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## The Determinants of the End-of-Year Spending Behavior of Local Governments' Financial Managers: A Lesson Learn from Indonesia

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### ABSTRACT

This study seeks to investigate the determinants of the end-of-year spending behavior of local governments' financial officers based on the social cognitive theory (personal and environmental factors) and moral intensity. Our sample is 290 senior officers who administer the financial and operational expenditures of regencies/ cities in Indonesia. Using the structural equation modeling (SEM), this paper demonstrates that multidimensional factors, including environmental (control environment), personal (risk consideration), and moral intensity, affect the end-of-year spending behavior of local governments' financial officers. Other findings show that risk consideration mediates the effect of moral intensity on the end-of-year spending behavior of local governments' financial officers.

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### INTRODUCTION

Numerous countries experience significantly increasing governments' budget at the end of the year, such as the US (Kozar and McCaffery, 1994; Liebman and Mahoney, 2013; Fichtner and Greene, 2014), Germany (Fitzenberg, 2015), England, Wales, Northern Ireland (Hyndman et.al., 2006; Baumann, 2015), Taiwan (Uang and Liang, 2012) and Indonesia (DIPA-Tracking-Study, 2012). Governments' spending realization generally consists of operational and capital spending. A significant increase in governments' operational spending realization at the end of the year brings various problems for governments. These problems include the incompatibility of expenditures with organizations' prioritized needs; and hasty procurement processes that potentially leads to inaccuracies and errors in contract drafting, payments to additional employee hours for contract drafting and payment, and increased goods procurement costs from vendors (Hyndman et.al., 2005); and a low quality of spending quality (Liebman and Mahoney, 2013;

Fichtner and Greene, 2014; Baumann, 2015). A significant increase of the end-of-year realization of capital expenditure also causes problems for governments, primarily related to financial officers' motivation to obtain illegal fees, and less efficient, less effective, and low-quality spending (Hyndman et al., 2005). Citizens are also affected by this spending behavior due to the provision of low-quality public goods and services and consequently delayed use of public goods and services.

The end-of-year spending behavior of governments' financial officers is closely related to the decisions to allocate a certain amount of the expenditure budget that is realized at the end of the year for specific purposes (Rausch and Wall, 2015). This end-of-year spending behavior is dysfunctional (Hyndman et al., 2005; Rausch and Wall, 2015) and arguably categorized as an unethical behavior because of the potential problems it created as explained before. It is then necessary to investigate the determinants of the end-of-year spending behavior of local governments' financial officers, including in Indonesia. In this respect, Indonesia is a country with a vast number of local governments, i.e., 542 provincial/ regency/ city governments that started the regional autonomy and fiscal decentralization policies in 2004. Although local governments' expenditure budgets increased significantly year by year (an average annual increase of 19.07% in 2012-2016), local governments still experienced problems with the realization of operational and capital expenditures that spiked significantly at the end of years (quarter IV). Notably, the average realization of operational (goods and service procurements) and capital expenditures of local governments in quarter IV were 49.38% and 61.25% of total annual expenditures (The Indonesian Ministry of Finance, 2014).

Previous studies on the determining factors of the increase of the end-of-year spending behavior of local governments mainly emphasize organizations' environmental factors. In particular, these studies analyze: 1) budgetary planning, especially in relation with delayed budget approval, delayed preparation of budget administration, and weaknesses in planning and budgeting; 2) budget implementation that refers to the lengthy process of budget document revision and lack of coordination; 3) goods and service procurement, especially in relation with lengthy procurement process, lack of certified procurement experts, and lack of the supporting infrastructure of electronic procurement and 4) the internal factors of governments' organizations, including changing regulations and late payment process (DIPA-Tracking-Study, 2012). Other studies by Liebman and Mahoney (2013), and Fichtner and Greene (2014) analyze the end-of-year behavior of using up operational expenditure budget as a consequence of the implementation of the annual budget system. Similarly, S. Baumann (2015) examines the end-of-year budget realization behavior concerning the yearly performance measurement system.

Previous studies arguably focus more on a single dimension, namely the organizations' environment factor. However, the end-of-year spending behavior of local governments' financial officers is likely affected by multidimensional factors, both environmental and personal ones (Rausch and Wall, 2016; Galperin et al., 2010; Aquino et al., 2009). In this respect, this study analyzes the end-of-year spending behavior of local governments' financial officers from the ethical behavior perspective, especially by using the social cognitive theory (Bandura, 1986) as a framework to gain a better understanding of the determinants of the spending behavior. The social cognitive theory proposes that behavior is affected by environmental factors. In this respect, the theory categorizes budget planning, budget implementation, goods and service procurement, and organizations' internal factors that are organizations' environmental factors into imposed environmental factors. Further, the social cognitive theory also argues that behavior is affected by personal factors, including the cognitive and affective aspects.

