

Internal Control SME's Role Over Their Competitive Advantage and Performance

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ABSTRACT

Internal control in the SME business process is very important so that errors and irregularities that occur immediately can be overcome so that objectives can still be achieved. The control function is one of the management functions that cannot be returned from other management functions (planning, organizing, and directing). However, many studies still doubt the role of internal control on competitive advantage and the performance of SMEs. This study aims to examine the role of internal control on competitive advantage and SME performance. This research was conducted by survey method by distributing questionnaires to the respondents that are SMEs in district of Magelang. The sample size of the study are 210 respondents. Data analysis was performed using WarpPLS 4.0. The results have shown that internal control has a positive effect on competitive advantage ($\beta=0,41$, $p<0,01$, $R^2=0,17$) and SME performance ($\beta=0,20$, $p<0,01$, $R^2=0,04$). Relational model among variables has good GoF ($APC=0,307$, $p<0,01$; $ARS=0,106$ $p<0,05$). The results of this study indicated that internal control plays a role in competitive advantage and SME performance.

Keywords: internal control, competitive advantages, performance, SMEs

1. INTRODUCTION

Small and medium enterprises (SMEs) globally contribute greatly to the world economy. According to the data from the World Bank, SMEs contributed to 33% of Gross Domestic Products (GDP) worldwide and 44% in absorbing workforce worldwide [1].

However, the large role of SMEs in the economy has been hampered by various external and internal environmental factors which are constantly changing. SMEs that are unable to respond to changes in the external and internal environment will lose the ability to compete and optimal performance because these conditions are full of business risks that must always be controlled by SMEs. Thus, SMEs must always carry out internal control in order to have a competitive advantage and good performance.

Internal control according to the Committee of Sponsoring Organizations of the Treadway Commission (COSO) a process to achieve certain goals. As a process, internal control is not an objective but is a series of actions that are intensive and are an inseparable part of the organizational infrastructure, not merely organizational complements [2]. Internal control is not just policies and forms but is carried out starting from supervisors, leaders to implementing personnel at every level of the organization [3].

Internal control has a positive impact on the organization, for example reducing fraud [3] & [4] and business continuity [1]. However, there are still many studies that doubt the impact of internal control on organizational performance, especially in the context of SMEs [5] and [1]. Therefore, this

study examines the effect of internal control on competitive advantage and the performance of SMEs.

2. RESEARCH METHODS

2.1. Sample and Data Collecting

This study uses a company level analysis or SME's so that members of the population are all SMEs in Magelang Regency. The sample in this study is the owners of SMEs that have been in business for at least 3 years consisting of 250 respondents. Sample selection by determining the purposive sampling based on criteria of running a business for 3 years. This criterion was chosen because to see the stability of the performance of SMEs that usually seen for a minimum of 3 years.

The data collection method uses a questionnaire. The sample is given a questionnaire containing questions about internal control, competitive advantage and the performance of SMEs. The questionnaire was submitted online through social media. The following are the results of the distribution of questionnaires and the number of questionnaires that can be used in this study.

Table 1 Sample and Returns of Questionnaires

Total questionnaires distributed	250
Total questionnaires filled out	210
Filling out	84%
Total questionnaires were processed	210

Table 1 shows that a total of 250 questionnaires were sent, of which 210 were filled by respondents (84% response rate). Thus, the total number of questionnaires that can be processed and further analyzed for this study is 210.

2.2. Operational Definition

Internal control. Internal control is the respondent's perception of internal control. Measurements adopted from COSO. Internal control is measured in 5 dimensions: (1) the control environment (CE) consists of 11 question items, (2) risk assessment (RA) consists of 7 question items, (3) control activities (CA) consist of 6 question items, (4) Information and communication (IC) consists of 3 questions items, (5) Monitoring (Mon) consists of 5 question items. All measurement question items are based on a 5-point Likert scale (1 = strongly disagree until 5 = strongly agree).

