

## The effects of entrepreneurial values and entrepreneurial orientation, with environmental dynamism and resource availability as moderating variables, on the financial performance and its impacts on firms' future intention: Empirical evidences from Indonesian state-owned enterprises

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### ABSTRACT

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This study focuses specifically on the effect of Entrepreneurial Values and Entrepreneurial Orientation on Financial Performance of Indonesian state-owned enterprise and also incorporates Environmental Dynamism (ED) and Resource Availability (RA) as moderating variables which will influence the effect of (i) Entrepreneurial Orientation (EO) on Financial Performance (FP), (ii) Entrepreneurial Values (EV) on Financial Performance (FP), and (iii) Entrepreneurial Values (EV) on Entrepreneurial Orientation (EO). In addition, this study also provides a better understanding about the effect of Financial Performance on Intention to Sustainable Development (ITS) as well as Financial Performance on Intention to Collaboration (ITC) in Indonesian state-owned enterprises. The method of analysis used in this study is PLS-SEM methodology with purposive sampling method. The unit of analysis is all the state-owned enterprises listed which consists of 81 out of 106 state-owned enterprises, while the unit of observation is individuals from those state-owned enterprises (represented by the paired CEO and CFO who are originated from the same company). The findings of this study are that there is a significantly positive effect of: (i) EV on EO; (ii) EO on FP; (iii) FP on ITS; and (iv) FP on ITC. Meanwhile, (i) there is not any significantly positive effect of EV on FP, and (ii) there is no significant moderating effect of ED and RA on the relationship between (1) EV and FP, (2) EO and FP, as well as (3) EV and EO.

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## 1. Introduction

The study that focuses specifically on the concept of Entrepreneurship and Financial Performance (FP) has been widely investigated in many developed and developing countries. Although there are some EO-performance and EV-performance studies in emerging markets, most of those studies use small to medium-sized enterprises (SMEs) as samples (Campos & Valenzuela, 2013). Meanwhile, the studies of the effects of (i) Entrepreneurial Orientation on financial performance; (ii) Entrepreneurial Values (EV) on financial performance; and (iii) Entrepreneurial Values (EV) on Entrepreneurial Orientation in state-owned enterprises have been very limited in literature. Schumpeter (1934) emphasized the importance of the role of entrepreneurs in the economic activities of a country, to promote economic growth. Entrepreneurs are a group that will constantly make renewal or innovation in economic activities. The innovation involves introducing new goods, enhancing efficiency in producing goods, expanding the market of goods to new markets, developing new sources of raw materials, and making changes in the organization (Schumpeter, 1934). Thus, the role of entrepreneurs is necessary to encourage the economy of a country, where the business world will absorb more labor, reduce unemployment and poverty which will further improve the welfare of the people (Schumpeter, 1934). In 2018, the number of entrepreneurs in Indonesia is 64,199,606 units. Of these,

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the number of Micro, Small and Medium Enterprises (MSMEs) reached 64,194,057 units or 99.99%. The remaining, approximately 0.01% or 5,550 units, is a large-scale business (Ministry of Cooperatives and SMEs Republic of Indonesia, 2018, <http://www.depkop.go.id/data-umkm>).

This study utilizes state-owned enterprises which are large firms as the analysis unit of study. Koe (2013) found the fact that Government-Linked Companies (GLCs) can be considered as an important driver of Malaysia development since they account for 54% of capital market in Kuala Lumpur composite index, hire about 5% of the workforce, provide strategic utilities and services to the public, execute the country's industrial policy, and establish international linkages. Similarly, in its relation as a development agent, Indonesian State-Owned Enterprises or SOEs have played a strategic role by being actively involved in national priority projects and pioneering business activities that cannot yet be carried out by the private sector to encourage equitable development in Indonesia. State-owned enterprises are mandated to play a dual role to sustainably improve economic value and public services in the long run. In terms of economic value, in 2019, the realization of the Indonesian SOEs' dividend and tax value reached IDR 491.7 trillion or exceeded the 2019 target of IDR 407.7 trillion (Ministry of State Owned Enterprises' Performance Report Year 2019). The realization of the investment value, however, reached IDR 489 trillion or still below the target of IDR 764 trillion. Meanwhile, the contribution of SOEs' dividends and taxes to the Indonesian economy (Gross Domestic Product / GDP) in 2018 reached 3.1% and in 2019 it is estimated at 3.0% (Ministry of State Owned Enterprises' Performance Report Year 2019 and Central Bureau of Statistics: Statistical Yearbook of Indonesia 2019). This fact indicates that there is still a lot of opportunities for increasing the SOEs' contribution to the economy. Thus, the role of entrepreneurial activities to enhance the SOEs' contribution to the Indonesian economy is highly expected. For the time being, due to some mergers among SOEs, the amount of SOEs have decreased to 106 companies which are then used as the population in this study.

