example, with football matches being held at both Manchester United’s Old Trafford and Manchester City’s Etihad Stadium, hotels in the city of Manchester have an average occupancy rate of 85%, compared to non-match days of 70%. Another example is when the Etihad Stadium holds a UEFA Champions League match between Manchester City and Spanish giants Real Madrid, the occupancy rate in the city of Manchester is at a level of 97% (STR Global Occupancy Rates, 2016). In Manchester City, as reported, football being able to contribute in increasing promotion to foreign countries so that Manchester city becomes one of the tourist destinations must be visited when visiting England. Football also has a positive impact in the financial sector with a total value of £ 330m a year for the economy of Manchester city, with 8,500 jobs involved to support the sport. Tourist’s consumption averages while watching matches in the Premier League up to £ 856 and gives a greater advantage to the country than inbound visitors from other countries to England who spend only £ 626 (Edrak et al., 2016).

In Indonesia, sports sector industry development still requires the active participation of the community to provide excellent sport (Sheng & Chen, 2016). Nowadays, football in Indonesia has been joined by elite professional teams in all cities in Indonesia, one of which is PERSIS Solo based in Surakarta. PERSIS Solo is one of the biggest clubs in Indonesia, founded in 1923. Whenever there is a match at Manahan Solo, it can attract thousands of visits from supporters or tourists (event sport tourism). The average ticket sold in each PERSIS Solo match is up to 21,778 tickets (Sambenyawa, 2014). Even though it has a large supporter base whose presence has a positive impact on club income, PERSIS Solo still has obstacles, namely inconsistency in attracting more tourists visiting, this is due to the team’s performance and operational expenses in competing not proportional upon the club’s main source income which is from the audience ticket.

**Table 1. Main Facilities Capacity Comparison for GBK Stadium and Manahan Stadium in Solo**

No	FACILITIES	CAPACITY	
		GBK	MANAHAN SOLO
1	Main stadium (soccer field)	88.000	25.000
2	Aquatic stadium	9.500	2.500
3	Velodrome	-	500
4	Futsal court	-	3.500

Source: (Ismawati & Astuti, 2020).

The data listed above shows several facilities in Manahan Stadium Solo complex compared to GBK complex, where venue ownership is more complete at Manahan Stadium Solo. This also shows that Manahan Stadium Solo has high potential to improve its quality to the international arena, however, it is necessary to improve capacity building sector in each venue. The U-20 World Cup which will be held in Indonesia provides an opportunity for all of the best stadium managers in the country to register their venue to support the event become successful. FIFA announced that Manahan Stadium Solo was chosen as one of the venues to hold the U-20 world cup competition which encouraged the city government of Surakarta to positively welcome the event because it could increase the competitiveness of Solo City, support cultural city tourism, and the proud football team it owns, PERSIS Solo. The preparations planned by the government are improving sports tourism destinations by renovating various owned venues and also inviting the PERSIS Solo team and their supporters to support these activities. Manahan Stadium Solo is also famous for organizing various events including League 1, League 2, international matches, athletic competitions, and various festivals.

A study conducted by Putri (2020) stated that sports development in a national sports system is developed through three pillars, namely educational sports, recreational sports, and achievement sports. Educational sports are an integral part of education which is carried out both in formal and non-formal paths through intra and extracurricular activities. Recreational sports aim to develop public awareness to improve health, fitness, pleasure, and social relations, while achievement sports are devoted to achieving achievements in the district, national, regional, and international championships. Meanwhile, a study conducted by Rawe (2018) showed that sports facilities are an important component in supporting the implementation of an element of sports development. Without adequate sports facilities, it is difficult to expect society or public participation in sports activities. In a study conducted by Sivrikaya et al. (2018), it is found that sports infrastructure is every necessary thing for sports implementation activities in the form of buildings, fields, and equipment. Sports facilities and infrastructure are used in sports coaching, with complete facilities and infrastructure, sports coaching will be easier to do.

The urgency of this study is to contribute to the planning of the Surakarta City Government regarding the renovation program of the Manahan Stadium Solo as a form of venue selection and as an increase in the standard of ability to hold international matches. PERSIS Solo management should manage this positive issue to increase sports tourism and increase club finances so that they can continue to exist and compete in the national football industry because as we know, the club from Solo has long been in League 2. In the implementation of sport tourism, the government and public have the opportunity to work together in organizing sports events to improve tourism promotion programs in Indonesia generally and in Surakarta city particularly. The existence of potential sport tourism in the tourism development of Surakarta City has a positive impact on the number and duration of tourist visits, economic improvement, transportation services, and the tourism industry. Based on the above background, it is necessary to have a strategic formulation as an effort of PERSIS Solo to maximize the tourism attractiveness from the community. The increasing number of tourists will have an increasingly positive impact on the existence, quality of players, and club human resources to support the local government program of Solo City. This study aims to analyze the impact of Manahan Stadium renovation on the improvement of the PERSIS Solo sports tourism program using the SWOT method, by analyzing strengths and weaknesses of the internal side, analyzing opportunities and threats from the external side, and also formulating development strategies.

## **Tourism**

Tourism is a phenomenon of the need for health and a change of atmosphere, a conscious assessment and growing (love) of natural beauty and in particular the increasing association of various nations and classes of human society as a result of the development of commerce, industry, trade, and the improvement of transportation means (Sivrikaya et al., 2018). Another definition explains that tourism is a trip from one place to another, temporary in nature, carried out individually or in groups, as an effort to find balance or harmony and happiness with the environment in the social, cultural, natural, and scientific dimensions (Astuti, 2015). A trip will be considered as a tourist trip if meets three requirements: temporary, voluntary which means that it does not occur due to coercion, and does not work which generates wages. Tourism objects form can be in the form of natural tourism objects such as mountains, lakes, rivers, beaches, sea, or in the form of building tourism objects such as museums, forts, historical heritage sites, and other forms of tourist objects. The implementation of tourism with a good managerial system can provide several benefits, including tourism plays an important role in the implementation of national unity with various people backgrounds from different regions and various customs, supporting State income with foreign

currency, thereby reducing the deficit in the balance of payments, and tourism will help a region or country to have strong competitiveness and existence in the industry (Manhas et al., 2016).

As a strong social connector, sport can bring people together, expand and strengthen social relationships and networks, link people to resources, and provide them with a sense of belonging. Social relations are a basic determinant of health but are often lack for people marginalized by poverty, disease, discrimination, or even conflict. Sports can also be used to reduce social stigma experienced by marginalized groups, such as people with disabilities, people with HIV-AIDS, and others. When holding sport that involving these people with other members of normal society, it creates shared spaces and shared experiences that can help break the stigma of negative perceptions and allow people to focus on what they have in common rather than looking at caste. This is an important step in fostering emotional bonds between individuals and helps give a positive impression that sports have a unifying tourism attraction (Zeki Akinci & Kasalak, 2016). Sport can play a valuable role as a communicator of education and health sectors for social community mobilization. In the sports sector by engaging and mobilizing high-profile elite athletes, professional sports clubs, and federations, this power of communication can be harnessed to provide critical health information and messages, model healthy lifestyle behaviors, and gather resources for health initiatives. At the community level, popular sports events offer a local platform for providing education and information on health that can serve as a starting point for movement in support of health promotion, vaccination, and control efforts (Jönsson & Lewis, 2014).

### **Special Interest Tourism**

Special interest tourism is an adventure that can be defined as a form of tourism travel carried out in a location that has unique and authentic physical attributes by emphasizing the elements of challenge, recreation, and the achievement of a tourist's desires through involvement/interaction with natural elements. Tourists who are involved in special interest tourism can be divided into two, the light group (Soft Adventure) which sees their involvement as more of a desire to try new activities, so the difficulty level of the challenges they are taking tends to be at a mild level or not too difficult and a heavy group (Hard Adventure) which sees their participation in an adventure of special interest tourism activity as more of a goal or main motivation, so they tend to be more actively and seriously involved in the activities they participate in. This group tends to look for products that offer challenge difficulties at levels above the average (Brotherton & Himmetoğlu, 2015).

Special interest tourism rests on two main things, *novelty-seeking*, which means the motivation to search for unique and new objects and tourist attractions, or the search/exploration of new more challenging locations for the types of tourist attractions observed and *quality seeking*, which means the motivation to search for the forms of tourist objects and attractions that can provide meaningful value for tourists, value for enrichment or self-development, value for challenges or adventures, and value of new knowledge or insights. One of the characteristics of special interest tourism is product quality offered in the form of quality experience (Putra et al., 2020). *Quality experience* in special interest tourism is obtained through active participation. With the active participation of tourists, both physically and psychologically will feel the objects or tourist activities that they participate in (Adinegara et al., 2017).

### **Sport Tourism**

Sports tourism is the main motivation for traveling, although elements of travel can amplify the overall experience. According to Undang-Undang No 3 of 2005 concerning the National Sports System stated that sports tourism is a sport carried out by people with passion and ability that grows and develops by conditions and cultural values of the local community for health, fitness, and joy (Woo-Sik Choi et al., 2016). Another definition says that sports tourism is a journey of people visiting certain places for a while in which there is a sports tourism attraction, both natural, cultural, and artificial, aiming to participate both actively and passively to fulfill pleasure or satisfaction. The main motive of tourists wanting to visit major sporting events is because of pleasure followed by the factor of finding entertainment and a place that aims to get satisfying and memorable personal experiences (Uvinha et al., 2018). Tourism for Sports (Sports Tourism), this type of tourism can be divided into two categories, namely the *Big Sports Event* which is one type of tourism carried out due to major sports events such as the Olympics Games, World Cup, and others. Furthermore, there is also a type of *Sporting Tourism of the Practitioner*, which is a type of sports tourism for those who want to practice and practice these sports empirically, such as mountain climbing, horse riding, etc. to gain self-experience (Nahar et al., 2019).

The impact of existence of sport tourism has several findings, first finding is the types of work that are included in the main group and have an effect on sports tourism are services-based jobs or economic services such as sales, maintenance and personal care. The second finding implies the need to understand from which segments an area's population can make a profit from sports tourism. Event managers can create predictive models to determine the size of events and expenses needed to cover costs (Edrak et al., 2016). The existence of this research-based positive information source can encourage for managers and government officials, as well as the community to express their potential ideas so that their area can become one of the main destinations for sports tourism (Jiménez-García et al., 2020).