We rely on the social cognitive theory because this theory arguably accommodates the multidimensional factors that determine the end-of-year spending behavior of local governments' financial officers, namely the environmental and personal factors. This theory has also been used extensively and managed to explain ethical behaviors in various contexts (Aquino et al., 2009; Galperin et al., 2010), including the financial one (Hmieleski dan Baron, 2009; Anggraini et al.,

2017). The end-of-year spending behavior of local governments' financial officers can be influenced by moral intensity (Jones, 1991; Kish-Gepart et al., 2010; Arel et al., 2012). Thus, this study also uses the moral intensity framework to analyze the behavior from the ethical behavior perspective (Jones, 1991). Further, in various contexts, moral intensity affects ethical behavior (Jones, 1991; Loe et al., 2000; Carlson et al., 2002; O'Fallon and Butterfield, 2005; Kish-Gepart et al., 2010), including in the financial one (Arel et al., 2012).

This study seeks to investigate the determinants of the end-of-year spending behavior of local governments' financial officers based on the social cognitive theory and moral intensity. In this regard, we propose control environment (D'Aquila, 1998; Ziegenfuss, 2001; Ahmad and Norhashim, 2008), risk consideration (Nurharjanti, 2017), self-control (Tangney et al., 2004; Gino, et. al., 2011), and moral intensity (Jones, 1991; Arel, et al., 2012) as the determinants. Specifically, the social cognitive theory classifies the control environment as the environmental factor, especially as the imposed environment. Meanwhile, the theory categorizes risk consideration (self-control) as the cognitive (affective) dimension of the personal factor.

The contribution of this study is twofold. Firstly, previous studies focus more on a single dimension, namely the environmental factors, especially the ones that are related to the budget system, goods procurement, and performance measurement system. Meanwhile, this study involves the multidimensional factors, i.e., environmental and personal factors and moral intensity in the ethical behavior analysis. Secondly, this study complements previous studies (e.g., Hmieleski and Baron, 2009; Anggraini et al., 2017; Arel et al., 2012) by demonstrating that the social cognitive theory and moral intensity manage to explain the ethical behavior of local governments' financial officers in budget spending.

## 1. LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

### 1.1 Social Cognitive Theory

As proposed by A. Bandura (1986), the social cognitive theory, as a social psychology theory, explains individual behavior. In particular, the social cognitive theory describes the reciprocal relationship that mutually affects human behavior, personal factors, and external or environmental factors. The reciprocal relationship does not necessarily imply that the determinants exhibit same effects, and the effects take place simultaneously. It takes a specified period for the determining factors to have their influences and activate the reciprocal relationship. Wood and A. Bandura (1989) explain that the cognitive aspects of personal factors include thoughts, expectation, belief, purpose, and interest. Further, the cognitive determinant refers to self-belief, the determination of personal goals, and the quality of analytical thinking. Next, the social cognitive theory categorizes risk consideration (Nurharjanti, 2017) that reflects the analytical thinking process into the cognitive aspects of personal factors. Another aspect of the personal factors is the affective factor that includes self-perception and feeling. The social cognitive theory also classifies self-control (Tangney et al., 2004; Gino et al., 2011) into the affective aspect of the personal factor. Individuals' biological traits include physical structure, senses, nerve structure, brain structure, race, sex, physical measures, and physical attractiveness.

The social cognitive theory identifies three types of environmental structure (Bandura, 1999), namely imposed environment, selected environment, and constructed environment. Imposed environment refers to the imposed physical and sociostructural environment regardless of the preference of individuals. In this respect, control environment (D'Aquila, 1998; Ziegenfuss, 2001; Ahmad & Norhashim, 2008) is categorized into imposed environment by the social cognitive theory. Meanwhile, selected environment is individuals' selected environment to associate and engage in various activities. Lastly, constructed environment is the social environment or

institutional system that is created for generative efforts. Each environment affects the nature of the reciprocal relationship between personal, behavioral, and environmental factors. When imposed environment is strong, individuals' perceived control is so low that the sense of agency is also small or even non-existent. Under this condition, imposed environment exhibits a strong influence on personal factors and individual behavior. Conversely, when personal factor is strong, for example, when leadership capacity or self-efficacy is strong, individuals likely create construct environment. Under this condition, personal factors exhibit a stronger impact on environmental factors and individual behavior.