The purpose of this research is then to analyze: (i) the effect of Entrepreneurial Values on Financial Performance of state-owned enterprises in Indonesia; (ii) the effect of Entrepreneurial Values on Entrepreneurial Orientation; (iii) the effect of Entrepreneurial Orientation on Financial Performance of state-owned enterprises; (iv) the moderating effect of Environmental Dynamism (ED) on the relationship between EV and FP, EO and FP, as well as EV and EO; (v) the moderating effect of Resource Availability (RA) on the relationship between EV and FP, EO and FP, as well as EV and EO; (vi) the effect of Financial Performance of state-owned enterprises on Intention to Sustainable Development; and (vii) the effect of Financial Performance of state-owned enterprises on Intention to Collaboration. Therefore, this study will expectantly make significant contributions to several areas of research. First, in developing countries, most of the studies of EO have been conducted mostly on small firms or individual entrepreneurships (Miller & Breton-Miller, 2011). In reality large firms face different challenges than small firms (Ambad & Wahab, 2013; Farag, 2009). The current research extends the literature on EO because the studies of the effects of entrepreneurial orientation on large firms' performance among the state-owned enterprises in developing country such as Indonesia are still rare. Thus, this study will expectantly add to the theoretical and practical understanding of this area. Second, this study uses the unidimensional EO construct – which consist of Innovativeness, Risk-Taking and Proactiveness – and investigate its effect on firms' financial performance. Third, in addition to investigation of EO-FP relationship, this study also examines the effect of CEO's / CFO's Entrepreneurial Values (EV) on financial performance, which has been limited in previous literature. Fourth, this study also examines the effect of CEO's / CFO's EV on firm's EO, which topic is very limited in literature. Fifth, the role of Environmental Dynamism and Resource Availability as moderating variables will enrich the understanding of their impacts on the relationship between EV-FP, EV-EO, and EO-FP variables. Sixth, this study will also provide evidence whether there is an effect of Financial Performance on Intention to Sustainable Development and Intention to Collaboration.

## 2. Literature Review and Hypotheses Development

### 2.1. Entrepreneurial Values and Firm Performance

A previous study conducted by Poon et al. (2006) examined the relationships among three self-concept traits, entrepreneurial orientation, and firm performance using survey data from 96 entrepreneurs. The results indicated that internal locus of control was positively related to firm performance, and entrepreneurial orientation did not play a mediating role in this relationship. In contrast, generalized self-efficacy had no direct effects on firm performance; however, it influenced firm performance positively through its effect on entrepreneurial orientation. Finally, self-attributed achievement motive was not significantly related to entrepreneurial orientation or firm performance. A more recent study by Tomczyk et al. (2013) focuses on the relationship between personal values of entrepreneurs and firm performance in the 500 fastest growing firms in America. Their study also provides evidence that entrepreneurs' personal values affect firms' performance. Therefore, it can be concluded that values are a key to understanding the relationship between entrepreneurs' personal characteristics and firm performance. Regarding the CEO's values, there is a belief that CEOs play an important role in affecting organizational outcomes such as strategic choices and performance levels (Hambrick & Mason, 1984). Amason (1996) also states that Top Management Team (TMT) is involved in the decision-making process for the company. Thus, values of directors other than CEO in Top Management Team shall be considered important in affecting organizational performance. Based on those previous researches on values – performance relationship, it can be concluded that there is still a research gap where there are only few

studies investigating the specific topic of Top Management Team's entrepreneurial values – large firm's performance relationship, specifically in state-owned-enterprises. This study tries to fill in the gap and it can be hypothesized that,

Hypothesis 1: The entrepreneurial value has a direct positive effect on state-owned-enterprise's financial performance.

### 2.2. *Entrepreneurial Values and Entrepreneurial Orientation*

Anchorena and Ronconi (2012) found that, worldwide, entrepreneurs place more emphasis—relative to non-entrepreneurs—on (1) responsibility, (2) tolerance and respect, (3) independence, (4) determination and perseverance, and (5) imagination. Other study conducted by Yan (2010) found significant relationship between entrepreneurial personality traits and entrepreneurial perception. In principle, it is expressed that there are two reasons to establish a relationship between culture and entrepreneurship. First, the entrepreneurial values and beliefs shared by the people around a person may make him/her to start his/her own business. Secondly, when there is a large entrepreneurial potential in some areas, one can observe such relationship between culture and entrepreneurship / EO (Davidson & Wiklund, 1997). There is also another recent study by Malovics et al. (2015) which tries to investigate the relationship between basic values and the innovative entrepreneurial behavior. They argued research of connection between EV and EO is an important, but yet less known topic. Malovics et al. (2015) use the model of Schwartz (2011) on basic values and contend that the three dimensions of EO (innovativeness, risk-taking, and proactiveness) are related to EV that control the organization's relationship with its external environment. The results of Malovics et al.'s (2015) study suggest that self-direction is the most important value for Entrepreneurs. Self-direction is in a relationship with innovativeness that is also more characteristic of those having a high EO. Entrepreneurs are also indicated to prefer having stimulation, thus the value of stimulation is important to entrepreneurs. The value of security suggests that entrepreneurs with high EO take significantly more risks and less on security. Benevolence, referring to helping a group close to the individual, is a significantly more important value for high EO entrepreneurs. Universalism / universality (that includes the protection of environment and tolerance) is at the second place in the order of values based on their importance. Achievement is also an important value which confirms that the effects of entrepreneurial values discussed in the literature can be observed in the structure of basic values. Based on those previous researches on values – entrepreneurial orientation relationship, it can be concluded that there is still a research gap where there are only quite a few studies examining the specific topic of TMT's entrepreneurial values – large firm's entrepreneurial orientation relationship. This study tries to fill in the gap and therefore it can be hypothesized that,

Hypothesis 2: The entrepreneurial value has a direct positive effect on entrepreneurial orientation.