Competitive Advantage. Competitive advantage is the manager's perception of the company's competitive advantage compared to competitors over the past three years. This variable was measured by an instrument developed by [6]. Competitive advantage is measured by 5 (five) dimensions, namely (1) price (PRI), (2) quality (QUA), (3) delivery dependability (DD), (4) product innovation (PI), (5) time to mark (TM) t. All measurement question items are based on a 5-point scale (1 = strongly disagree to 5 = strongly agree)

SMEs Performance. SMEs performance is the perception of manager / owner of the company towards the development of company performance compared to competitors which include: sales growth, revenue growth, growth in the number of employees, net profit margins, product / service innovation, process innovation, new technology service, product / service quality, variety product / service, and customer satisfaction [7]. This variable was measured by an instrument developed by [7] consisting of 10 (ten) question items. The measurement is by asking respondents to compare the development of the company's performance over the last three years on average from their main competitors. Performance measures in the form of perceptions on a 5-point scale from "very low" to "very high".

Hypothesis:

H₁: Internal control has a positive effect on competitive advantage

H₂: Internal control has a positive effect on performance

2.3. Data Analysis Method

Data analysis in this study was carried out using the Partial Least Square (PLS) approach. PLS is a structural equation model (SEM) based on components or variances. According to [8] and [9] PLS is an alternative approach that shifts from the covariance-based SEM approach to variant-based. PLS is a powerful analysis method [8] because it is not based on many assumptions. For example, the data must be normally distributed and the sample does not have to be large. The validity test used in this study is the convergent validity test. Convergent validity is seen from the combined loading indicator to the variable. If in the convergent validity test

there are indicators with low loading scores, the indicators must be discarded [9].

Table 2 Output Combined Loading Internal Control

	CE	RA	CA	IC	MON	PValue
ce1	0,14					<0,001
ce2	0,02					<0,001
ce3	0,25					<0,001
ce4	-0,14					<0,001
ce5	0,85					<0,001
ce6	0,60					<0,001
ce7	0,60					<0,001
ce8	0,82					<0,001
ce9	0,70					<0,001
ce10	0,59					<0,001
ce11	0,20					<0,001
ra1		0,77				<0,001
ra2		0,78				<0,001
ra3		0,80				<0,001
ra4		0,71				<0,001
ra5		0,64				<0,001
ra6		0,74				<0,001
ra 7		0,65				<0,001
ca1			0,63			<0,001
ca2			0,60			<0,001
ca3			0,48			<0,001
ca4			0,63			<0,001
ca5			0,55			<0,001
ca6			0,74			<0,001
ic1				0,71		<0,001
ic2				0,76		<0,001
ic3				0,80		<0,001
mon1					0,94	<0,001
mon2					0,98	<0,001
mon3					0,98	<0,001
mon4					0,98	<0,001
mon5					0,19	<0,001

The results of convergent validity testing using PLS for each reflective indicator of internal control dimensions (CE, RA, CA, CI, MON) are shown in Table 2. Based on table 2 it appears that some variable indicators have loading below 0.4 (ce1, ce2, ce3, c4, ce11 and mon5). This means that the indicator has a convergent validity value that is not practically significant because according to [10] loading less than 0.4 must be discarded. After insignificant indicators are discarded, they are re-estimated to get better loading. The results after re-estimation can be seen in Table 3. Based on Table 3. It can be seen that all indicators have a loading above 0.4. This means that the indicator has practically significant convergent validity values.

Table 3 Output Combined Loading Internal control after Re-estimation

	CE	RA	CA	CI	MON	PValue
ce5	0,86					<0,001
ce6	0,61					<0,001
ce7	0,72					<0,001
ce8	0,83					<0,001
ce9	0,69					<0,001
ce10	0,56					<0,001
ra1		0,78				<0,001
ra2		0,78				<0,001
ra3		0,80				<0,001
ra4		0,71				<0,001

	CE	RA	CA	CI	MON	PValue
ra5		0,44				<0,001
ra6		0,74				<0,001
ra 7		0,65				<0,001
ca1			0,63			<0,001
ca2			0,54			<0,001
ca3			0,48			<0,001
ca4			0,61			<0,001
ca5			0,69			<0,001
ca6			0,74			<0,001
ic1				0,71		<0,001
ic2				0,76		<0,001
ic3				0,80		<0,001
mon1					0,94	<0,001
mon2					0,98	<0,001
mon3					0,98	<0,001
mon4					0,98	<0,001