## **1.2 The End-of-year Spending Behavior of Local Governments' Financial Officers**

According to A. Rausch and F. Wall (2015), the end-of-year spending behavior of governments' financial officers refers to decisions to allocate a certain amount of expenditure budgets that will be realized at the end of years to particular purposes. The end-of-year spending behavior can be classified as a dysfunctional spending-related behavior (Hyndman et al., 2005). The spending-related dysfunctional behavior is closely associated with financial officers' counter-productive actions due to the budget used to set budget plans and targets. Dysfunctional behavior usually takes place in the context of traditional budgets that is constrained by fixed budget cycles for a limited period. The dysfunctional behavior is a consequence of the use of budget in performance evaluation, specifically in relation to several main characteristics of budget. Firstly, the compensation of individuals who are in charge of the budgets usually reflects whether their actual performance meets or even exceeds budget targets. Secondly, spending targets and fund availability are determined for a fixed time, usually a year. In this respect, dysfunctional budget-related behavior includes reporting distorted information; proposing excessive or deficient budget estimations; creating budget slack; and delaying or accelerating expenditures, investments, and income. E. Pereira (1991) argues that budget-related behavior is affected by attitude toward the budget system, the responsibility of meeting budgets, budget internalization, and difficulties in meeting budgets.

Further, A. Rausch and F. Wall (2015) propose that dysfunctional budget-related behavior takes place during both the budget planning and budget realization phases. During the budget planning stage, the dysfunctional behavior is closely related to the participation of sub-units in budget preparation, and budget use for the control and performance evaluation of sub-units. During the early phase of budget implementation, the most common dysfunctional behaviors are saving funds incorrectly and deliberately missing investment opportunities. At the final stage of the budget period, the most common dysfunctional behaviors are unnecessary expenditures, wasteful spend-down, and bringing forward future projects and investments to the current period to avoid losing unspent funds. In this regard, H. Pollack and R. Zeckhauser (1996) label the behaviors as wasteful budget funding, ill-planned project, and investments to prevent losing funds.

## **1.3 Control Environment**

Control environment refers to the environment that is created or applied by local government units' leaders in which governments' financial officers have to comply. Concerning the environmental factors, as explained by the social cognitive theory (Bandura, 1999), control environment in local government units can be classified as the imposed environment for governments' financial officers. Referring to COSO (1992) and Government Regulation of Republic of Indonesia No. 60 the Year 2008 concerning the Internal Control of Government, control environment is defined as the condition of government units that affects the effectiveness of internal control and potentially create positive behavior. Thus, control environment is created and maintained through

the enforcement of integrity and ethical values, commitment toward competence, conducive leadership, the appropriate delegation of authority and responsibility, the proper preparation and implementation of human resource policies, and creating effective government internal control officers. In this respect, previous studies demonstrate the significant effect of control environment on financial reporting behavior (D'Aquila, 1998), employees' fraud, and counterproductive behavior (Ahmad and Norhashim, 2008), and fraud in local governments (Ziegenfuss, 2001).

## 1.4 Risk Consideration

A cognitive aspect that affects one's behavior is analytical thinking (Wood & Bandura, 1989). Individuals' analytical thinking process involves consideration of risks and results of their behavior or action. Thus, risk consideration can be defined as consideration of the probability of a particular event that potentially has a negative effect on one's specific purposes. In relation to the personal factors as explained by the social cognitive theory (Bandura, 1986), risk consideration can be categorized as the cognitive aspect of the personal factors.

Referring to COSO (1992), risks that need to be considered and anticipated by local governments' financial officers can be categorized into internal (risks from within officers' governmental units) and external risks. Internal risks itself can be classified further into operational and internal audit risks, while external risks consist of external audit and legal risks. Operational risk is related to the management of governments' expenditures, such as the disapproval of procurement result examination officers on the expenditures' results, the unwillingness of organizational units' heads as the budget users to pay expenditures, and the disapproval of expenditure accountability reports by financial verifiers. Next, audit risk refers to the possibility of negative audit findings on spending realization, either by internal auditors (regional inspectorate) or external auditors (the Audit Board of Indonesia). The examples of negative audit findings are manipulations from procedures, budget inefficiencies, local governments' financial losses, and the inaccuracy of expenditure allocation. Lastly, legal risk is closely related to the possibility of legal cases of governments' spending realization. Thus, risk consideration in governments' spending management assesses the probability of obstacles in payment approval, the verification of accountability reports, negative audit findings, and legal cases on spending realization.