### **Gelora Manahan Stadium Solo**

Gelora Manahan was built in 1988, completed, and inaugurated in 1992 by Mrs. Tien Soeharto, the whole process was completed and used in 1998. The Gelora development project itself is handled by the consultant Tripanoto Sari, with the person in charge of Ir. Franky du ville. The idea of building the Manahan stadium was initiated by R. Maladi and then received a response from former president Soeharto. Sometimes people asked why the name R. Maladi is currently used for the Sriwedari stadium, not for the Gelora Manahan, this is because previously the ownership status of Gelora Manahan was not yet fully belonging to the Surakarta city government, but still owned by the Cendana family, which later gave the name Gelora Manahan according to the name of the place. The Gelora Manahan area is designed not only to host professional sports events but also to provide facilities for the entire Surakarta community, especially in sports activities. Apart from being a sports area for the people of Surakarta, the Gelora Manahan area is also a communal space, which is used as a place to gather together for various activities. For Indonesian football lovers, the name of Gelora Manahan is not a strange thing, this is because the Manahan stadium is one of the 8 best stadiums (national standard A) in Indonesia nowadays, and is often used to hold several important matches. Even though it received an A standard by BLI (*Badan Liga Indonesia* - the Indonesian league agency), but the current condition is still lacking in various things, such as the drainage system (current repair process), supporting facilities, etc., so some improvements are still needed (Putri, 2020).

The main building of the stadium consists of 3 floors (west and east side), and 2 floors (north and south side). The audience stands are divided into 3, namely: the economic stands in the east, the economy stands in the south and the north, as well as the VIP stands, and the VVIP (west side) with roof covers. The function of the main building of this stadium is not only for football matches but is used for athletic championships such as running, throwing discs, and others (you can see the running track in the picture above). Besides, the rooms designed according to the character of the stands are used for various things, including the stadium management room, the Surakarta KONI secretariat, services, and several martial arts training sites. Service facilities are arguably incomplete, for example, on the 2nd and 3rd floors on the east side, which are accessible to the economic stands, no toilets were provided, which caused some of the audience to urinate/defecate in the back of the stands, besides that there was also no canteen which led to the entry of hawkers into the stands which, although disturbing but also needed by some of the audience. Therefore, it is still necessary to re-plan or add basic facilities, the provision of facilities is divided according to the needs of the audience in each stand. The concept of distributing counters and entrances to the stands is very good in anticipating the crowds that may have caused riots, but the problem here is that the design of the door itself is less innovative, quite troublesome, and allows spectators to enter without tickets. The lighting in the Manahan stadium is good enough for a stadium in Indonesia, namely using 800 lux lamps, but by international standards, it is 1200 lux. Then for the very important scoreboard, it is not active, even if it is active it is still not standard because it should use a digital scoreboard. Meanwhile, the acoustic element for the audience is also not maximal, almost all viewers did not hear comments from the committee on the Commentary Seat (Ismawati & Astuti, 2020).

### **SWOT analysis**

SWOT analysis is one of the most widely recognized internal and external analysis instruments for companies environment. This analysis is based on the assumption that an effective strategy will minimize weaknesses and avoid threats. When applied accurately, this simple assumption has a positive and significant impact on the design of a successful strategy (Gürel & Tat, 2017). Another definition states that SWOT analysis is an evaluation system of the overall internal environment (strengths and weaknesses) or external environment (opportunities and threats) which is based on the assumption that an effective strategy will create success for a company. The function of a SWOT analysis is to obtain information from situation analysis and separate it into

internal issues (strengths and weaknesses) and external issues (opportunities and threats). The SWOT analysis will explain information that indicates strategic information that will help the company achieve its goals or provide an indication that there are obstacles that must be faced or minimized to meet the desired outcomes (Musanganya & Sinumvayo, 2017). The strategic decision-making process is always related to the development of the mission, objectives, strategies, and policies of the company. Thus the strategic planner must analyze the company's strategic factors and issues related to strengths, weaknesses, opportunities, and threats in current conditions which are often referred to as situation analysis.

**Strength** is a resource of skills or other advantages relative to competitors and the market needs to be served by the company or organization. Strengths are specific competencies that provide a company with a comparative advantage in the market. **Weakness** is a limitation or deficiency in resources, skills, and capabilities that seriously hinders the effective performance of a company or organization. Facilities, financial resources, management capabilities, marketing skills, brand image can be sources of weakness.

**Opportunities** are important situations that benefit a company or organization. Important trends are one source of opportunity. Identification of market segments that were previously neglected, changes in competitive situations or regulations, changes in technology, and improved relationships with buyers or suppliers can provide opportunities for companies or organizations. **Threat** is an important unfavorable situation in a company or organizational environment. The threats are a major deterrent to the current position that organizations desire. The entry of new competitors, slower market growth, increased bargaining power of important buyers or suppliers, technological changes and new or revised regulations can pose future threats. In summary, opportunities in the external environment reflect possibilities where threats are potential constraints. Threats are the opposite meaning of the opportunity, thus it can be said that threats are environmental factors that are not beneficial to a business unit, if not addressed, threats will become obstacles to the business unit concerned both for the present and the future.

**METHOD**

The research type is descriptive qualitative research. Descriptive qualitative research aims to make a systematic, factual, and accurate description of a social or natural phenomenon (Igwenagu, 2016). The focus of the research is to identify the strengths, weaknesses, opportunities, and threats of the PERSIS Solo football club as an object of sport tourism, and to analyze the formulation of optimal strategy for developing PERSIS Solo football club as an object sports tourism. The location of this research is the Gelora Manahan Solo Stadium as the venue for the PERSIS Solo football club when home match. The second location is the PERSIS Solo football club office. The interview process will be conducted with management and supporters. The results of these interviews will be used as information for the evaluation and preparation of strategic formulations to support the PERSIS Solo football club as sports tourism. External environment interviews are included in the EFAS (External Strategic Factor Analysis Summary) matrix and internal environment interviews are included in the IFAS (Internal Strategic Factor Analysis Summary) matrix. After the internal and external strategic factors matrix is completed, the results will be included in a SWOT Matrix qualitative to formulate a competitive strategy (Musanganya & Sinumvayo, 2017). The filling out of EFAS (External Strategic Factor Analysis Summary) matrix table and the IFAS (Internal Strategic Factor Analysis Summary) matrix table are as follows:

**Table 1. Internal Strategic Factor Analysis Summary (IFAS)**

Strategic Factors	Weight	Rating	Score
Internal			
(1)	(2)	(3)	(4) = (2x3)
Strength			
1)			
2)			
3)			
Weakness			
1)			
2)			
3)			

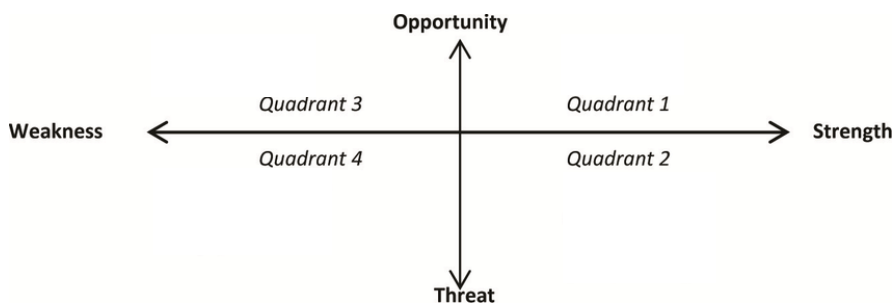
Source: (Ashutosh et al., 2020)

**Table 2. External Strategic Factor Analysis Summary (EFAS)**

Strategic Factors	Weight	Rating	Score
External			
(1)	(2)	(3)	(4) = (2x3)
Opportunities			
1)			
2)			
3)			
Threat			
1)			
2)			
3)			

Source: (Ashutosh et al., 2020)

The weights on the IFAS (Internal Strategic Factor Analysis Summary) and EFAS (External Strategic Factor Analysis Summary) tables are carried out on each factor from 0.0 (not important) to 1 (most important), then giving a rating from 1 to 4 for each external and internal factors about how important they are.



**Figure 1. SWOT Analysis Quadrant**

Source: (Gürel & Tat, 2017)

Quadrant 1 is a very favorable situation. The company has opportunities and strengths so it can take advantage of existing opportunities optimally. The effective strategy that must be applied in this condition is to support an aggressive growth policy (Growth-oriented strategy). Meanwhile, in quadrant 2, despite facing various threats, this company still has strength from an internal perspective. The effective strategy that must be implemented is to manage internal strengths to take advantage of long-term opportunities with a diversification strategy (product or market). In quadrant 3 the company faces a very large market opportunity, they face several obstacles or weaknesses in internal capabilities. The business conditions in quadrant 3 are similar to Question marks in the Boston Consulting Group Matrix. The focus of the company's strategy is to minimize internal problems so it can seize potential market opportunities. Quadrant 4 is a very unfavorable situation because the company faces various threats and weaknesses on the internal side, so the effective strategy adopted is to minimize internal weaknesses to avoid various unfavorable threats in the future.

## RESULT AND DISCUSSION

### SWOT ANALYSIS OF PERSIS SOLO AS SPORT TOURISM

#### *Strength*

Ownership of player human resources and good academy management will make management more confident in developing the club. PERSIS Solo has a venue with a fairly complete infrastructure due to the good cooperation with the relevant government so that the home matches are well facilitated. The availability of a mess for players' lodging and adequate club transportation. The fanaticism of the supporters and fans of PERSIS Solo, nicknamed Pasoepati, gave its aura and interest when visited Surakarta (Solo) because of its historical story. A



strong brand image that PERSIS Solo is the most competitive Liga 2 team with other big teams such as PERSIJAP Jepara, PERSIK Kediri, PSMS Medan, and Mitra Kukar.

**Weakness**

The identified weakness factors of PERSIS Solo include management delays in making breakthroughs in the field of sports science and technology innovation, sports tourism product packages still do not have a well-prepared and comprehensive concept, for example, meet and greet with players and stadium tours both aimed for fans or general tourists. There has been no consistent collaboration with related agencies regarding sports tourism in Surakarta city.