Furthermore, the results of convergent validity testing using PLS for each reflective indicator of competitive advantage dimensions (PRI, QUA, DD, PI, TM) and performance indicators (PERFORM) are shown in Table 4. Based on the table several indicators of competitive advantage dimensions have loading below 0, 4 (dd1, pi1, and tm4). Thus, to get a better loading then the indicator must be removed and re-estimated. Unlike the competitive advantage dimension indicators, all performance indicators have a loading above 0.4 so that loading is good and there is no need to re-estimate and can proceed to structural analysis. The results of re-estimation of competitive advantage dimension indicators can be seen in Table 5. Based on Table 5 it appears that all indicators of competitive advantage dimensions have loading above 0.4 so that all indicators already have convergent validity. Thus, it has met the requirements to proceed to structural analysis.

Then the results of the construct reliability test can be seen in Table 6. From the table the composite reliability has fulfilled the requirements above 0.7. This shows that the indicators of internal control, competitive advantage and performance meet the requirements of construct reliability. Thus, the overall measurement model for the reflective construct of internal control indicators, competitive advantage and performance can be continued to the structural model.

3. RESULTS AND DISCUSSION

The structural model is evaluated using R-square for the dependent construct and the significance value is determined based on the p value. The value of the path coefficient can be seen from the value of the original sample (B) between constructs. The depiction of the structural model of the study along with the path coefficient value and the R² value for the dependent independent construct namely the internal control (I-CONTRL) construct and the dependent construct namely competitive advantage (COMP-AD) and performance (PERFORM) are shown in Figure 1.

Table 4 Output Combined Loading Competitive Advantage and Performance

	PRI	QUA	DD	PI	TM	PERFORM	PValue
pri1	0,77						<0,001
pri2	0,77						<0,001
qua1		0,55					<0,001
qua2		0,83					<0,001
qua3		0,73					<0,001
qua4		0,66					<0,001
dd1			-0,39				<0,001
dd2			0,88				<0,001
dd3			0,85				<0,001
pi1				0,26			<0,001
pi2				0,85			<0,001
pi3				0,80			<0,001
tm1					0,73		<0,001
tm2					0,63		<0,001
tm3					0,75		<0,001
tm4					0,37		<0,001
per1						0,71	<0,001
per2						0,86	<0,001
per3						0,70	<0,001
per4						0,84	<0,001
per5						0,78	<0,001
per6						0,82	<0,001
per7						0,70	<0,001
per8						0,66	<0,001
per9						0,74	<0,001
per10						0,56	<0,001

Table 5 Output Combined Loading Competitive Advantage and Performance After Re-Estimation

	PRI	QUA	DD	PI	TM	PERFORM	PValue
pri1	0,77						<0,001
pri2	0,77						<0,001
qua1		0,55					<0,001
qua2		0,83					<0,001
qua3		0,73					<0,001
qua4		0,66					<0,001
dd2			0,89				<0,001
dd3			0,89				<0,001
pi2				0,87			<0,001
pi3				0,87			<0,001
tm1					0,77		<0,001
tm2					0,64		<0,001
tm3					0,75		<0,001
per1						0,71	<0,001
per2						0,86	<0,001
per3						0,70	<0,001
per4						0,84	<0,001
per5						0,78	<0,001
per6						0,82	<0,001
per7						0,70	<0,001
per8						0,66	<0,001
per9						0,74	<0,001
per10						0,56	<0,001

Table 6 Composite Reliability of Internal Control Competitive Advantage, and Performance

Variable	Composite Reliability	Note
Internal Control	0,926	Reliable
Competitive Advantage	0,772	Reliable
Performance	0,924	Reliable

Based on Figure 1, it can be seen that internal control has a significant positive effect on competitive advantage with β of 0.41, $p < 0.01$, and R^2 of 0.17. In addition, it was also seen that internal control had a significant positive effect on performance with a β of 0.20, $p < 0.01$, and R^2 of 0.04. Goodness-of-Fit (GoF) models can be seen from the magnitude of APC and ARS. Based on the results of the analysis using WarpPLS it is known that the APC acquisition result is 0.307 and is significant $P < 0.001$, while for ARS is 0.106, and significant is $P < 0.001$. This shows that the Goodness-of-Fit (GoF) model is good.