### 2.3. *Unidimensional EO Construct and Firm Performance*

Researchers have essentially theorized a positive relationship between entrepreneurial orientation and the growth and/or profitability of the firm (Miller & Friesen, 1982; Covin & Slevin, 1991; Lumpkin & Dess, 1996). However, studies have often differed in their approaches to measurement of EO, with some investigating the relation between unidimensional (composite) EO and firm performance and others investigating individual dimensions of EO and firm performance. For example, Koe's (2013) study in Malaysia found that all the five dimensions in EO, namely innovativeness, proactiveness, risk-taking, competitive aggressiveness and autonomy recorded significant positive effects on performance of GLCs. This result support the previous multi-dimensional EO-FP researches. In examining EO as a unidimensional construct, numerous past researchers have discovered support for a positive relationship between EO and firm performance. For instance, Zahra and Covin (1995) observed there is a significant positive relationship between composite EO and performance and that this relationship is enhanced over time. Further, they noted the significance of gaining first mover advantages as a result of high EO that ultimately led to higher firm performance. In a different study which used a contingency theory-based approach, Becherer and Maurer (1997) studied 147 U.S. entrepreneurs and confirmed a positive relationship between the composite entrepreneurial orientations of the entrepreneurs (as representative of the organization) and changes in profitability while also examining the relationship between EO and marketing orientation and the moderating influence of environmental variables. Wiklund (1999) took an international longitudinal approach by examining 132 Swedish firms over a two-year period. The findings again confirmed a positive relationship between composite EO and firm performance, while also agreeing with Zahra and Covin (1995) that this relationship is improved over time. A recent study conducted among Islamic banks in Yemen, also found that the entrepreneurial orientation has a direct positive effect on firm performance (Al-Swidi & Al-Hosam, 2012). The other recent study conducted by Uno et al. (2019) also showed an empirical evidence that entrepreneurial orientation has a positive influence on financial performance of 32 selected micro-small-medium businesses in Indonesia. Therefore, it can be hypothesized that,

Hypothesis 3: The entrepreneurial orientation has a direct positive effect on state-owned-enterprise's financial performance.

### 2.4. *Environmental Dynamism as a Moderating Variable*

Covin and Slevin (1991) and Lumpkin and Dess (1996), respectively, developed a conceptual model of entrepreneurship as firm behavior which includes environmental dynamism as moderating variable. Although their studies mainly focus on the

relationship between EO and firm performance, the effect of environmental dynamism as moderating variable can also be developed to include the relationship between EV and firm performance, as well as between EV and EO. The underlying reason is because the theoretical foundation explaining the effect of environmental dynamism on the relationship between EV and firm performance, as well as between EV and EO has been unknown in previous literatures. Thus, there are three hypotheses that can be developed:

Hypothesis 4: Environmental Dynamism (ED) moderates the relationship between EV and FP: A firm's EV will be more strongly associated with high performance when ED is high than when it is low.

Hypothesis 5: Environmental Dynamism (ED) moderates the relationship between EO and FP: A firm's EO will be more strongly associated with high performance when ED is high than when it is low.

Hypothesis 6: Environmental Dynamism (ED) moderates the relationship between EV and EO: A firm's EV will be more strongly associated with high EO when ED is high than when it is low.

### *2.5. Resource Availability as a Moderating Variable*

Similar to the environmental dynamism construct, resource availability as developed by Miller and Friesen (1982), Covin and Slevin (1991), Lumpkin and Dess (1996) in their model has a function of moderating variable which moderate the relationship between EO and firm performance. Because this study examines not only the relationship between EO and firm performance, but also the relationship between EV and firm performance as well as the relationship between EV and EO, thus the resource availability construct is hypothesized as the following:

Hypothesis 7: Resource Availability (RA) moderates the relationship between EV and FP: A firm's EV will be more strongly associated with high performance when RA is high than when it is low.

Hypothesis 8: Resource Availability (RA) moderates the relationship between EO and FP: A firm's EO will be more strongly associated with high performance when RA is high than when it is low.

Hypothesis 9: Resource Availability (RA) moderates the relationship between EV and EO: A firm's EV will be more strongly associated with high EO when RA is high than when it is low.

### *2.6. Firm Performance and Intention to Sustainable Development*

Dean and McMullen (2007) investigate a relationship between environmental degradation and entrepreneurial action. Their study tries to explain how entrepreneurship can help resolve the environmental problems of global socio-economic systems. In their paper, they explain that according to environmental economics, environmental degradation results from the failure of markets, whereas the entrepreneurship literature argues that opportunities are inherent in market failure. This economic and entrepreneurship literature then suggest that environmentally relevant market failures represent opportunities for achieving profitability while simultaneously reducing environmentally degrading economic behaviors. Another recent study conducted by Vuorio et al. (2017), which explains the drivers of entrepreneurial intentions in sustainable entrepreneurship, also shows that attitude toward sustainability and perceived entrepreneurial desirability enhance sustainability-oriented entrepreneurial intentions. In other literature, Shapero and Sokol (1982) revealed that the perceived feasibility such in financial performance could lead to the future entrepreneurial intention. Therefore, this study investigates the intention that leads to the performance of sustainability initiative. Furthermore, this study investigates the impact of state-owned-enterprise's Financial Performance on Intention to Sustainable Development in the context of social and environmental impact. Thus, it can be hypothesized that,

Hypothesis 10: Financial Performance has a direct positive effect on Intention to Sustainable Development.