**Opportunities**

Supporters' and fanatical loyalty in the form of support for PERSIS Solo is a culture inherent in the city of Surakarta (Solo). The development of increasingly sophisticated technology, especially in the mobile sector, will facilitate club management in expanding market share and tourism units in Surakarta, increasing public interest in sports especially football in Surakarta, and increasing the need for tourist destinations, as well as economic growth due to tourists on vacation and visiting Surakarta city. (Solo).

**Threat**

The first threat is the decline in PERSIS Solo achievements in the Indonesian football competition. Second, the inconsistency of Indonesian football regulations and frequent conflicts between competition participants and PSSI, as well as with the government. Determination of the match schedule that can change at any time.

**IDENTIFICATION OF STRATEGIC TOURISM SPORT WITH IFAS & EFAS**

**Table 3.** Results of the *Internal Strategic Factor Analysis Summary (IFAS) Matrix*

Factor	Weight (W)	Rating (R)	Weighted (WxR)
<b>Strenght</b>			
Player HR	0,1	2	0,2
Infrastructure	0,25	4	1,0
Fanaticism of fans	0,15	4	0,6
Brand Image	0,1	3	0,3
<b>Total</b>	<b>0,6</b>		<b>2,1</b>
<b>Weakness</b>			
Delayed in innovation	0,2	3	0,6
The packaging of sport tourism packages is not good yet	0,15	4	0,6
The discourse on cooperation with related governments is not yet integrated	0,05	2	0,1
<b>Total</b>	<b>0,4</b>		<b>1,3</b>
<b>S-W gap</b>			<b>0,8</b>

Source: Results of data processing, 2020.

Based on the weighting results in the IFAS table above, it can be identified that the internal position of PERSIS Solo is determined by the gap between strength (S) and weakness (W) which results in a value of 0.8.

**Table 4.** Results of the *External Strategic Factor Analysis Summary (EFAS) Matrix*

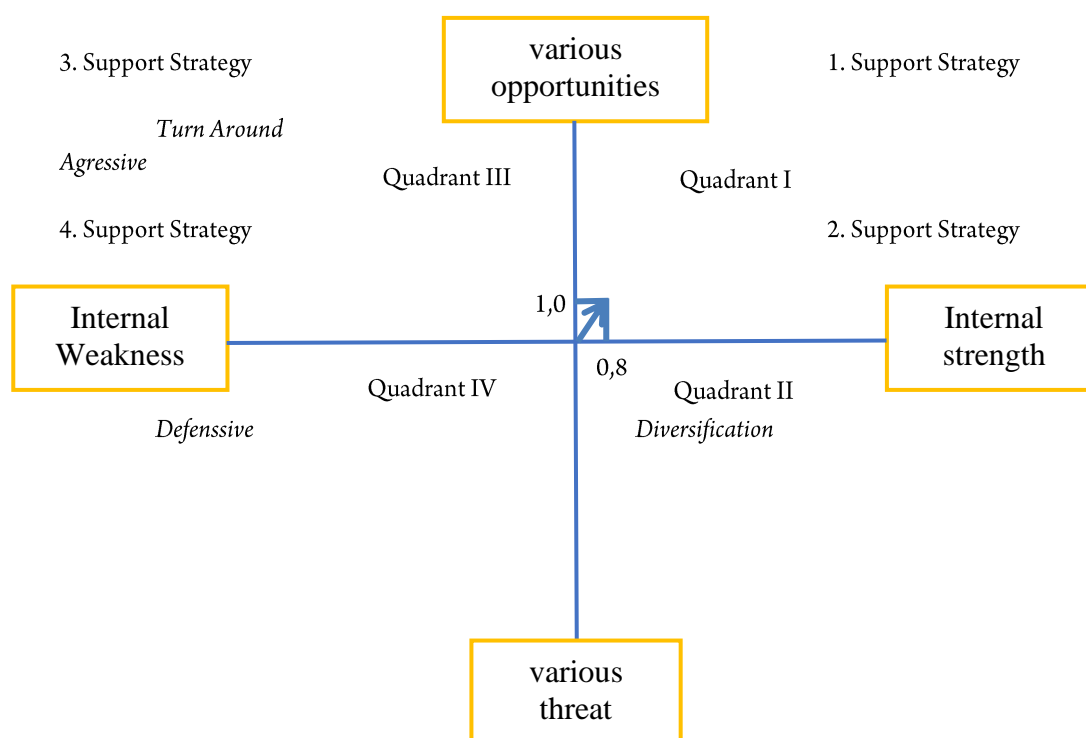
Factor	Weight (W)	Rating (R)	Weighted (WxR)
<b>Opportunities</b>			
Loyalty of the public or tourists to football	0,15	3	0,45
Development of mobile technology	0,2	3	0,6
Increase in special interest tourism	0,15	4	0,6
Economic growth	0,15	3	0,45
<b>Total</b>	<b>0,65</b>		<b>2,1</b>
<b>Threat</b>			
The decline in club performance	0,2	3	0,6
Inconsistency of football competition regulations	0,1	4	0,4

Match schedule that can change at any time	0,05	2	0,1
<b>Total</b>	<b>0,35</b>		<b>1,1</b>
<b>O-T gap</b>			<b>1,0</b>

Source: Results of data processing, 2020.

Based on the weighting results in the EFAS table, it can be identified that the external position of PERSIS Solo is determined by the gap between opportunities (O) and threat (T) which results in a value of 1,0.

The following is a picture of PERSIS Solo position after identifying the internal environment with IFAS and identifying the external environment with EFAS which shows that quadrant I is the best result of the SWOT analysis that has been carried out. These results provide recommendations that the potential for profitable growth for PERSIS Solo as a sports tourism object in Surakarta city can be done by utilizing existing strengths to maximize opportunities.



**Figure 2.** SWOT Analysis Quadrant Results

Growth strategy is the strategy most often sought and attempted by companies to continue to grow consistently so that the company can survive in the industry (Hunger & Wheelen, 2012). Two reasons a growth strategy is so desirable, among others, that a growing company can easily minimize errors and inefficiencies compared to a stable company and a growing company also offers many opportunities for promotions and other interesting jobs to establish profitable partnerships. The results of the identification of internal and external factors showed positive results, which means that the strength of PERSIS Solo is relatively superior to its weaknesses in the potential to become an object of sport tourism, while the external environment has a greater chance of being successful than the threat. Therefore, PERSIS Solo can turn the potency into a better achievement and performance, so that the right direction for management policies to be implemented is by the S-O strategy to maximize the various opportunities that exist as in the following table:

**Table 5.** Analysis of PERSIS Solo SWOT Matrix

<b>Internal Strategic Factor Analysis Summary (IFAS)</b>  <b>External Strategic Factor Analysis Summary (EFAS)</b>	<b>Strength</b>	<b>Weakness</b>
	<ol style="list-style-type: none"> <li>1. HR Player</li> <li>2. Infrastructure</li> <li>3. The Fanaticism of supporters through attractions</li> <li>4. <i>Brand image</i></li> </ol>	<ol style="list-style-type: none"> <li>1. Delay in innovation in the field of sports science and technology</li> <li>2. The packaging of sport tourism packages is not good yet</li> <li>3. The discourse on cooperation with related governments is not yet integrated</li> </ol>
<b>Opportunities</b>	<b>S-O Strategies</b>	<b>W-O Strategies</b>
<ol style="list-style-type: none"> <li>1. Loyalty of the public or tourists to football</li> <li>2. Development of mobile technology</li> <li>3. Increase in <i>special interest tourism</i></li> <li>4. Economic growth</li> </ol>	<ol style="list-style-type: none"> <li>1. Providing the best infrastructure on an international scale will increase the special interest tourism of tourists from local to international and support the economic growth of Surakarta City</li> <li>2. The enhancement of PERSIS Solo brand image raises the potential for the increasing loyalty of Surakarta people to football which is also supported by the development of mobile technology so that it is better managed</li> </ol>	<ol style="list-style-type: none"> <li>1. Developing mobile technology that provides a choice of sports tourism packages according to consumer preferences is a practical first step for the club to attract tourists to visit</li> <li>2. The realization of integrated cooperation with the relevant government will facilitate objectives achievement in the economic growth of Surakarta in the tourism sector</li> </ol>
<b>Threat</b>	<b>Strategi S-T</b>	<b>Strategi W-T</b>
<ol style="list-style-type: none"> <li>1. The decline in club performance</li> <li>2. Inconsistency of football competition regulations</li> <li>3. Match schedule that can change at any time</li> </ol>	<ol style="list-style-type: none"> <li>1. Improving the quality of human resources for players to maintain the stability of the club's achievements and also be able to boost the club's achievement even higher</li> </ol>	<ol style="list-style-type: none"> <li>1. Accelerating innovation in the field of sports science and technology will help clubs improve their achievements even better</li> <li>2. The realization of cooperation between clubs and related governments will help clubs deal with inconsistencies in football competition regulations</li> </ol>

Source: Processed data, 2020.

The results of the analysis in this study provide an increased understanding to Surakarta City government about the need to consider the tourism sector in the sports sector, especially football as an important part of the regional development program, and support the existence of PERSIS Solo in the national football industry. Besides, optimal management of football clubs and sports facilities will be one of the positive track records for Surakarta City as one of the potential cities that have a high selling value in the sports tourism sector, so if the country holds an event, Surakarta is one of the priority choices as a host that meets standards requirement. The complexity of Surakarta City tourism development program plan can be implemented more optimally because the football sector in Indonesia will experience rapid development and provide various kinds of positive impacts, especially from an

economic perspective if it is managed properly and has the potential to increase the existence of Surakarta city at the national and international levels. Some of the benefits and costs that will be obtained are as follows:

**Table 6.** Benefits and Costs of the Economic Perspective of Sports Tourism in Surakarta

NO	BENEFITS	COSTS
1	Creating job opportunities and improving the quality of regional human resources	Increased license fees and prices for tourism services
2	Bring increased income opportunities for regions, companies and MSMEs	Increased maintenance costs for various sports facilities that have been built
3	Increase income tax and increase the potential for tourist visits	Increase in the cost of promoting tourism visits
4	Increase the amount of investment in infrastructure and sports facilities	
5	Increase business networks on a regional to national scale	

Source: Processed data, 2020.

