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Determinants Influencing The Application of Management Accounting: The Case of Vietnam

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Abstract
The study aimed to determine the factors influencing the level of application of management accounting in feed production firms in Vietnam. Data were collected from the survey of 228 feed production firms in Vietnam. The study employs the combination of qualitative and quantitative methods with building multivariate regression models of determinants affecting the application of management accounting in those firms. The results contribute to building a multivariate regression model of factors affecting the application of management accounting in food production firms. Based on the findings, some recommendations are proposed for improving the effectiveness of applying management accounting in Vietnamese food production firms.

Keywords: Factors, application of management accounting, Vietnam

1. INTRODUCTION

Management accounting has been studied quite early in the world, in the early years of the 19th century. In Vietnam, management accounting has only been studied since the 90s of the 20th century. In this article, the author mentioned some typical studies on the factors affecting the application of management accounting in some types of firms.

Abel-Kader& Luther (2008) investigated the impact of firm characteristics on management accounting practices: A UK-based empirical analysis. They stated organizational size is viewed as an important factor that is reported to affect both structure and control measures. The results also show that as the level of competition increases, so does the complex management accounting techniques used by companies. Research indicates that direct costing is widely practiced and important, as opposed to activity-based and total costing.

Ahmad (2012)pointed out the role of management accounting in management, the factors affecting the application of management accounting in small and medium-sized firms (SMEs), the relationship between the application of management accounting management accounting and business results of firms. The factors affecting the application of management accounting that have been modeled are the size of the enterprise, the level of market competition, the commitment of the owners, and the progress of production technology.

Tran (2016) investigated determinants affecting the application of management accounting in small and medium-sized firms in Vietnam and identified a number of key factors affecting the application of management accounting in small and medium firms. At the same time, the thesis uses an econometric model to quantify the factors affecting the application of management accounting.

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It can be said that, so far, there has not been much study on determining the factors affecting the application of management accounting in feed production firms. In the dimension of thisresearch, we ourselves deeply look into determining the factors affecting the application of management accounting in feed production firms basing on both qualitative and quantitative approaches.

2. MAIN THEORIES

Management accounting is a set of techniques that support management functions with the goal of enhancing organizational value (Chenhall, 2006). Through the use of techniques, management accounting is influenced by various organizational, behavioral, economic and social factors. Therefore, contingency theory, agency theory, sociological theory and psychological theory are frequently applied in management accounting research (Maleen & Michael, 2009). We approach some of the above theories to serve the research objectives.

Contingency theory

Contemporary theorists argue that there is no single "best" organizational structure for organizations. The effectiveness of an organization depends on the conformity of the organizational structure to the external and internal conditions of the organization such as environment, strategy, technology, size, culture (Chenhall, 2006). According to contingency theory, management accounting is considered as a component of the organizational structure. Therefore, management accounting in an enterprise is influenced by factors inside and outside the enterprise. Factors affecting management accounting in firms such as technology, enterprise size, and the external environment of the enterprise (Otley, 1980). Production technology is a factor that greatly influences the study of management accounting. Organizations that use mass production technology in production, the production process requires a budgeting system that supports the management of routine day-to-day operations (Chenhall, 2006).

Agency theory

According to Jensen and Mec-kling (1976), agency relationship (or fiduciary relationship) is viewed as a contractual relationship whereby shareholders appoint, appoint another person, a company manager (person) -agents representatives), to perform the management of the company for them. Agency theory holds that, if both parties in this relationship (shareholders and company managers) want to maximize their own interests, then the company manager will not always act because the best interests of the owners, i.e. the shareholders. The agency relationship is also reflected in the relationship between senior managers and lower-level managers in the decentralized system, between managers and people who directly use the organization's resources.

Sociological theory

Sociological theory shows that the management accounting system in the enterprise is not only the internal problems of the enterprise but it is affected in a general social context, it is related to the regimes and policies current economic, political and social issues and deal with the relationship with employees in the enterprise.

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3. RESEARCH METHODOLOGY

The study was carried out by a combination of qualitative and quantitative research methods. The methods used are primary data collection, secondary data collection, questionnaire, Cronbach's alpha test, EFA exploratory factor analysis, multivariate regression analysis using SPSS 26 software.