### *2.7. Firm Performance and Intention to Collaboration*

The international business literature has already acknowledged a number of positive outcomes for companies actively engaged in co-operation or strategic alliances, such as higher return on equity, better return on investment, and higher success rates, compared with integration through mergers and acquisitions. Brandenburger and Nalebuff (1996) developed a co-operation-competition model or co-opetition which describes a strategic framework that enables organizations to classify relevant actors in their industry and beyond. They believe that businesses can become more competitive by cooperating. Based on case studies across different industries, they argued that cooperation and competition are both necessary and desirable when doing business. Cooperation is required to increase benefits to all players (focus on market growth), and competition is needed to divide the existing benefits among these players (focus on market share). In other literature, Todeva and Knoke (2005) conduct a comprehensive review of strategic alliances and collaboration models. They argue that strategic alliances should be developed and propagated as formalized interorganizational relationships. These cooperative arrangements represent new organizational formation that seeks to achieve organizational objectives better through collaboration than through competition. Considering the importance of collaboration and the study by Saphero and Sokol (1982) which suggests that financial performance could lead to the future entrepreneurial intention, this study investigates the impact of state-owned-enterprise's Financial Performance on Intention to Collaboration. Thus, it can be hypothesized that,

Hypothesis 11: Financial Performance has a direct positive effect on Intention to Collaboration.

### 3. Conceptual Framework

In this study, Entrepreneurial Values (EV) has been designated as the independent variable, while Entrepreneurial Orientation (EO) and Financial Performance (FP) are the mediating variables. Additionally, there are two moderating variables which are Environmental Dynamism (ED) and Resource Availability (RA) in the model. Finally, there are two intention variables, namely, Intention to Sustainable Development (ITS) and Intention to Collaboration (ITC) as the dependent variables in the model.

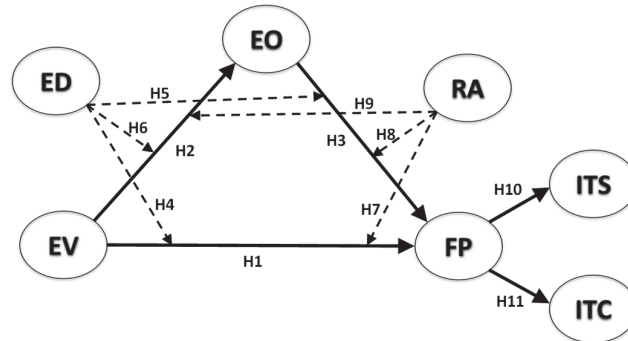


Fig. 1. The Conceptual Framework

### 4. Methodology

The objective of this research is to test the effect of Entrepreneurial Values (EV) and Entrepreneurial Orientation (EO) on state-owned enterprises' Financial Performance (FP), with influence of Environmental Dynamism (ED) and Resource Availability (RA) as moderating variables, and its impact on Intention to Sustainable Development (ITS) and Intention to Collaboration (ITC) variables. The unit of analysis of this research is the organization / company. Every organization/company is represented by two respondents who are the CEO and CFO and their responses on questionnaire are averaged to come up with single response for each company. The type of research is a descriptive study and the directional relationships between variables are investigated to test an effect of a variable on another variable as well as to test an effect of a moderating variable on the relationship between specified variables. The questionnaires used in this study have been developed from relevant literature dealing with EO (Covin & Slevin, 1989), EV (Sánchez, 2014), perceived Financial Performance (Lumpkin & Dess, 2001; Covin & Slevin, 1989), Environmental Dynamism (Miller & Friesen, 1982), Resource Availability (Miller & Friesen, 1982), Intention to Sustainable Development (Vuorio et al., 2017) and Intention to Collaboration (Jap, 2001). The population for this study is 106 state-owned enterprises which are listed in Ministry of State-Owned Enterprises of Indonesia. The sampling method in this research is a purposive sampling technique which is used to get the sample of 81 SOEs that fits with the criteria of respondents having tenure of one year or more than a year. Likert scale method (1 to 6) is utilized in measuring all the variables in the study. The PLS-SEM is used as an analytical technique in this study with using SmartPLS software.

### 5. Analysis and Results

#### 5.1. Measurement Model

The reflective measurement model assessment involves examining the indicator loadings. Loadings above 0.708 are recommended, as they indicate that the construct explains more than 50 per cent of the indicator's variance, thus providing acceptable item (indicator) reliability.