## CONCLUSION AND RECOMMENDATION

Based on the results of this research about the potential of Surakarta City and PERSIS Solo sport tourism, the researcher can conclude there are several factors obtained have potential as strengths, weaknesses, opportunities, and threats to increase PERSIS Solo attractiveness as sport tourism. The strength factors which PERSIS Solo has as a sport tourism include improving infrastructure, human resources for players and academy coaches with optimally owned and managed, showcasing attractions from supporter creativity, and the famous PERSIS Solo brand image which can be used as an expand market potential strategies. Meanwhile, the weakness factors for PERSIS Solo as a potential for sports tourism include the delay of from management to breakthroughs innovation of sports science and technology facility, special tour packages for fans such as stadium tours, meet and great with club players. The PERSIS Solo opportunities factors as a potential sport tourism include the advancement of current technology development makes the management promote the club easier to the national level, the fanaticism of Surakarta football fans community, ease of accessibility from the Surakarta City government for sport tourists to attendance every match at the Gelora Manahan Solo Stadium, and increasing society in special interest tourism. The threat factors which include security facilities during matches, especially big match, television broadcast rights which are replaced by live streaming technological developments, and unstable situation of league competition. The results also show the potential of PERSIS Solo sport tourism is in quadrant I situation which aggressive growth (growth oriented strategy) because PERSIS Solo has good internal conditions (strength) so it can be used to maximize opportunities. The club management has best strategic formulation such as renovating sports infrastructure with international standards supported by sophisticated technology which can improve the economy of Surakarta City, increasing special interest tourism growth from domestic to foreign tourists, and increasing the loyalty of Surakarta society to football.

The limitations of this research include the object only use Indonesian League 2 club, so the results obtained, are less comprehensive. The suggestions for further research include researchers should have completely information database so it can further contribution to development of sport tourism in Indonesia. The suggestions for club management are develop new destinations and build a sport tourism unit based on security, cleanliness, healthy, beauty, hospitality, and full of memories spot. PERSIS Solo management should also adapt to use sports science and technology innovations such as coaching, medicine, match analysis, and performance analysis so it can improve club existence and competitiveness at national level.

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## Effectiveness of Individual Performance Dialogue on Employee Performance (Case Studies on Civil Servants of the Ministry of Finance in City of Semarang)

Ni Made Watimena Sudiarti<sup>1</sup>, Edi Noersasongko<sup>2</sup>, Yuventius Tyas Catur Pramudi<sup>3</sup>✉

<sup>1</sup>Kementrian Keuangan Wil Kota Semarang

<sup>2</sup>Magister Management, Faculty of Economics and Business, Dian Nuswantoro University, Indonesia

<sup>3</sup>Magister Management, Faculty of Economics and Business, Dian Nuswantoro University, Indonesia

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### Abstract

*Bureaucratic Reform in human resources began with the birth of Law No. 5 of 2014 on State Civil Apparatus (ASN). The new paradigm in the ASN Law makes ASN employees a profession that has an obligation to conduct self-development and must take responsibility for performance and apply merit principles in the implementation of ASN management. The Ministry of Finance followed up the Bureaucratic Reform in hr with performance management policies. Performance management in the Environment of the Ministry of Finance consists of three main stages, namely planning, monitoring, and determining performance results and evaluation. Performance evaluation results determine the performance value of employees and organizations, which affects employee careers and compensation. The solution by the Ministry of Finance is to implement management practices called Organizational Performance Dialogue (DKO) and Individual Performance Dialogue (DKI) whose main purpose is to improve the performance of employees and organization. This research is explanatory, where the research method used is Partial Least Square (PLS), with software for analysis using SmartPLS. Data collection instruments using questionnaires and structured interviews with research respondents are employees of the Ministry of Finance in Semarang City area. This research aims to know the effectiveness of performance dialogue on employee performance, so that the results are expected to be a reference in management practices in organizational units in the environment of the Ministry of Finance in an effort to improve the performance of employees and organizations.*

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✉Correspondence address:

Fakultas Ekonomi dan Bisnis Universitas Dian Nuswantoro, Jl. Imam Bonjol No.207,  
Pendrikan Kidul, Kec. Semarang Tengah, Kota Semarang, Jawa Tengah 50131  
E-mail: tyas.catur@dsn.dinus.ac.id

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## INTRODUCTION

Good governance and supported by quality human resources are the spearheads in realizing government programs. Recognising this, his government has gone to great lengths to pursue and accelerate better governance improvements. Bureaucratic Reform is one of the efforts made by the government that is applied to all Ministries and Institutions and Local Governments. The grand plan in the form of The Grand Design of Bureaucratic Reform was announced in 2010-2025 where the policy was established and affirmed in Government Regulation Number 81 of 2010.

The improvement of governance through the Bureaucratic Reforms set out in PP 81 in 2010 cannot be implemented at once, so it needs to be implemented gradually, but sustainably. The government's hope is that in 2014, there has been a strengthening in some ways, one of which is a professional HR Apparatus supported by a procurement and promotion system based on competence, openness, and being able to realize the salary and welfare guarantee of commensurate employees. The new paradigm in the ASN Law is to make employees of the State Civil Apparatus as a profession with an obligation to bear performance, conduct self-development and be obliged to implement merit system in the implementation of management. Civil Servant's career development pattern is one important thing that needs to be underlined in the implementation of merit system, where civil servant's career is determined through competency assessment, qualifications, performance, and needs of Government Agencies. This requires government organizations to structure performance management in order to assess employee performance, improve competencies and develop qualifications to determine employee needs.

In relation to performance management, Decree of the Minister of Finance No. 186/KMK.01/2013 is the starting point for Bureaucratic Reform in the Ministry of Finance. Bureaucratic reform must be ensured of success. So to ensure such success needs to be applied assessment model through performance management. Performance management systems are implemented with the aim of increasing staff and organizational performance. The organizational unit as well as all employees in the Ministry of Finance to continue to anticipate challenges and be proactive to always take advantage of opportunities in improving performance. Therefore, leaders in the organizational unit of the superiors and employees need tools that can be utilized as *early warning sistem*. Performance management stipulated in the Decree of the Minister of Finance Number 467/KMK.01/2014 essentially regulates performance assessment procedures, where staffing performance is assessed based on performance achievement and employee behavior. Performance Employee Achievement (CKP) is calculated based on Performance contract and realization, while Behavior Value (NP) calculated using 360 degree assessment method (direct superior, peer and subordinate).

The results of the Ministry of Finance Fitness Index survey in 2015 stated that the nkp calculation model in 467/KMK.01/2014, does not reflect the performance of the employee objectively, so the NKP calculation model needs to be improved in order to distinguish performance between employees more objectively. In the preparation of performance contracts where there are targets that must be achieved by organizational units or individual employees before paying attention to the quality aspects. The achievement value of employee performance is not only based on the percentage of realization towards the target, but should also pay attention to the quality of the target. Performance assessment results have so far been dominated by employees with "excellent" value status, but the problem is:

*Why is employee performance not aligned with the overall performance of the organization?*

*How to structure a quality performance contract? this is a difficult job for the leaders of the organizational unit and the employees in the Ministry of Finance.*

In 2016 the Minister of Finance published Decree No. 234/KMK.01/2016 referring to the recommendations of the Ministry of Finance Fitness Index survey. The decision is a guideline for the calculation of employee performance based on the quality of performance contracts (NKP-K3). Based on these regulations, NKP is calculated with the following formula:  $NKP = (CKP * K3) + NP$ , (CKP \* K3) has a weight of 70%, while NP has a weight of 30%. Employees as human resources in carrying out the tasks charged by the organization and the targets set out in performance contracts, are basically influenced by two main factors: **the first factors** that are self-sourced (individual factors) consist of (competency, motivation, commitment), the second is the factor derived from external employees in the organization namely leadership such as (empowerment, coaching, compensation) directly related to individual employees. **The two factors** should run in harmony, harmony and focus on achieving IKU/KPI targets as a commitment of employees and organizations in carrying out tasks.



ASN's employee placement (mutation and promotion) policy does not fully guarantee the concept of "the right man in the right place". This condition can create gaps that have the potential to hinder the achievement of IKU targets in accordance with performance contracts. The Minister of Finance as the supreme leader has taken anticipatory measures by issuing policies that serve as Management Tools to help the leaders / officials who are employee bosses. The policy implements the Performance Dialogue set forth in Decree No. 590/KMK.01/2016. The decision basically governs the implementation and provides guidance in conducting performance dialogues. The grouping of performance dialogue activities is distinguished into 2 (two) types, namely the Organization Performance Dialog (DKO) implemented by the strategy map holder organizational unit, and the Individual Performance Dialog (DKI) implemented by the organizational unit instead of the strategy map holder. DKO and DKI are implemented periodically, where DKO is a formal communication between superiors and subordinates to discuss the achievement of the organization's strategy, performance, risk, and action plan. While DKI is communication between coach and coachee where direct boss as coach and subordinate as coachee, to discuss performance.

There are several limitations in this study, including that:

- a. *Personal Factors* (individual factors), indicating what an individual employee has. This means that the dimensions of personal factors are very broad, so in this study will be limited to the dimensions of competence, motivation and commitment;
- b. *Leadership factors* (Leadership factors), defined by the ability of managers and team leaders to provide encouragement, guidance, and support. In this study the leadership dimensions to be examined are those that have relevance to the Performance Dialogue i.e. the dimensions of empowerment, coaching and compensation;
- c. Performance Dialogue in accordance with the Decree of the Minister of Finance 590/KMK.01/2016 which will be examined is the dimensions of interaction, work culture and mapping potential;
- d. Employee Performance Variables are limited to the dimensions associated with the performance assessment component, namely Employee Performance Achievement (CKP), Behavioral Value (NP) and Performance Contract Quality (NKP), based on the Decree of the Minister of Finance Number 234/KMK.01/2016 which refers to the recommendation of the results of the Ministry of Finance Fitness Index.