In this respect, N. Nurharjanti (2017) finds the effect of risk assessment on goods/ service procurement. J. Liebman and N. Mahoney (2013) reveal that environmental factors (annual budget system and uncertainty) affect risk consideration on stochastic shocks that, in turn, affect end-of-year spending behavior. In a similar vein, S. Baumann (2015) holds that environmental factors (annual performance measurement system) affect risk consideration in performance evaluation that eventually affects end-of-year spending behavior.

## 1.5 Self Control

Self-control is the psychological capacity that enables individuals to exhibit behavior that is consistent with their long-term objectives, and to restrain themselves from behavior that is controlled by their short-term goals in relation to their personal motivation (Gino et al., 2011). J. Tangney et al. (2004) suggest that self-control is individuals' ability to refuse or convert inner responses, to interrupt unwanted behavior, and to restrain themselves from reacting to undesirable behavior. Self-control consists of thought control, emotion control, impulse control, behavior control, and habit control. With regards to public finance management, self-control is the psychological capacity that enables local governments' financial officers to behave consistently with good governance principles and values in managing governments' finance; namely orderly, efficient, effective, regulative, transparent, and accountable; and to restrain themselves from exhibiting self-motivated behavior.

Regarding the personal factors, as explained by the social cognitive theory (Bandura, 1986), self-control can be categorized as the affective aspect of personal factors. Previous studies have demonstrated the significant effect of self-control on unethical behavior (Tangney et al., 2004; Gino et al., 2011).

## 1.6 Moral Intensity

Jones (1991) explains that moral intensity refers to the characteristics of ethical issues that motivate decision-makers to use ethical considerations. Moral intensity is a construct that captures moral extension that is related to crucial issues in a particular situation. Moral intensity does not contain the individual moral traits of decision-makers or organizational factors. Moral intensity focuses on moral issues, not on individuals as moral agents or organizational context. Thus, moral intensity reduces the unethical behavior incidents by enhancing self-responsibility attribution on one's choices that affect others. There are six different elements of moral intensity, namely: 1) probability of effect, i.e., the likelihood that an action will result in damage or loss; 2) magnitude of consequences, i.e. total loss suffered by victims from an ethical behavior; 3) concentration of effect, i.e., the concentration of the impact of an action on the victims; 4) temporal immediacy, i.e., the time elapsed between an action and the realization of its detrimental consequences; 5) proximity, i.e., social, psychological, cultural, and physical proximity between an action and its victims; 6) social consensus, i.e., the degree of peers' approval that an action is considered wrong. The characteristics of these moral issues are collectively labeled as moral intensity. If any of the elements of the situational characteristics increases, the entire moral intensity of the situation will also increase proportionally.

Previous studies have found the significant effect of moral intensity on unethical behavior (e.g., Jones, 1991; Loe et al., 2000; Carlson et al., 2002; O'Fallon and Butterfield, 2005; Kish-Gephart et al., 2010) and financial reporting behavior (Arel et al., 2012). In particular, Kish-Gephart et al. (2010) reveal that four of the six elements of moral intensity significantly affect unethical behavior, namely social consensus, probability of effect, proximity, and concentration of effect.

Based on the above arguments, we propose the following hypotheses:

- H<sub>1</sub>: Control environment affects the end-of-year spending behavior of local governments' financial officers.*
- H<sub>2</sub>: Moral intensity affects the end-of-year spending behavior of local governments' financial officers.*
- H<sub>3</sub>: Risk consideration mediates the effect of control environment on the end-of-year spending behavior of local governments' financial officers.*
- H<sub>4</sub>: Risk consideration mediates the effect of moral intensity on the end-of-year spending behavior of local governments' financial officers.*
- H<sub>5</sub>: Self-control mediates the effect of control environment on the end-of-year spending behavior of local governments' financial officers.*
- H<sub>6</sub>: Self-control mediates the effect of moral intensity on the end-of-year spending behavior of local governments' financial officers.*