**Table 1**  
Validity and Reliability of HCM

Construct (HOC*)	Dimensions (LOC*)	Loading	CA	CR	AVE
EV	Self-Direction	0.632	0.833	0.877	0.591
	Achievement	0.717			
	Stimulation	0.865			
	Benevolence	0.897			
	Universality	0.701			
EO	Innovativeness	0.903	0.855	0.910	0.771
	Proactiveness	0.849			
	Risk-Taking	0.881			

Remarks: \*HOC=Higher Order Construct; \*LOC=Lower Order Constructs

CA=Cronbach Alpha, CR=Composite Reliability, AVE=Average Variance Extracted

The indicator loading result shows that all indicators of EV Benevolence and EO Innovativeness are reliable and valid. Meanwhile, not all indicators of EV Self-Direction, EV Achievement, EV Stimulation, EV Universality, EO Proactiveness, EO Risk-Taking, FP, ITC, ITS, RA and ED are reliable and valid. All indicators of EV Security, on the other hand, are not reliable and valid, thus, EV Security is not included in the empirical model.

**Table 2**  
Validity and Reliability of Dimensions

Dimensions	Item	Loading	CA	CR	AVE
		>0.70	0.60-0.90	0.60-0.90	>0.50
Self-Direction	selfEV5	1.000	1.000	1.000	1.000
Achievement	achEV9	0.824	0.643	0.847	0.735
	achEV10	0.889			
Stimulation	stimEV 16	0.898	0.781	0.873	0.697
	stimEV 17	0.845			
	stimEV 18	0.756			
Benevolence	benevEV 21	0.827	0.796	0.862	0.560
	benevEV 22	0.857			
	benevEV 23	0.627			
	benevEV 24	0.779			
Universality	benevEV 25	0.616	1.000	1.000	1.000
	UnivEV27	1.000			
Innovativeness	inovEO1	0.732	0.883	0.909	0.588
	inovEO2	0.772			
	inovEO3	0.790			
	inovEO4	0.742			
	inovEO5	0.733			
	inovEO6	0.810			
Proactiveness	inovEO7	0.787	0.821	0.877	0.593
	proEO8	0.617			
	proEO9	0.885			
	proEO10	0.840			
	proEO11	0.811			
Risk-Taking	proEO12	0.663	0.822	0.875	0.584
	riskEO16	0.797			
	riskEO17	0.775			
	riskEO18	0.702			
	riskEO20	0.746			
	riskEO22	0.797			

Note: CA=Cronbach Alpha, CR=Composite Reliability, AVE=Average Variance Extracted

The result of indicator loading test shows that only 45 out of 85 indicators are reliable and valid. Furthermore, the testing result of Internal Consistency Reliability shows that EV, EO, FP, ITS, ITC, ED and RA variables have an internal consistency reliability since their Cronbach's Alpha are higher than 0.70 and their Composite Reliability are less than 0.95. Furthermore, the testing result of Convergent Validity shows that the AVE values of all constructs are higher than 0.50. Thus, it can be concluded that EV, EO, FP, ITS, ITC, ED and RA have convergent validity. In other words, all constructs explain more than 50 per cent of the variance of their items, respectively.

**Table 3**  
Validity and Reliability of Constructs

Constructs	Item	Loading	CA	CR	AVE
FP	fp1	0.906	0.891	0.932	0.820
	fp2	0.923			
	fp3	0.887			
ITS	Its3	0.801	0.889	0.922	0.749
	Its4	0.907			
	Its5	0.919			
	Its6	0.828			
ITC	Itc1	0.851	0.903	0.937	0.832
	Itc2	0.941			
	Itc3	0.941			
ED	ed7	0.911	0.756	0.891	0.803
	ed8	0.881			
RA	ra1	0.751	0.781	0.859	0.604
	ra2	0.749			
	ra3	0.780			
	ra4	0.826			

Note: CA=Cronbach Alpha, CR=Composite Reliability, AVE=Average Variance Extracted

The next step is to assess discriminant validity, which is the extent to which a construct is empirically distinct from other constructs in the structural model. The HTMT ratio of the correlations is defined as the mean value of the item correlations across constructs relative to the (geometric) mean of the average correlations for the items measuring the same construct. Discriminant validity problems are present when HTMT values are high (Hair et al., 2019). Henseler et al. (2015) propose a threshold value of 0.90 for structural models with constructs that are conceptually very similar. The testing result of Discriminant Validity shows that there is no discriminant validity problem in the model.

## 5.2. Structural Model

The value of Variance Inflation Factor (VIF) is ideally below 3 ( $VIF < 3$ ); if the VIF lies between 3 and 5, it means there is a possibility of Collinearity; if VIF is greater than 5, it means there is a high possibility of Collinearity. In this study, the VIF value of EV-EO, EO-FP and EV-FP lies below 3 (three) which means that there is no Collinearity problem. It is found in this study that EV explains 58.6% of variances in EO, while 41.4% of EO variances are explained by other variables. Thus, EV has a moderate explanatory power in the model. On the other hand, EO explains only 34.1% of variances in FP, while 65.9% of FP variances are explained by other variables. The ITS and ITC variables have only very weak explanatory power since their  $R^2$  is just 0.065 and 0.045, respectively. The predictive accuracy (relevance) of EO and FP in this study is between 0 and 0.25, although it is closed to 0.25 which is the threshold for medium predictive accuracy. Thus, it can be concluded that EO and FP have relatively small predictive accuracy. Other variables (ITS and ITC), however, show much less predictive accuracy than EO and FP. Since all  $Q^2$  values are larger than 0 (zero), then they suggest that the model has predictive relevance for a certain endogenous construct. In contrast, values of 0 or below that level indicate the lack of predictive relevance (Hair et al., 2017).