### **Relationship of Personal Factors and Employee Performance**

Armstrong and Baron (1998) said that personal factors are indicated by the skill level, competence, motivation and commitment of the individual. Employee competency is a combination of knowledge, skill skills and personal attributes mapped on job behavior can be evaluated, observed and measured (Muh. Khadarisman, 2018). Another opinion expressed by Wibowo (2016), competence is an ability to do a job based on the skills, knowledge and attitude of work required by the job.

Competence according to the regulation of the Minister of Utilization of State Apparatus and Bureaucratic Reform of the Republic of Indonesia No. 38 of 2017 includes managerial, technical, social and cultural based on a standard. Asn competency standards are descriptions required of a State Civil Apparatus in carrying out the duties of office, including knowledge, skills and behavior. Motivation is a motivation from within that is caused by a need that must be met. The motivation can have a positive impact to improve performance because in motivation contained the expectation of compensation from the organization.

In relation to ASN management, employee commitment is a psychological bond of employees in an organization characterized by trust and acceptance of the organization's goals and values, a willingness to strive for the organization's interests and a strong desire to maintain its presence in the organization (Zulkifli, Paranoan, 2014; Achmad Djumlani, Michael Armstrong and Angela Baron, 2016) suggest that one of the factors affecting performance is personal factors. Personal factors show what an individual employee has such as competency level, skills, motivation and commitment. Based on previous theories and research stipulated in the frame of thought in this study, it can be compiled hypothesis 1 as follows:

#### ***H1. Personal Factors positively affect on Employee Performance***

### **Leadership Factors and Performance Relationships**

Leadership factors are determined by the quality of encouragement, guidance and support carried out by managers and team leaders. Wibowo (2016) said that employee performance in terms of organization is influenced by how well leaders empower their workers (empowerment), how leaders reward workers

(compensation), and how leaders improve worker skills (coaching) through coaching, mentoring and counselling. Michael Armstrong and Angela Baron (2016) suggest one of the factors affecting performance is leadership factors. Leadership factors are the ability of managers and team leaders to provide encouragement, guidance, and support.

The key to an organization's success in improving performance is determined by its leadership and management style. Harmonization of organizational resources as well as the drive towards achieving organizational goals are believed to be achieved only through adequate leadership and management. Stephen P. Robbins and Timothy A. Judge (2015) define leadership as the ability to influence a group toward achieving a defined vision or goal. In government organizations, leaders in an organizational unit are appointed based on a decree after going through the selection process according to the concept of merit system in the career of the State Civil Apparatus (ASN). The concept of merit system, focuses on the performance and behavior of employees, so that a leader is required to have competence in his field with good behavior. Leaders in government organizational units can be grouped at the positional leader level where the leader who occupies the position.

Any conduct cannot be separated from its official position stipulated by the other party or by any other agreement. Followers of these leaders are more formal and simply obey the rules. The key word in this leadership level is authority (right) John C. Maxwell (Andrie Wongso, 2015). Performance basically has a broader understanding, not only in terms of work, but also how the work completion process takes place. Performance is the result of a job and how it is done (Wibowo, 2016). Meanwhile, according to Kadarisman (2018), civil servant performance is a manifestation of the success achieved by an employee for his work to achieve the goals set by the organization.

Performance is heavily influenced by the boss's policy of placing employee positions in accordance with their capabilities. Thus the role of the boss as leader is very influential to the performance of his subordinates. A boss must know in detail the shortcomings and advantages of his subordinates, so that policies related to competency, empowerment, compensation and coaching of employees can be done appropriately, will improve the performance of employees individually and the organization as a whole. There are 4 (four) main elements as a buffer in building and improving employee performance namely competency, coaching, empowerment, compensation (Ma'ruf Abdullah, 2014). Based on previous theories and research stipulated in the conceptual framework of research, it can be compiled hypothesis 2 as follows:

## ***H2. Leadership factors have a positive impact on Employee Performance***

### **Personal Factors and Performance Dialogue**

Kreitner and Kinicki (2016) say that motivation is goal-directed behaviour, which is a psychological process that evokes and directs behavior towards achieving goals. One form of management practice implemented in the Ministry of Finance related to integration and harmonization is "Performance Dialogue" which is governed by Decree of the Minister of Finance No. 590/KMK.01/2016 on Performance Dialogue Guidelines. The Decree of the Minister of Finance No. 590/KMK.01/2016 on performance dialogue guidelines states that the principle stipulated in the Performance Dialogue is FACT:

- *Fact based* (Factual), Performance Dialog is conducted based on credible data and easy to understand by all parties involved;
- *Action oriented* (Action), The Performance Dialog focuses on the action plan and meeting participants are committed to implementing an action plan;
- *Constructive and challenging* (Constructive and challenging), each participant of the dialogue conducts active communication, where the meeting leader/boss must give the dialogue participant the opportunity to convey information or opinions that are groundbreaking in supporting the achievement of the output of the dialogue. Meeting leaders or supervisors are obliged to provide feedback on such
- *Targeted* (*clear output*), performance dialogue must produce solutions to the main issues that are the focus of discussion.

Based on previous theories and research stipulated in the conceptual framework of research, it can be compiled hypothesis 3 as follows Performance Dialogue should produce solutions to the main issues that are the focus of the discussion:

### ***H3. Personal Factors positively affect on Performance Dialogue***

**Leadership Factors and Performance Dialogue**

Stephen P. Robbins and Timoty A. Judge (2015) write that experts have lately considered ethical leadership from a new angle of "serving leadership". Leaders who implement a model of leadership that serves will work beyond self-interest, but put forward opportunities to help their subordinates thrive. Characteristics of leadership behavior that serve include listening, empathizing, persuading, receiving service and actively developing the potential of its employees. McKensey (2015) found that leadership factors must be harmonious, so as to improve employee competency, the development of the organization's work culture, the realization of positive interaction between bosses and subordinates and the mapped of employee potential as one of the tools for employee planning and coaching. The harmonious relationship between leadership factors and personal factors is basically a working relationship between the leadership and the form of management practices called performance dialogue. Based on previous theories and research stipulated in the conceptual framework of research, it can be compiled hypothesis 4 as follows:

**H4. Leadership Factors have a positive effect on Performance Dialogue**

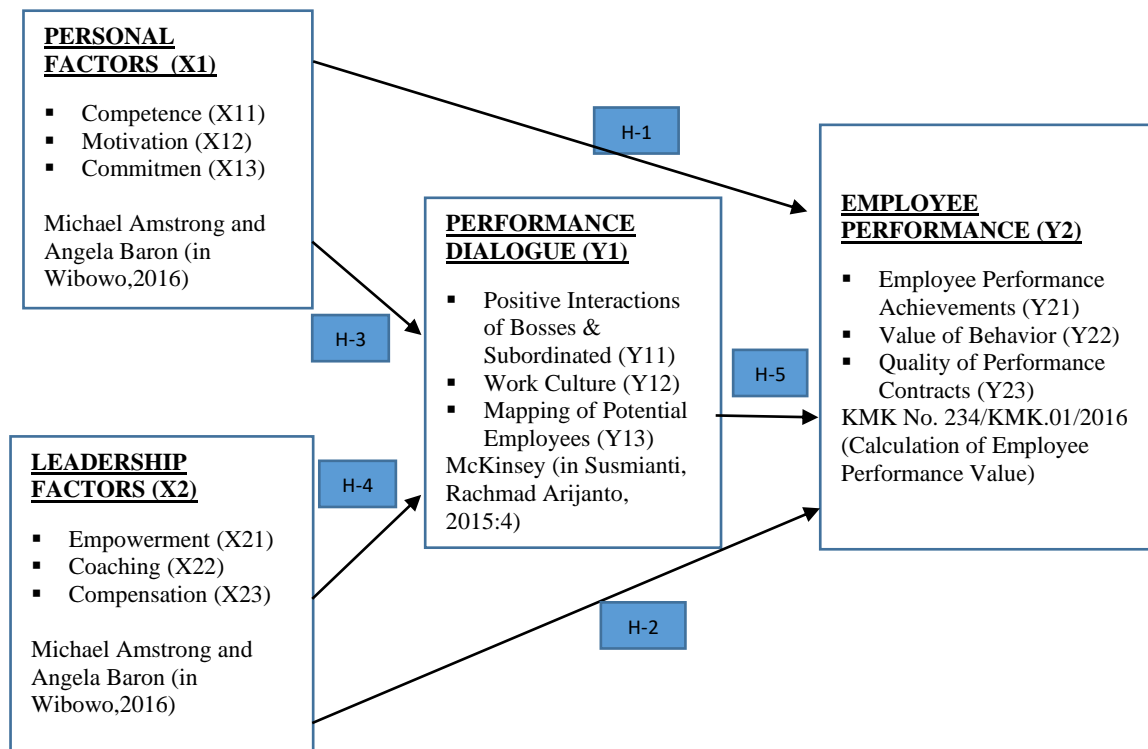
**Employee Performance and Performance Dialogue Relationships**

According to Susmianti, Rachmad Arijanto (2015) one of the management practices that can be applied to improve the performance of individual employees/organizations is performance dialogue, with the following characteristics:

- a. Bring together his direct superiors with subordinates in a planned, orderly, and structured manner;
- b. monitor and discuss organizational unit performance by referring to each unit's performance data;
- c. agreed on the priority of the action plan against the issue of performance gaps between targets and realization, deciding how to address them to be reviewed at the next meeting.

In line with McKinsey's opinion, Palladium Group conducted an assessment at the Ministry of Finance (2014) with the recommendation that: "In conducting a strategy review meeting, 90% of the discussion portion was used to discuss the future and not just the achievement of Key Performance Indicators (IKU) in the past. In addition, in order for the discussion to be effective, the discussion format is enhanced by using reports in one page IIAA (Issue, Implication, Action, and Accountability)". Based on previous theories and research stipulated in the conceptual framework of research, it can be compiled hypothesis 5 as follows:

**H5. Performance Dialogue positively affects on Employee Performance**



**Figure 1.** Conceptual Framework

## METHOD

The research was conducted on 938 employees of the Ministry of Finance who served in vertical offices in Semarang city, in the organizational unit of the Secretariat General (Setjen), Directorate General of Taxation (DJP), Directorate General of Customs and Excise (DJBC), Directorate General of Treasury and Directorate General of State Wealth with the composition of employees based on the level of office as Table-1. The research was conducted using sampling, dengan Metode Stratified Proportional Random Sampling. Sampling is based on strata of positions taken proportionally.