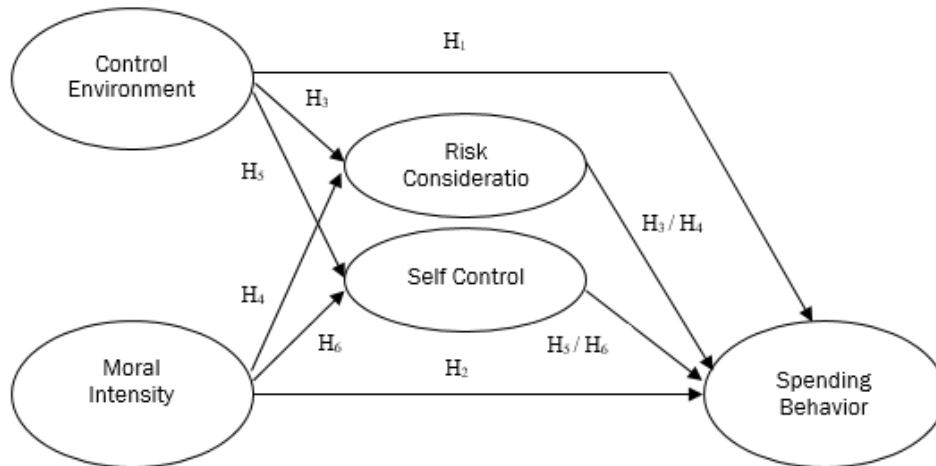


Figure 1: The Structural Model

## 2. METHODS

There are three categories of the 2017 budget and spending realization characteristics of all city/regency governments in Indonesia, i.e., high (total annual budget exceeded Rp 3 trillion), medium (total annual budget between Rp 1.51 and Rp 3 trillion), and low (total annual budget up to Rp 1.50 trillion). Our sample was all 338 structural officers of local governments' organizational units that manage operational expenditures who had authorities to realize governments' operational expenditures in six city/regency governments in Indonesia. The 2017 budget and spending realization characteristics of these six local governments arguably represented the budget and spending realization characteristics of all city/regency governments in Indonesia in all three categories. The study used two exogenous (independent) variables, namely control environment and moral intensity, and three endogenous (dependent) variables, namely risk consideration, self-control, and the end-of-year spending behavior of local governments' financial officers. The end-of-year spending behavior of local governments was an observed variable that was measured with the proportion of realized expenditures in quarter 4 to the total annual operational spending realization of governmental units. We used the realization of offices' operational expenditures for quarters I, II, III, and IV and total 2017 spending realization from the Local Government Finance Office of each city/ regency government.

Control environment, risk consideration, self-control, and moral intensity were latent variables or constructs that were measured with empirical indicators (see Table 1). We developed eight empirical indicators of the control environment construct by referring to Government Regulation No. 60 the Year 2008 concerning the Internal Control System of Government. Next, we measured the risk construction construct with six empirical indicators based on COSO (1992). We used and modified the empirical indicators of Tangney et al. (2004) into the governments' spending context to measure self-control empirically. Lastly, we referred to Jones (1991) and Carlson et al. (2002) in measuring the moral intensity construct into six dimensions, namely probability of effect, magnitude of consequences, the concentration of effect, temporal immediacy, proximity, and consensus. Overall, we used a 7-point Likert scale that ranged from point 1 (totally disagree) to point 7 (totally agree). The questionnaire contained respondents' identity and 28 questions on respondents' opinions on all empirical indicators of the control environment, risk consideration, self-control, and moral intensity constructs. We directly handed in the questionnaires to the respondents by ourselves with the assistance of the enumerators who were civil servants from each local government. The direct submission of questionnaires enabled us to provide sufficient explanation to the respondents. We handed in the questionnaires in July 2018, and the deadline for returning the questionnaires was mid-October 2018.

Until the deadline, from 338 respondents, 48 of them did not return the questionnaires, leaving 290 (85.80%) returned questionnaires. From 290 returned questionnaires, 44 of them were incomplete, leaving 246 usable questionnaires (72.78%). We tested our hypotheses by using the structural equation modelling (SEM). Specifically, the study used the maximum likelihood estimation as the estimation technique. We estimated the model in two steps with the confirmatory factor analysis and full structural equation model techniques. The following are the structural equation models of this study:

$$\eta_1 = \gamma_{1.1} \xi_1 + \gamma_{1.2} \xi_2 + \zeta_1$$

$$\eta_2 = \gamma_{2.1} \xi_1 + \gamma_{2.2} \xi_2 + \zeta_2$$

$$\eta_3 = \gamma_{3.1} \xi_1 + \gamma_{3.2} \xi_2 + \beta_{3.1} \eta_1 + \beta_{3.2} \eta_2 + \zeta_3$$

Explanation:  $\eta_1$  = risk consideration;  $\eta_2$  = self control;  $\eta_3$  = spending behavior;

$\xi_1$  = control environment ;  $\xi_2$  = moral intensity ;  $\gamma$ ,  $\beta$  = regression coefficient;  $\zeta$  = error.