The path coefficient measures the significance and strength of the relationships between constructs in the hypothesis, values range between -1 and +1. It is found in this study that there is a significantly positive effect of (i) EV on EO with path coefficient of 0.281, (ii) EO on FP with path coefficient of 0.336, (iii) FP on ITS with path coefficient of 0.254, and (iv) FP on ITC with path coefficient of 0.213. However, there is no significant effect of EV on FP (path coefficient of -0.055).

**Table 4**  
Value and Significance of Path Coefficient

No.	Path	Standardized Coefficient	t-statistic ( $t > 1.645$ )	p-values ( $p < 0.05$ )	Decision
H1	EV → FP	-0.055	0.423	0.336	Not Supported
<b>H2</b>	<b>EV → EO</b>	<b>0.281</b>	<b>3.324</b>	<b>0.000</b>	<b>Supported</b>
<b>H3</b>	<b>EO → FP</b>	<b>0.336</b>	<b>2.060</b>	<b>0.020</b>	<b>Supported</b>
H4	EDxEV → FP	-0.145	0.918	0.179	Not Supported
H5	EDxEO → FP	-0.045	0.347	0.364	Not Supported
H6	EDxEV → EO	0.056	0.626	0.266	Not Supported
H7	RAxEV → FP	-0.050	0.368	0.357	Not Supported
H8	RAxEO → FP	-0.026	0.260	0.397	Not Supported
H9	RAxEV → EO	-0.076	0.864	0.194	Not Supported
<b>H10</b>	<b>FP → ITS</b>	<b>0.254</b>	<b>2.043</b>	<b>0.021</b>	<b>Supported</b>
<b>H11</b>	<b>FP → ITC</b>	<b>0.213</b>	<b>1.912</b>	<b>0.028</b>	<b>Supported</b>

In terms of moderating variable, ED does not significantly moderate the effect of EV on FP (path coefficient of -0.145), EO on FP (path coefficient of -0.045), and EV on EO (path coefficient of 0.056). The same result applies for RA which does not significantly moderate the effect of EV on FP (path coefficient of -0.050), EO on FP (path coefficient of -0.026) and EV on EO (path coefficient of -0.076). Despite the insignificance, the negatively moderating effect of ED or RA indicates that a positive effect of a construct on another construct will be reduced when ED/RA is larger than when ED/RA is smaller.

## 6. Discussion

**Hypothesis 1:** The entrepreneurial value has a direct positive effect on state-owned-enterprise's financial performance. **The Hypothesis 1 is not supported.** This result proves that EV does not directly affect a large firm's Financial Performance. Previous literatures which provide empirical evidences that EV affects financial performance apply only for small firms where the founder (which is the entrepreneur) also functions as the leader of the firm. In a large company setting especially in state-owned-enterprises, that is not the same case. The CEOs/CFOs of state-owned-enterprises are the corporate leader (director) but not the founder of state-owned-enterprises. In terms of psychological traits, business founders will: (1) demonstrate a higher achievement orientation than will non-founders, (2) show a greater internal locus of control than non-founders, (3) manifest higher risk-taking propensity than non-founders (Begley & Boyd, 1988). It helps to explain why in a large company setting, specifically in SOEs, where the corporate leaders are non-founders, the influence of EV on FP is not an evidence.

**Hypothesis 2:** The entrepreneurial value has a direct positive effect on entrepreneurial orientation. **The Hypothesis 2 is supported.** This result supports previous literatures that EV positively affect EO. It means that entrepreneurial orientation as

an organizational behavior will be enhanced when the entrepreneurial value increases or get stronger (Malovics et al., 2015). The fact that this relationship is found in the state-owned-enterprises study proves that this relationship is generally accepted.

**Hypothesis 3:** The entrepreneurial orientation has a direct positive effect on state-owned-enterprise's financial performance. **The Hypothesis 3 is supported.** This relation between EO and FP has been widely investigated in many developed countries and developing countries. Many traditional researchers conceptualized EO with three dimensions and investigate the impact of the composite EO on financial performance (Covin & Slevin, 1989; Miller, 1983; Miller & Friesen, 1982). Furthermore, recent studies also support previous traditional researches that unidimensional EO has a positive effect on large firms' financial performance and SMEs' financial performance (Al Swidi & Al-Hosam, 2012; Gupta & Batra, 2015). However, similar research in state-owned-enterprises is still limited. Thus, the evidence of positive effect of EO on FP in this study supports the previous unidimensional EO studies as well as the study conducted by Koe (2013) regarding the impact of Entrepreneurial Orientation on Performance of Government-Linked Companies (GLCs) in Malaysia which will enrich the entrepreneurial research literatures.