**Table 1.** Population

No	Organizational Unit Name	Unit	Esl III	Esl IV	Fungsional	Executor	Total
1	Secretariat General	1	1	3	2	18	24
2	Directorat General of State Asset	2	7	20	10	80	117
3	Directorat General of Tax	8	13	52	50	300	415
4	Directorat General of Custom and Excise	2	8	38	25	125	196
5	Directoral General of Treasury	3	8	38		140	186
	Total	16	37	151	87	663	938
	Proportion of samples		5.3%	16%	9.4%	69.3%	100%
	Sample Count		7	24	13	106	150

In this study, the data to be processed is derived from the perception of respondents. Research in management areas such as human resource management that measures perceptions of difficulty in obtaining normal distributed data (Ananda Sabil Hussein, 2016). The characteristics of this study are predictive, which tests the relationship between latent variables partially in one research model. Another characteristic of this study is the availability of latent variables "Performance Dialogue" that will be studied is a new management practice whose research results are still limited. Based on the characteristics of the study, to analyze the data of researchers using sem base variant or better known as SEM-PLS. Indicator measurement models use reflective indicator models, with analytical tools using SmartPls software Version 3.2.9.

### Validity and Reability Test

Prior to the study, the validity and reliabilitas test and the goodness of fit, the relationship between the outer model and the relationship between the latent variable (inner model) were conducted. The test stage consists of:

#### Outer Model Analysis

- Reliability Indicators  
Aim to find out whether or not the measurement indicator is a latent variable (construct). The way is to evaluate the *loading factor where the value of loading factor Appropriate with the rule of thumbs* above 0.7.
- Internal Consistency Reliability  
The analysis uses composite reliability and Cronbach's alpha, where the composite reliability value of 0.6 – 0.7 is considered to have good reliability.
- Convergent Validity  
A construct with reflective indicators is evaluated using Average Variance Extracted (AVE), where the AVE value should be equal to 0.5 or more.
- Validitas Diskriminan  
*Test of Discriminant validity on SmartPLS using the calculation results cross loading* with the aim of ensuring that the construct's correlation with the measurement item, is greater than any other construct.

#### Inner Model Analysis

- *Collinearity* is a term to describe a correlation between latent variables in a model, its predictive strength is unrely reliable and unstable. The cause is due to the repetition of correlation from one variable to another

(Sobur Setiawan, 2020). is a term to describe a correlation between latent variables in a model, its predictive strength is unrely reliable and unstable. The cause is due to the repetition of correlation from one variable to another (Sobur Setiawan, 2020). *Collinearity* may cause errors in determining significance.

- Determination coefficient (R<sup>2</sup>)
  - The determination coefficient value indicates the magnitude that an exogenous variable can explain against an endogenous variable with a range of values:
  - According to Sarstedt *et al.* (2017), R<sup>2</sup> = 0,75(strong), R<sup>2</sup> = 0,50 (moderat), dan R<sup>2</sup> = 0,25 (weak)
  - According to Ghozali dan Latan (2015): R<sup>2</sup> = 0,67 (strong), R<sup>2</sup> = 0,33 (moderat) dan R<sup>2</sup> = 0,19 (weak).
- Predictive relevance or Cross-validated Redundancy (Q<sup>2</sup>)
 

*Predictive relevance (Q<sup>2</sup>) often referred to as predictive sample reuse with the aim of validating endogenous construct models. The meaning of q2 value is if Q2 > 0 Q2 value < 0 inaccurate model accuracy Sarstedt et al. (2017) and Natalia Ririn Furadantin (2018).*
- Effect Size atau f-square (f<sup>2</sup>)
 

Evaluation of *inner model* not only to know the signification of relationships between latent variables, but also should researchers also assess the amount of influence between variables using size effect or f<sup>2</sup>. Sarstedt (2017), grouped the f<sup>2</sup> values into three groups, not only to know the signification of relationships between latent variables, but also should researchers also assess the amount of influence between variables using size effect or f<sup>2</sup>. Sarstedt (2017), grouped the f<sup>2</sup> values into three groups, namely.02=small, 0.15=middle dan 0.35=big
- Path coefficients
 

The path coefficient is used to measure the strong signification of relationships between latent variables (constructs), where values range between -1 and 1. Getting closer to -1 indicates that the relationship is negativeThe path coefficient is used to measure the strong signification of relationships between latent variables (constructs), where values range between -1 and 1. Getting closer to -1 indicates that the relationship is negative (Sarstedt *et al.*(2017) and Natalia Ririn Furadantin (2018).

**RESULTS AND DISCUSSIONS**

**1. Analisis Data**

Data analysis is preceded by test and reability as well as the suitability of research models, with the following stages:

Stage 1, Testing Perform an evaluation of the measurement model (outer model), Testing Perform an evaluation of the measurement model (outer model). Assessment of measurement models or *outer model*, is connecting all variable manifests or indicators with latent variables. In concluding the quality of the measurement model using reference or *rule of tumbs* as Table 2.

**Table 2.** *Rule of Tumbs* Measurement Model

Test	Parameters	Rule of tumbs
Convergent Validity	Loading factor (Outer Loading)	>0,7
	Average variance extracted (AVE)	>0.5
	Communality	>0.5
Deskriminan Validity	AVE root and Laten variable coleration	Ave Root > Correlation Leten Variables (Discriminat Validity)
	Cross loading (Discriminant Validity)	<0.7 in one variable
Reability	Cronbach Alpha	>0.6
	Composite Realibility	>0.6

Source: Chin (1885); Wert et al. (1974) Salisbury et al. (2002); Hartono and Abdillah (2011)

### Indicator Reliability Test

Done by evaluating the value of the *loading factor* where the value of *loading factor* sesuai *rule of thumbs* above 0,7. Nilai *loading factors* dari 49 (forty-nine) indicators there are 14 (fourteen) indicators with a value of *loading factor* < 0,7, so that the indicator should be eliminated from the model (Ananda Sabil Hussein, 2015). If the indicator is still included in the hypothesis test then the results of the study will have weak validity.

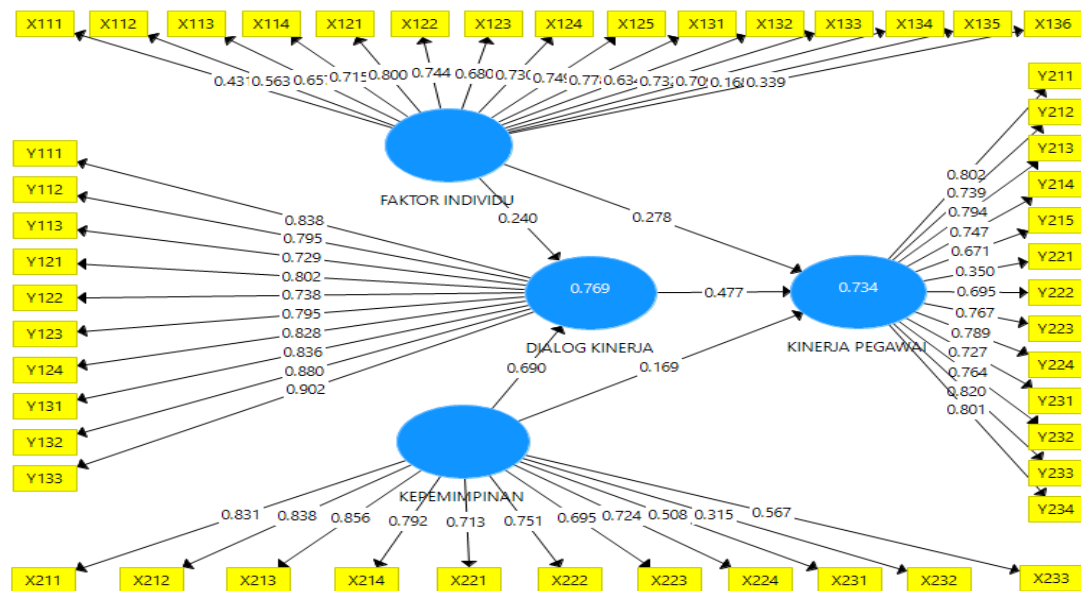


Figure 2. Loading Factors

### Internal Consistency Reliability

Internal consistency reliability measured by looking at the calculation results *composite reliability* and *Cronbach's alpha*. Value composite reliability 0,6 – 0,7 considered to have good reliability (Sarstedt dkk., 2017), and value of *Cronbach's alpha* expected to be above 0,7 (Ghozali dan Latan, 2015). Calculation results as presented in Table 3.

Table 3. Calculation Results Construct Reliability and Validity

	CALCULATION RESULTS			
	Cronbach's Alpha	rho_A	Composite Reliability	(AVE)
PERFORMANCE DIALOG	0.944	0.945	0.952	0.666
INDIVIDUAL FACTORS	0.896	0.897	0.917	0.579
LEADERSHIP FACTOR	0.905	0.913	0.926	0.642
EMPLOYEE PERFORMANCE	0.928	0.931	0.939	0.608

### Convergent Validity

*Convergent Validity* determined based on the principle that the correlation between constructors should be high (Ghozali and Latan, 2015). *Convergent Validity* a construct with reflective indicators is evaluated using Average Variance Extracted (AVE), where the AVE value should be equal to 0.5 or more. Ave value of 0.5 or more means that the construct can explain 50% or more variance of the item (Wong K.K., 2013, Sarstedt et al., 2017). The ave calculation result in table 3 shows that the AVE value in each construct is above 0.5.

**Discriminant validity**

Uji Discriminant validity on SmartPLS using the calculation results cross loading with the aim of ensuring that the construct's correlation with the measurement item, is greater than any other construct. Calculation results Cross Loading that you can see on Table 4.