### 3. RESULTS AND DISCUSSIONS

#### 3.1 Reliability and Validity

We ran the reliability test by calculating the values of construct reliability (see table 1). The analysis shows that the construct reliability values of all items were greater than 0.7. The results suggest that all indicators had sufficient reliability to explain each construct. We used the factor loading value of each indicator to measure construct validity (see Table 1). From 28 empirical indicators, four had the factor loading values below 0.5. Thus, we left out these four indicators in the subsequent analysis. Meanwhile, other empirical indicators had the factor loading values higher than 0.5, implying that the empirical indicators were valid.

**Table 1.** Factor loading values and construct reliability

	Code	Factor loading	Construct reliability
<b>Control Environment</b>	LP		.754
The enforcement of the implementing regulations and budget responsibility	LP1	.296	
Sanctions on manipulations	LP2	.654	
Required expert certification to manage expenditures	LP3	.459	
The implementation of performance-based management	LP4	.562	
The prevention of unauthorized use of finances	LP5	.332	
Responses to budget manipulation report	LP6	.642	
Firm recommendation from auditors on the manipulated budget use	LP7	.593	
Early prevention from potential budget manipulation by auditors	LP8	.601	
<b>Risk Consideration</b>	PR		.959
The risk that the procurement result examination officer does not approve the budget result	PR1	.926	
The risk that the organization's head does not approve the payment	PR2	.944	
The risk that the financial verifactor does not approve the budget	PR3	.952	
Risk of negative findings by the internal audit team	PR4	.876	
Risk of negative findings by the external audit team	PR5	.867	
Risk of legal cases	PR6	.877	
<b>Self-control</b>	PD		.888
Executing expenditures according to the organizational needs	PD1	.689	
Preparing expenditure responsibility based on reality	PD2	.749	
Realizing expenditure that provides significant benefits to the organization	PD3	.504	
Executing expenditure on schedule	PD4	.373	



Executing expenditure according to the budget ceiling for performance measurement purpose	PD5	.821	
Executing expenditure according to the budget ceiling for incentive requirements	PD6	.800	
Executing end-of-year expenditure according to the budget ceiling	PD7	.768	
Trying to prevent the presence of remaining budgets to be returned to the local government's finance	PD8	.730	
<b>Moral Intensity</b>	IM		.893
Probability of effect	IM1	.767	
Magnitude of consequences	IM2	.882	
Concentration of effect	IM3	.858	
Temporal immediacy	IM4	.639	
Proximity	IM5	.723	
Social consensus	IM6	.746	

### 3.2 Data Analysis and Results

The descriptive analysis in Table 2 displays the average and standard manipulation information of each factor and the correlation between these factors. The results show that the correlation between the independent variables and the dependent variables were higher than 0.7 (high correlation), except for the moderate correlation between spending behavior and control environment (the coefficient was between 0.3 and 0.7).

**Table 2.** Descriptive and correlation analysis

	Mean	St.Dev.	1	2	3	4
1 Control environment	5.755	1.151				
2 Risk consideration	4.837	1.554	.515**			
3 Self-control	4.632	1.741	.456**	.790**		
4 Moral intensity	4.730	1.487	.451**	.898**	.792**	
5 Spending behavior	30.691	15.052	.459**	.722**	.718**	.708**.

Note : \*\*p<.01

Table 3 indicates that the average spending realization of the quarter I year 2017 was relatively low (13.90%), only 49.40% of the proposed budget. Spending realization increased in quarters II and III (22.30%-25.78%), at par with the proposed budget. The highest average spending realization was in quarter IV (30.72%), with 127.10% of the proposed budget. Overall, the average annual spending realization was 92.70%. Thus, the average spending realization in quarter IV was a third of the total annual spending realization.

**Table 3.** Quarterly Spending Realization (n=246) for the Year 2017 (%)

	Average		
	Budget	Realization	Manipulation
Quarter I	28.72	13.90	-14.82
Quarter II	24.44	25.78	1.35
Quarter III	22.67	22.30	-.37
Quarter IV	24.17	30.72	6.55
Total	100.00	92.70	-7.30

Source: processed from various sources (2018)

The respondents' ages were between 27 years and 58 years old, and most of them (89.02%) was more than 40 years old. Male respondents comprised of 52.85% of the total respondents. Most respondents (96.75%) had bachelor or master graduates. Lastly, most respondents (61.79%) had 5-years or more experience to manage governmental units' finance.

The descriptive analysis reveals that 66.77% of respondents realized operational expenditures at the end of the year (quarter IV) more than the proposed budgets of the quarter. Further, only 6.50% respondents realized their expenditures equal to their proposed budgets in quarter IV, while 26.83% of respondents realized expenditures less than their proposed budgets. Based on the respondents' characteristics (sex, age, education, position level, and experience in finance matters), most respondents (57.14% - 100%) realized expenditures in quarter IV more than the proposed budgets of the quarter.