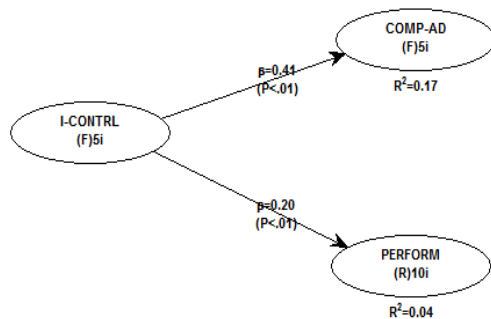


Figure 1 Structural Model

The first research hypothesis (H_1) states that internal control has a positive effect on competitive advantage. While the second hypothesis (H_2) states that internal control has a positive effect on performance. Based on the pictures it can be seen that Internal control has a significant positive effect on competitive advantage and performance. Based on this, hypothesis one and hypothesis two are all supported.

The results of this study answer doubts from [5] and [1] who ask whether internal control influences other variables. These results explain that in the context of SMEs, internal control plays a role in increasing competitive advantage and SMEs performance. This means that the better the internal control in SMEs, the better the competitive advantage and performance of SMEs.

4. CONCLUSION

Research carried out is research related to internal control, competitive advantage and performance. The purpose of this study is to empirically examine the effect of internal control on competitive advantage and performance using the SMEs setting. Based on the results of testing and analysis of data that has been done, the conclusion in this study is that internal control has a positive effect on competitive advantage and performance. Then the value of GoF is good. Thus, it can be said that internal control has a positive effect on competitive advantage and performance. This answers previous doubts about the effect of internal control on the context of SMEs. Empirical results show that internal control in the context of SMES has a role in competitive advantage and performance.

REFERENCES

- [1] J. Bruwer, "Can internal control activities and managerial conduct influence business sustainability? A South African SMME perspective," *J. Small Bus. Enterpr. Dev.*, vol. 25, no. 5, hal. 710–729, 2018.
- [2] H. Chalmers, Kyrin; Hay, David; Khlif, "Internal control in accounting research: A review," *J. Account. Lit.*, vol. 42, no. 6, 2019.
- [3] P. Gao dan G. Zhang, "Accounting Manipulation, Peer Pressure, and Internal Control," vol. 94, no. 1, hal. 127–151, 2019.
- [4] J. A. Mark, E. D. Simeon, dan O. O. Ifeanyichukwu, "Journal of Accounting & The Role of Internal Control System in Mitigating Embezzlement and Payroll Fraud in Small and Medium Enterprises (SMES) in Obio / Akpor Local Government Area of Rivers State," vol. 7, no. 4, 2018.
- [5] E. K. Oseifuah dan A. B. Gyekye, "Internalcontrol in small and microenterprise in the Vhenbe D, Limpopo Province, South Africa," vol. 9, no. 4, hal. 241–251, 2013.
- [6] S. Li, S;Ragu-Nathan, B;Rao, "The impact of supply chain management practices on competitive advantages and organizational performance," *Int. J. Manag. Sci.*, vol. 34, hal. 107–124, 2006.
- [7] D. Wiklund, J;Shepherd, "Research note and commentaries: Knowledge-based resources, entrepreneurial orientation, and the performance of small and medium-sized businesses," *Strateg. Manag. Journal*, vol. 24, hal. 1307–1314, 2003.
- [8] I. Ghazali, *Structural equation modeling metode alternatif dengan Partial Least Square (PLS)*. Semarang: Badan Penerbit Undip, 2006.
- [9] H. M. Jogiyanto, *Konsep dan aplikasi Partial Least Square (PLS) untuk penelitian empiris*. Yogyakarta: BPFE, 2009.
- [10] W. C. Hair, J. F.;Anderson, R. E.;Tanham,R. L.;Black, *Multivariate Data Analysis*. Upper Saddle River, New Jersey: Prantice Hall Inc, 2006.