**Table 4.** Value Calculation Results Cross Loading

Indicators	CONSTRUCT			
	PERFORMANCE DIALOG	Personal Factors	Leadership factors	Employee performance
X114	0.569	0.703	0.536	0.660
X121	0.577	0.818	0.598	0.646
X122	0.577	0.765	0.539	0.482
X124	0.522	0.743	0.509	0.545
X125	0.609	0.789	0.599	0.559
X131	0.596	0.802	0.560	0.599
X133	0.550	0.734	0.544	0.528
X134	0.553	0.727	0.546	0.500
X211	0.728	0.586	0.863	0.662
X212	0.707	0.573	0.863	0.608
X213	0.795	0.669	0.877	0.734
X214	0.761	0.610	0.828	0.685
X221	0.614	0.571	0.720	0.639
X222	0.553	0.506	0.705	0.490
X224	0.654	0.556	0.730	0.607
Y111	0.838	0.763	0.748	0.665
Y112	0.795	0.596	0.741	0.602
Y113	0.728	0.576	0.663	0.646
Y121	0.802	0.531	0.667	0.629
Y122	0.738	0.590	0.601	0.776
Y123	0.795	0.514	0.677	0.679
Y124	0.829	0.564	0.710	0.661
Y131	0.836	0.682	0.750	0.707
Y132	0.880	0.656	0.742	0.742
Y133	0.902	0.614	0.745	0.711
Y211	0.711	0.695	0.650	0.803
Y212	0.598	0.599	0.508	0.745
Y213	0.601	0.559	0.536	0.783
Y214	0.683	0.577	0.638	0.758
Y223	0.724	0.638	0.712	0.782
Y224	0.704	0.630	0.683	0.819
Y231	0.559	0.459	0.557	0.711
Y232	0.584	0.453	0.572	0.764
Y233	0.638	0.565	0.650	0.818
Y234	0.686	0.599	0.650	0.805

**Structural Model Evaluation (inner model)**

The structural model describes the relationship between latent variables (constructs) in a research model. In this study, the inner model evaluation will be carried out in several steps, namely:

- Collinearity test by measuring value VIF (*Varianve Inflation Faktor*);
- Measuring the coefficient of determination ( $R^2$ );
- Measure *Predictive relevance* or *Cross-validated Redundancy* ( $Q^2$ );
- Measure *effect size* between variables ( $f^2$ );
- Measure *Path Coefficients*.

### Collinearity Test

*Collinearity* is a term that describes the correlation between latent variables in a research model, where two or more free variables or exogenous constructs are highly correlated resulting in the predictive ability of the model not being good (Sekaran and Bougie, 2016). *Collinearity* may cause errors in determining significance. Table 5. presents the calculation results Inner VIF Values on SmartPLS.

**Table 5.** Inner VIF Values

CONSTRUCT	PERFORMANCE DIALOGUE	PERSONAL FACTORS	LEADERSHIP FACTORS	EMPLOYEE PERFORMANCE
PERFORMANCE DIALOGUE				4.327
PERSONAL FACTORS	2.023			2.272
LEADERSHIP FACTORS	2.023			4.081
EMPLOYEE PERFORMANCE				

### Determination coefficient (R<sup>2</sup>)

The determination coefficient value represents the magnitude that exogenous variables can describe against endogenous variables with a range of values R<sup>2</sup>=0.75 (strong), R<sup>2</sup>=0.50 (moderate), and R<sup>2</sup>=0.25 (weak) (Sarstedt et al., 2017). Other opinions were expressed by Chin with criteria values R<sup>2</sup>=0.67 (strong), R<sup>2</sup>=0.33 (moderate) and R<sup>2</sup>=0.19 (weak) (Chin, 1998 in Ghazali and Latan, 2015). Table 6 presents the value of the R<sup>2</sup> calculation result, where the R<sup>2</sup> values in the Endogenous Construct of the Performance and Employee Performance Dialog are 0.778 and 0.744 respectively fall into the strong category.

**Table 6.** Determination Coefficient

	R Square	R Square Adjusted
PERFORMANCE DIALOGUE	0.778	0.775
EMPLOYEE PERFORMANCE	0.744	0.739

### Predictive relevance or Cross-validated Redundancy (Q<sup>2</sup>)

One of the calculation features in SmartPLS is the Blindfolding Procedure, which will assess predictive relevance (Q<sup>2</sup>) often called predictive sample reuse with the aim of validating endogenous construct models. The meaning of q<sup>2</sup> value is if Q<sup>2</sup> > 0 indicates that the model has an accurate predictive relevance to a particular construct. While the Q<sup>2</sup> value < 0 the accuracy of the model is inaccurate (Sarstedt and friends., 2017).

Table 7. Calculation results predictive relevance (Q<sup>2</sup>)

KONSTRUK	SSO	SSE	Q <sup>2</sup> (=1-SSE/SSO)
PERFORMANCE DIALOGUE	1500.000	737.202	0.509
PERSONAL FACTORS	1200.000	1200.000	
LEADERSHIP FACTORS	1050.000	1050.000	
EMPLOYEE PERFORMANCE	1500.000	839.536	0.440

Prosedur *blind folding on SmartPLS*, Produce *construct crossvalidated redundancy estimation*. Where is the value Q<sup>2</sup> = (1 – SSE/SSO). SSE = sum square prediction error, and SSO = sum squared observation. value(Q<sup>2</sup>) from endogenous construction Performance Dialog = 0.509 and employee performance construct = 0,440 indicates that the model has a *predictive relevance* against a particular construct.



**Size Effect or f-square (f<sup>2</sup>)**

Evaluation of the inner model is not only to determine the signification of relationships between latent variables, but also should researchers also assess the amount of influence between variables using Size Effect or f<sup>2</sup>. Sarstedt and friend., 2017, grouped the f<sup>2</sup> values into three groups of 0.02=small, 0.15=medium and 0.35=large, where the value of 0.02 can be ignored because it is considered to have no effect. Table 8 presents an f<sup>2</sup> value between latent (construct) variables.

**Table 8.** Size Effect (f<sup>2</sup>) Value

Relationships Between Latent Variables	f <sup>2</sup>	The amount of influence
Performance Dialogue – Employee Performance	0.204	middle
Personal Factors - Performance Dialogue	0.135	low
Leadership Factors – Performance Dialogue	0.979	strenght
Personal Factors - Employee Performance	0.089	low
Leadership Factors – Employee Performance	0.039	low

**Path coefficients**

The path coefficient is used to measure the strong signification of relationships between latent variables (constructs), where values range between -1 and 1. Getting closer to -1 indicates that the relationship is negative (Sarstedt *et al.*, 2017). The path coefficient is used to measure the strong signification of relationships between latent variables (constructs), where values range between -1 and 1. Getting closer to -1 indicates that the relationship is negative (Sarstedt *et al.*, 2017).

**Table 9.** Path Coefficient Value on Inner Model

Relationships Between Latent Variables	Value	Description
Performance Dialogue – Employee Performance	0.485	The Value of path coefficients range from -1 to +1. As the +1 value of the relationship between the two contracts gets closer
Personal Factors - Performance Dialogue	0.235	
Leadership Factors – Performance Dialogue	0.681	
Personal Factors - Employee Performance	0.235	
Leadership Factors- Employee Performance	0.204	

**2. Hypothesis Testing**

At the hypothesis test stage will be conducted through the analysis of the coefficient of the (*path coefficients*). With the resampling method (*bootstrapping*) on SmartPLS allows researchers to determine the sample to 500. This means that the number of 150 samples with the bootstrapping method will be processed into 500 samples. *Significance level* Use 0,05 (5%). The bootstrapping method on SmartPLS generates a t-statistical value, which will then be compared to the t-table by using a 95% trust level. The t-table value at Significance level 0.05 and trust level 95% is 1.96. This means that if t-statistics => 1.96 then Ho is rejected and Ha is accepted the opposite if t-statistics < 1.96 then Ho is accepted and Ha is rejected (Ghozali and Latan, 2015). The results of the Path Coefficients calculation are presented in Table 10.

**Table 10.** Calculation Results of Path Coefficients

Inter-Constructed Relations	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics ( O/STDEV )	P Values
Performance Dialogue -> Employee Performance	0.485	0.478	0.103	4.690	0.000
Personal Factors - > Performance Dialogue	0.253	0.251	0.061	4.154	0.000
Personal Factors -> Employee Performance	0.235	0.242	0.078	3.021	0.003
Leadership Factors -> Performance Dialogue	0.681	0.686	0.059	11.475	0.000
Leadership Factors -> Employee Performance	0.204	0.207	0.122	1.675	0.095

**(H1) Influence of Personal Factors on Employee Performance**

From the calculation results in table 10, in the path of individual factors (Employee Performance is obtained a t-statistical value of 3,021, where the value is greater than the t-table (1.96). This states that individual employee factors have a significant effect on employee performance. Thus the H1 hypothesis is proven. From the calculation results in table 10, in the path of individual factors (Employee Performance is obtained a t-statistical value of 3,021, where the value is greater than the t-table (1.96). This states that individual employee factors have a significant effect on employee performance. Thus the H1 hypothesis is proven.

**(H2) Influence of Leadership Factors on Employee Performance**

The t-statistical calculation on the path coefficient for leadership factor relationships -> employee performance, was 1,675. The t-statistical value is below 1.96 so the H2 hypothesis is not proven. Leadership factors have no direct effect on employee performance.

**(H3) Effect of Personal Factors on Performance Dialogue**

The t-statistical calculation result in the Individual Factor -> Performance Dialog construct is 4,154, where the value is greater than the t-table value (1.96). Thus the H3 hypothesis is accepted. Individual Factor variables have a significant effect on performance dialog variables. Changes to individual factors will have a significant impact on performance dialogue.

**(H4) Influence of Leadership Factors on Performance Dialogue**

Table 10 shows the t-statistical value on the Leadership Factor construct relationship -> Performance Dialog is 11,475. value is higher than the t-table value (1.96). Thus the hypothesis stating that "Leadership Factors have a significant effect on performance dialogue (H4)" is proven and acceptable. The Leadership Construct has a significant effect on the Performance Dialogue construct

**(H5) Effect of Performance Dialogue on Employee Performance**

The t-statistical value of the coefficient path table shows a number of 4,690 where the value is higher than the t-table value (1.96). This indicates that the Performance Dialog has a significant impact on Employee Performance. Thus the H5 hypothesis is proven and acceptable.