The full model analysis of the structural equation aimed to test the hypotheses of the determinants of the end-of-year spending behavior of local governments' financial officers. The first step is to conduct a goodness-of-fit test, the result showed that it did not produce the goodness-of-fit index that met the cut-off value. The next step modified the model by considering the modification index and resulted in the goodness-of-fit index value as displayed in Table 4.

**Table 4.** Goodness-of-Fit based on the Full Model of the Structural Equation

Goodness-of Fit	Cut-off Value	Test Value	Explanation
Chi-square	Expectedly low	199.639	Marginal
Probability	≥ .05	.139	Good
CMIN/DF	≤ 2.00	1.115	Good
GFI	≥ .90	.934	Good
AGFI	≥ .90	.907	Good
RMSEA	≤ .08	.022	Good
TLI	≥ .95	.994	Good
CFI	≥ .95	.995	Good

The probability value, CMIN/DF, GFI, AGFI, TLI, CFI, and RMSEA that met the cut-off value, the model was considered the goodness-of-fit criteria. Table 5 displays the results of the hypothesis testing.

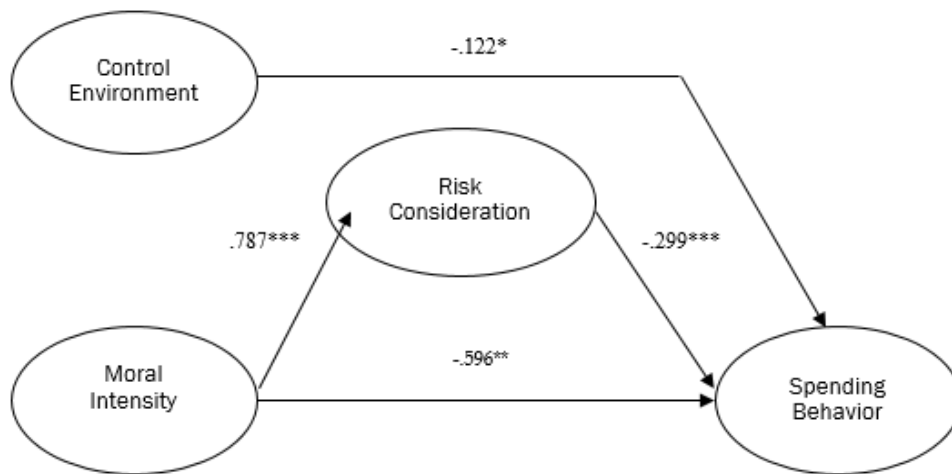
**Table 5.** The Results of Hypothesis Testing

		Estimate	S.E	C.R	P	Decision
KB	<-- LP	-3.287	1.756	-1.871	.061*	H <sub>1</sub> supported
KB	<-- IM	-7.512	2.924	-2.569	.010**	H <sub>2</sub> supported
KB	<-- PR	-3.119	.891	-3.498	***	
	PR <-- LP	.205	.149	1.381	.167	H <sub>3</sub> not supported
	PR <-- IM	.952	.077	12.344	***	H <sub>4</sub> supported
KB	<-- PD	1.734	2.215	.783	.434	
	PD <-- LP	.314	.158	1.992	.046**	H <sub>5</sub> not supported
	PD <-- IM	1.061	.105	10.148	***	H <sub>6</sub> not supported

Note : \*\*\*p<.01 ; \*\*p<.05 ; \*p<.10 ; N=246

Based on the regression weight value in Table 5, the hypothesis tests resulted in the following. First, control environment negatively influenced the end-of-year spending behavior of local governments' financial officers. Second, moral intensity negatively affected the end-of-year

spending behavior of local governments' financial officers. Third, risk consideration did not mediate the effect of control environment on the end-of-year spending behavior of local governments' financial officers. Fourth, risk consideration mediated the impact of moral intensity on the end-of-year spending behavior of local governments' financial officers. Five, self-control did not mediate the effects of control environment and moral intensity on the end-of-year spending behavior of local governments' financial officers. From the overall results of the hypothesis testing, the model proposed in Figure 1 about the determinants of the end-of-year spending behavior of local governments' financial officers needs to be modified as presented in Figure 2.