**Hypotheses 4, 5 and 6:** Environmental Dynamism (ED) moderates the relationship between (i) EV and FP, (ii) EO and FP, (iii) EV and EO. **The Hypotheses 4, 5 and 6 are not supported**, since p-value and t statistics are not significant. There are 48.6% of respondents tend to disagree with the needs to outperform their competitors, most of sample respondents contend that actions of competitors are predictable (79%), demand is predictable (85.2%), and consumer tastes are predictable (81.5%). Although Environmental Dynamism moderation effect is not significant in SOEs external environment, regulatory environment may also be intense and cause a negative impact (specifically when there is regulatory environment that does not encourage entrepreneurial activities) on SOE's entrepreneurial activities and the success of financial performance. This finding supports the notion that in less developed market economies where there are inefficient, weak, and unpredictable regulatory institutional structures, such institutional conditions are likely to negatively influence firm performance (Adomako & Danso, 2014).

**Hypotheses 7, 8 and 9:** Resource Availability (RA) moderates the relationship between (i) EV and FP, (ii) EO and FP, (iii) EV and EO. **The Hypotheses 7, 8 and 9 are not supported**, since p-value and t statistics are not significant at  $p < 0.05$  and  $t > 1.645$ , respectively. The RA indicators which are valid and reliable are i) capital, ii) skilled labor, iii) material supplies, and iv) managerial talents, while other indicators are not valid and reliable. Furthermore, the descriptive statistic result also shows that on average there are 86.2% of sample respondents agree that (i) capital or financial resources, (ii) the number of skilled workers, (iii) material supplies for operations, (iv) managerial talent are available at SOE. Despite the insignificance, it indicates that the positive effect of EV on EO will be reduced or weaker when RA is higher than when it is lower. In other words, the positive effect of EV on EO will be stronger when RA is lower than when it is higher. The finding is in line with Miller and Friesen (1982) who argued that RA will negatively influence innovation. Hughes et al. (2015) also provided evidence that there is a positive effect of slack resource availability on SMEs' entrepreneurial orientation, while networking effectiveness partially mediates the entrepreneurial orientation and firm performance relationship. Available slack resource, which is an uncommitted resource, will allow firms to adapt to complex competitive landscapes by engaging in more complex activities (Hughes et al., 2015). Those studies help to explain that when RA in Indonesian SOEs is relatively abundant, the drive to innovate and make risky decisions is somehow reduced that can lead the firms to expansion to non-core activities and making them losing financial discipline. On the contrary, when there is a resource scarcity (e.g. capital), SOEs tend to collaborate with other parties (e.g. other SOEs, private firms, local governments) and be involved in more entrepreneurial activities.

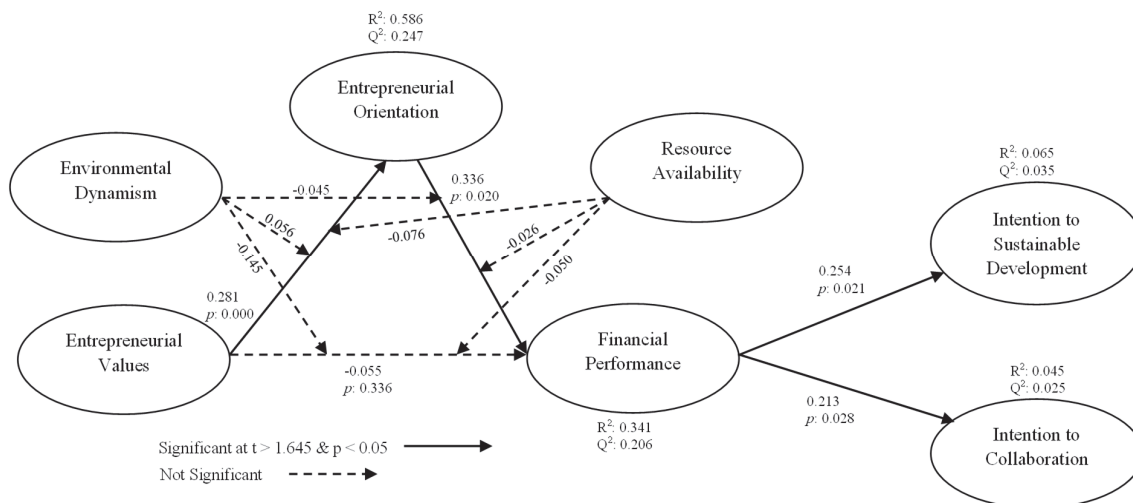


Fig. 2. Empirical Model with Path Coefficients



**Hypothesis 10:** Financial Performance has a direct positive effect on Intention to Sustainable Development. **The Hypothesis 10 is supported.** The result of indicator ITS shows that on average there are 99.8% respondents agree that they have intention to sustainable development through strategy of SOE. Therefore, this finding is in line with Saphero and Sokol's (1982) study which suggests that financial performance could lead to the future entrepreneurial intention. The result is in line with the practice that SOEs have already conducted sustainable development activities such as (i) cooperation with farmer groups in the development of rice seeds and absorbing grain, (ii) developing the "MSME Digital Market" program so that people can market their products digitally, (iii) providing internet services to 12,500 villages, (iv) establishing fishermen housing and facilitating the education of fishermen's children by establishing reading houses, etc.