**3. Evaluation of Indirect Effects**

Inner Model (structural model) in this study there is a direct and indirect relationship between latent variables. The exogenous construct "Leadership" relates directly to the endogenous construct "Employee Performance", but is also indirectly related through the "Performance Dialog" constructor. This is the case with the exogenous construct "Individual Factors" which are directly related to the endogenous construct "Employee Performance", and are indirectly related through the "Performance Dialogue" construct. This relationship gives rise to a Mediating effect indicating that the influence of free variables on variables is bound through the third variable as a mediator variable (Alwin & Hauser in Edwards & Lambert, 2007). Inner Model (structural model) in this study there is a direct and indirect relationship between latent

To find out the extent of the effect posed by the "Performance Dialog" variable as an intervening variable, an analysis will be performed with SmartPLS with bootstrapping procedur. Effect analysis will produce direct effect, indirect effect and total effect values indicating weak or strong mediation influence. Table 11 presents the results of indirect effect analysis and total effect performed with SmartPLS.

**Table 11.** Statistical t value

Variable Relationships	Direct effect		Indirect Effect (via Performance Dialogue)		Total Effect	
	t Statistics	Signifikasi	t Statistics	Signification	t Statistics	Significatio n
Performance Dialogue -> employee performance	4.690	Significant			4.690	Significant
Personal Factors -> Performance Dialogue	4.154	Significant			4.154	Significant
Personal Factors -> employee performance	3.021	Significant	2.944	Significant	4.288	Significant

Leadership Factors -> performance dialogue	11.475	Significant			11.475	Significant
Leadership Factor -> Employee Performance	1.675	Not Significant	4.574	Significant	6.050	Significant

Referring to the group mediation effect of Zhao et al (2010), it can be concluded that the constructed relationship "Leadership Factor -> Performance Dialogue -> Employee Performance", the effect of mediation belongs to the category "Full Mediation". Without mediation of performance dialogue mediation, leadership factors have no significant effect on employee performance. Thus, the significance of the relationship between leadership and employee performance is more effective by using performance dialogue as a mediator as opposed to a direct relationship without a mediator.

In the relationship between "Individual Factors -> Performance Dialog -> Employee Performance" the effect of performance dialog mediation belongs to the Complementary (partial mediation) category. This means that although the t-Statistical value with mediation (4,288) is greater than without mediation (3,021), the two values are still greater than the t-Table (1.96). Thus, the mediation effect of performance dialogue in the relationship is not very effective.

**4. Discussion**

One of the characteristics of the Performance Dialogue is that it brings together its direct superiors with subordinates in a planned, orderly, and structured manner (McKinsey, like Susmianti, Rachmad Arijanto 2015;4). Direct bosses as leaders and subordinates as personal employees are brought together in the Performance Dialogue with the aim of improving the performance of employees and organizations. The study used a structural model with four variables with the variable "Employee Performance" as endogenous latent variables, as figure 2.

The first exogenous latent variables studied were "Individual Factors" and impact on employee performance. Individual factors reflect the character that employees have in this study using the Dimensions of Compensation, Motivation and Commitment. The results showed that individual factors (Compensation, Motivation and Commitment) had a significant impact on employee performance. This is in line with research conducted by (Sujiati, M. Syamsul Ma'arif, and Mukhamad Naji, 2017) with the results of research stating that motivation, competence have a significant effect on employee performance. Researchers (Andi Irawan, M. Syamsul Maarif, and M. Joko Affandi, 2015) stated that, individual factors have a direct positive influence on employee performance.

The second exogenous latent variable is "Leadership", where the hypothetical test results in this study show that Leadership has no direct effect on Employee Performance with a t-statistical value of 1,675 < T-Table 1.96. But through indirect relationship analysis with the help of the mediator variable "Performance Dialogue", the influential Leadership factor is very significant with the t-statistical value on the total effect is 6,050 > 1.96. This is in line with research conducted by (Thoni Setyo Prabowo, Noermijati, and Dodi Wirawan Irawanto, 2017) who conducted research related to Transformational leadership saying that:

*"Transformational leadership declared no significant effect on employee performance. Transformational leadership if through job satisfaction declared significant effect on employee performance".*

The study stated that Transformational leadership has no effect on employee performance but through Job satisfaction has a significant effect on employee performance. The leadership dimension scrutinized is Empowerment, Coaching and Compensation. The loading factor results showed that of the 11 indicators studied, there were 4 indicators with a smaller loading factor value of 0.7. Respondents' perceptions showed that the compensation dimension got the lowest score. Direct compensation indicators such as salaries and benefits of almost all respondents are satisfied, but one indicator that needs attention is indirect compensation i.e. reward for work performance. Indirect compensation such as science and skills that do not look real, but impact on employees (intrinsic reward).

The results of the study (Irum Shahzadi, Ayesha Javed, Syed Shahzaib Pirzada, Shagufta Nasreen, Farida Khanam, 2014) in the journal "Impact of Employee Motivation on Employee Performance" state that intrinsic reward has a significant positive relationship with employee performance and employee motivation. This is in line with the opinion of Gibson, Ivancevich and Donnelly (as Wibowo, 2016) that the main purpose of the

awards program is to attract capable people to join the organization, keep workers coming to work, and motivate workers to achieve high performance.

The third exogenous latent variable is "Performance Dialog", where in the structural model there is a direct relationship with employee performance, but also as a mediator between leadership variables and employee performance. Research related to performance dialogue is still rare, considering performance dialogue is a new management practice with a limited theoretical basis, so this research is predictive. The results of the study according to table 4.31 show that performance dialogue has a significant influence on employee performance. This is indicated by a t-count value of 4,690 well above t-table 1.96.

Respondents' perception of performance dialogue in its organizational unit showed an average high score of 93.06, with the loading factor of all indicators greater than 0.7. This indicates that the performance dialog in each office is already running properly. Boss/subordinate interaction, work culture and employee potential mapping have been implemented in accordance with the organization's policies. The effect of mediation between leadership relationship with employee performance is significant, as evidenced by the difference in t-count value where direct effect (1,675) is lower than indirect effect (6,050).

## CONCLUSION AND RECOMMENDATION

After going through the data analysis process, in the research on the effectiveness of Performance Dialogue on Employee Performance in the Ministry of Finance, with a case study at the Civil Servants of Finance Ministry in Semarang city area, obtained the following conclusions:

1. In organizations that implement performance management such as the Ministry of Finance, the implementation of Performance Dialogue as a management practice, is very effective in improving employee performance, because Leadership desperately needs Performance Dialogue as a mediator in improving employee performance, as well as the results of indirect effect calculations on statistical tests;
2. Personal factors (competency, motivation, and commitment) have a significant impact on employee performance. This shows that employee competency (education, skills, collaboration, and understanding of SOP) is very decisive in improving performance.
3. Personal Factors have a significant effect on the Performance Dialogue, this indicates that the Performance Dialog is urgently needed by employees to improve each individual's performance. Performance Dialogue is a strategy review meeting, 90% portion of the discussion is used to discuss the future and not just the achievement of Key Performance Indicators (IKU) in the past and the discussion format using the concept of Issue, Implication, Action, and Accountability, so it is very useful for employees.
4. Personal Factors with Performance Dialogue mediation on Employee Performance, there was no significant change in t-count after mediation. This indicates pseudo-mediation occurs, because without mediation a direct and indirect relationship between individual factors and employee performance results in the same signification.
5. Leadership factors have no direct effect on employee performance. This shows that the empowerment, coaching and compensation aspects as leadership dimensions have no direct effect on employee performance but affect employees personally. The improvement of competence, motivation and commitment of employees has a very significant impact on performance.
6. Leadership factors have a significant effect on the Performance Dialogue. All aspects of an individual dialogue are heavily influenced by leadership according to managerial capabilities and leadership models applied. Dialogue will not go on without good leadership.
7. Leadership factors have a significant effect on employee performance through intervening performance dialogue. Leadership relates to resources one of which is HR and resources related to performance. Thus leadership empowers, nurtures and compensates employees so that individual employees can improve their competence, motivation and commitment to the organization.
8. The Performance Dialogue has a significant impact on Employee Performance. The concept of strategy review meeting held in dialogue is needed to improve employee performance. The dimensions of work culture, positive interaction and mapping employee potential are very beneficial for leaders and employees in improving performance. Overall, the Performance Dialog is very effective to improve the individual performance of employees and the performance of the organization.

Referring to the results of testing of research variables, and analysis of respondents' perception data in the effectiveness study of employee Performance Dialogue at the Ministry of Finance, researchers suggested some things that need attention. Some of the suggestions that can be submitted are as follows:

1. In Organizational Units that implement performance management, Performance Dialog management practices should be implemented because not only because of the implementation of regulations, but more on the needs of the organization, because it proves effective to improve employee performance;
2. From the perception of respondents obtained education indicator scores are smaller compared to other indicator scores on competency dimensions. This indicates that the current position of the employee is not all inline with his educational background. Mutation patterns, promotion and placement of employees in certain positions need to take into account educational background;
3. Leadership has a very significant effect on the Performance Dialogue, so the requirements of competency (hard/soft competency) of leadership candidates, especially managerial competencies and technical competencies, need to get attention because in the concept of Performance Dialogue the leader is couch, mentor and consultant for his subordinates

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### **Laws and Regulations**

Law No. 5/2014 on Civil Apparatus of the State

Presidential Regulation No. 81/2010 On Grand Design of Bureaucratic Reform 2010–2025

Decree of the Minister of Finance No. 186/KMK.01/2013 on the Institutional Transformation Program of the Ministry of Finance

Decree of the Minister of Finance No. 36 /KMK.01/2014 on the Blueprint of the Institutional Transformation Program of the Ministry of Finance year 2014-2025

Decree of the Minister of Finance No. 467/KMK.01/2014 on Performance Management in the Environment of the Ministry of Finance

Decree of the Minister of Finance No. 234/KMK.01/2016 on The Calculation of Employee Performance Value based on The Quality of Performance Contracts in the Environment of the Ministry of Finance

Decree of the Minister of Finance No. 590/KMK.01/2016 on Performance Dialogue Guidelines in the Environment of the Ministry of Finance.