Note :  $***p<.01$  ;  $**p<.05$  ;  $*p<.10$

Figure 2. The Results of the Structural Model

### 3.3 Discussion

The results generally show that the end-of-year spending behavior of local governments' financial officers was affected by the environmental factor (control environment), personal factor (risk consideration), and moral intensity. The findings extend the body of knowledge's understanding of the determinants of the ethical spending-related behavior of local governments' financial officers by using the factors in the social cognitive theory and moral intensity. The results also supplement previous studies (Hmieleski & Baron, 2009; Arel et al., 2012; Anggraini et al., 2017; Kish-Gephart et al., 2010) that reveal that social cognitive theory and moral intensity likely explain the ethical spending-related behavior of local governments' spending behavior. The findings also describe a more complex configuration on the influences of environmental and personal factors and moral intensity on individuals' ethical behavior in governmental organizations by including the mediating role of the personal factor.

The study demonstrates that the control environment affected the end-of-year spending behavior of local governments' financial officers. Thus, this research complements previous studies that show the effect of control environment on unethical behavior (Ziegenfuss, 2001; Ahmad & Norhashim, 2008) and financial reporting behavior (D'Aquila, 1998). The results also imply that moral intensity affected the end-of-year spending behavior of local governments' financial officers. In this respect, this study supports previous studies that indicate the impact of moral intensity on unethical behavior (Jones, 1991; Loe et al., 2000; Carlson et al., 2002; O'Fallon & Butterfield, 2005; Kish-Gephart et al., 2010) and on financial reporting behavior (Arel, et.al., 2012). For example, J. Kish-Gephart et al. (2010) suggest that numerous studies empirically show that from the six elements of moral intensity, four elements (social consensus, probability of effect,

proximity, and concentration of effect) significantly affect unethical behavior. Precisely, from the entire six elements of moral intensity (magnitude of consequences, social consensus, probability of effect, temporal immediacy, proximity, and concentration of effect) form moral intensity that significantly affects the end-of-year spending behavior of local governments' financial officers. This study also supports Jones (1991). In particular, the magnitude of consequences as an element of moral intensity contributes more to the effect of moral intensity on the spending behavior of local governments' financial officers.

Other findings demonstrate that risk consideration mediated the impact of moral intensity on the end-of-year spending behavior of local governments' financial officers. The results support Nurharjanti (2017) who shows the effect of risk assessment on fraud behavior in goods and service procurement and Anggraini et al. (2017) who finds the influence of professional sanction risk consideration on unethical behavior in the financial context. The study also suggests that self-control did not mediate the influence of control environment and moral intensity on the end-of-year spending behavior of local governments' financial officers. We explain the results by highlighting the role of the organizational environment of local governments in moderating the impact of self-control on the end-of-year spending behavior of local governments' financial officers that mitigates the mediating role of self-control.

## CONCLUSION

The study empirically shows that the end-of-year spending behavior of local governments' financial officers was affected by multidimensional factors, i.e., environmental and personal factors, and moral intensity. More specifically, the results demonstrate that: a) the end-of-year spending behavior of local governments' financial officers was directly affected by environmental factor (control environment), personal factor (risk consideration), and moral intensity; b) risk consideration mediated the impact of moral intensity on the end-of-year spending behavior of local governments' financial officers.

Local government heads need to internalize moral intensity (moral issue) to their officers who manage government spending to mitigate the unethical end-of-year spending behavior of local governments' financial officers. It is also necessary for all related parties to strengthen control environment to all local government units, namely: a) local government heads and their government unit heads consistently and fully implement sanctions and performance-based management; b) government unit heads quickly and firmly follow up any budget-related manipulation; c) inspectorate auditors provide firm recommendations on inappropriate budget implementation and initiate early prevention on budget manipulation. Besides, local government unit heads need to strengthen the competence and integrity of procurement result examination officers, financial verifiers, budget users, and inspectorate auditors to help them assume their tasks and responsibilities effectively and eventually improve their risk consideration in managing governments' operational expenditures.

This study is subject to the following caveats. Firstly, the results do not empirically demonstrate the mediating role of self-control on the effects of control environment and moral intensity on the end-of-year spending behavior of local governments' financial officers, probably due to the impact of local governments' organizational environment that mitigates the mediating role of self-control. Thus, future studies need to investigate the moderating role of local governments' organizational environment on the effect of self-control on the end-of-year spending behavior of local governments' financial officers. Secondly, the research model does not involve a moderating variable. We then advise future studies to explore the role of the differences in personal characteristics, such as demographic factors and experience in managing government finance in moderating the effect of the environmental factor on spending behavior. Alternatively, future research could analyze the role of organizational characteristics in moderating the impact of personal factors on spending behavior (Kish-Gephart et al., 2010). Such studies are essential to

gain a better understanding of the configuration between environmental and personal factors, moral intensity, and spending behavior of government financial managers.

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