**Hypothesis 11:** Financial Performance has a direct positive effect on Intention to Collaboration. **The Hypothesis 11 is supported.** The result of ITC variable shows that 100% respondents agree that they have intention to collaborate with other SOEs, multi-nationals, micro-small-medium enterprises. This finding is also in support of Saphero and Sokol's (1982).

## 7. Conclusion

This study provides an empirical evidence that: (1) Entrepreneurial Values (EV) has no significant positive effect on SOEs' Financial Performance in Indonesia; (2) Entrepreneurial Values (EV) has a significant positive effect on Entrepreneurial Orientation (EO); (3) there is significantly positive effect of Entrepreneurial Orientation (EO) on the Financial Performance of Indonesian state-owned enterprises; (4) there is no significant moderating effect of Environmental Dynamism on the relationship between (i) EV and FP, (ii) EO and FP, as well as (iii) EV and EO; (5) there is no significant moderating effect of Resource Availability on the relationship between (i) EV and FP, (ii) EO and FP, as well as (iii) EV and EO; (6) there is an evidence that Financial Performance has a positive influence on the Intention to Sustainable Development (ITS); and (7) there is another evidence that Financial Performance has also a positive effect on the Intention to Collaboration.

## 8. Theoretical and Practical Implications

The theoretical implications of this study are: (i) the literature of EO-FP relationship and EV-EO relationship in SMEs can be generalized to large firms specifically state-owned enterprises in developing country such as Indonesia; (ii) the unidimensional EO construct can be applied in the state-owned enterprise context; (iii) the Entrepreneurial Values of top management team play a significant role in influencing positively the Entrepreneurial Orientation behavior of the institution and furthermore, the Entrepreneurial Orientation also affects positively the Financial Performance, (iv) the Financial Performance has a positive effect on Intention to Sustainable Development and Intention to Collaboration.

Meanwhile, the practical implication of this study can be summarized as follows: firstly, the implication of the evidence in this study is that the government needs to consider carefully any additional state-capital participation in SOEs so as not to create comfort zone and making firms tend to lose financial discipline and expand to non-core activities that have an impact of reducing their entrepreneurial orientation which may decrease the financial performance. This implication is supported by the Miller and Friesen's (1982) that initially predicted a positive correlation between resource availability (e.g., capital) and innovation but got a negative one for the entrepreneurial firms. Alternatively, SOEs and government can consider the use of slack resource availability which consists of three types of slack resources: (i) available (resources that are not yet committed); (ii) recoverable (resources that have been absorbed and are subsequently contributing to additional cost but can be recovered through organizational redesign); and (iii) potential (future resources that can be generated by, for example, raising additional debt). This slack resource availability is useful either for innovation and change or as a buffer for organization (Hughes et al., 2015). Empirical evidence shows that resources need to be accumulated, bundled, and leveraged, not simply possessed, suggesting that competitive advantage is created when resources are managed effectively (Zahra et al., 2009 cit. Hughes et al., 2015, p. 8). Finally, government can formulate a mechanism through regulation regarding the slack resource availability that can encourage entrepreneurial initiatives of SOEs through collaboration with other parties.

Secondly, to enhance the Financial Performance of a state-owned enterprise, government needs to hire an entrepreneurial oriented CEO or Top Management Team who can direct the firm behavior to adopt entrepreneurial values (such as self direction, achievement, stimulation, etc which correspond to innovativeness, proactiveness, and risk-taking). This is in line with the Alon et al. (2014) about Chinese state-owned enterprises going global. They contended that although Chinese SOEs are fairly confident about their outward direct investments (ODI) activities, the SOEs still need top entrepreneurs with the right knowledge and skills who will determine the future direction of their overseas investments (Alon et al., 2014).

Thirdly, to support the public service context of SOEs in the long run as well as creating a sustainable economic value to the country, thus, Intention to Sustainable Development (e.g. poverty alleviation around the company, new job creation, equal opportunity, use of environmentally friendly materials and processes, use of renewable energy, and protection of environmental biodiversity) and Intention to Collaboration should be at the center of the corporate strategy in creating economic value in a way that also creating value for society. Focusing on the Triple Bottom Line agenda to create economic, social and environmental values through partnerships with other parties (Elkington, 2004). Therefore, corporate social responsibility mindset in

which societal issues are at the periphery, not the core, should be replaced by the shared value principle (Porter & Kramer, 2011).

## 9. Limitation of the Study and Future Research

The limitations of this study are as follows: (i) this study uses perceived Financial Performance instead of an objective financial performance data; (ii) this study includes all SOEs with various performances (both poor and good performance); (iii) this study does not specify government regulations in the research model; (iv) this study does not focus on specific context of SOEs whether they are profit oriented or public service.

The recommendation or suggestion is that further study can be conducted on these issues below to enrich the entrepreneurial literatures: (i) The model in this study can be modified to use multidimensional EO instead of unidimensional EO; (ii) The model in this study can be applied to use objective financial performance data; (iii) This study does not consider the sectors/industry of SOEs in the sample; (iv) The model in this study can be extended to large public-listed firms; (v) The model can be modified to include other moderating variables such as corporate culture, government regulation; (vi) There may be other variables which also explain the variance of Intention to Sustainable Development and Intention to Collaboration that can be investigated in the future study.

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