Research process:

On the basis of the theoretical foundation of the study and the research objectives, we design a quantitative research process shown in Figure 1, below:

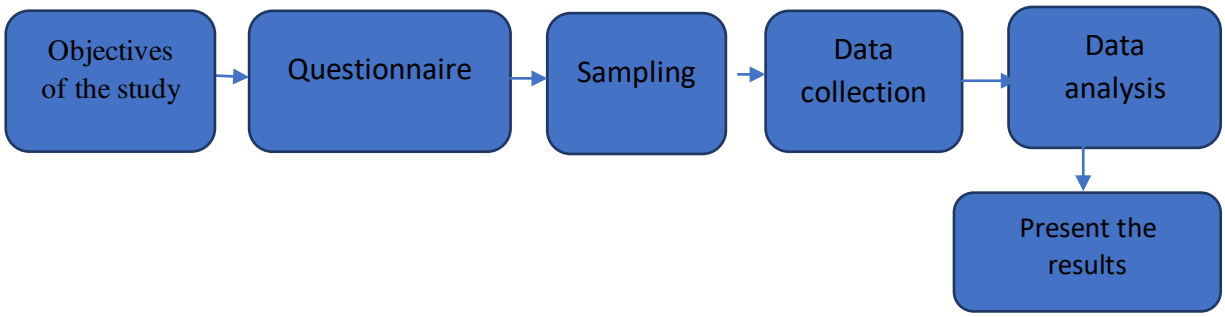

Figure 1: Quantitative research process

Sample size:

For EFA exploratory factor analysis: Hair et al. (1998) studied the expected sample size. Accordingly, the minimum sample size is 5 times the total number of observed variables. For multivariate regression analysis: the minimum sample size required is calculated by the formula n=50 + 8 x m (m: number of independent variables) (Dinh, 2018). According to the General Statistics Office (2020), our country has about 228 food production firms. Therefore, we selected a sample of all 228 feed processing firms in our country for research.

The general questionnaire about the enterprise, the level of understanding of management accounting, the level of competition, the level of management decentralization was emailed to two senior managers in 228 food production firms in Vietnam. Questionnaires of level of application of management accounting and determinants and its attributes sent to the chief accountants and accountants of 228 production firms via email. The number of questionnaires received is 1,752.

Based on studies on factors affecting the application of management accounting, we design hypotheses for their research as below:

H1: The larger the scale of the agricultural production firms, the higher the possibility of applying management accounting.

H2: The higher the level of competition in the market, the higher the possibility of applying management accounting applied.

H3: Industrial production firms with managers knowledgeable about management accounting, the higher the possibility of applying management accounting.

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H4: Industrial production firms have trained accountants with deep understanding of management accounting, the higher thepossibility of applying management accounting.

H5: The higher the level of management decentralization in the production firms, the higher the possibility of applying management accounting.

Table 1: Observable variables in the study

Variables	Attributes	Contents
SIZE (independent)	SIZE1	Capital
	SIZE2	Labor
	SIZE3	Capacity
COMPE (independent)	COMPE1	Competitive price
	COMPE2	Competing on output
	COMPE3	Number of competitors
AWARE (independent)	AWARE1	Level of understanding of management accounting
	AWARE2	The usefulness of applying management accounting
	AWARE3	The need to apply management accounting in firms
QUAL (independent)	QUAL1	Degree level
	QUAL2	Understanding of management accounting
	QUAL3	The need to apply management accounting in firms
DECENTR (independent)	DECENTR1	An enterprise divides its organizational structure into divisions according to operational functions
	DECENTR2	Managers in each department are specified in terms of their rights and responsibilities
	DECENTR3	Department managers have full authority to make decisions within their management scope without being influenced by outside influences
POSS (dependent)	POSS1	Cost Management Accounting Techniques
	POSS2	Estimation Management Accounting Techniques
	POSS3	Management accounting techniques to evaluate results
	POSS4	Strategic Management Accounting Techniques
	POSS5	Management accounting techniques to support decision making

4. RESULTS AND DISCUSSION

4.1. Overview of Vietnamese animal feed manufacturers

The animal feed processing industry in our country has developed rapidly and strongly since the early 1990s, especially since 1994. Due to the impact of the policy of economic renewal, opening up, integration, and encouraging investment in and abroad, firms investing in the field of animal feed processing is increasing. According to statistics in 2013, Vietnam's feed market grows 10-13% per year, bringing Vietnam to the top of ASEAN region and 12th in the world in terms of industrial feed output. By the end of 2020, statistics from the Department of Livestock Production show that the whole country has 228 feed production firms, including 71 foreign-invested firms, 157 domestic firms (Ministry of Agriculture and Rural Development, 2020). The number of feed production firms has decreased compared to 2013. The factories that have stopped working are mainly domestic firms with small scale,

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unable to compete in the feed market, while many large feed companies are run by water. In addition to capital investment, we continuously expand the production scale of the existing factories.

4.2. Descriptive analysis

Regarding the type of firms, according to survey data at 228 feed production firms in Vietnam, we obtained information on the types of feed production firms in Vietnam (Table 2):

Table 2: Types of industrial production firms in Vietnam

No.	Type of firms	No. of firms	Relative
1	Limited Liability	112	49.1%
2	Shares	55	24.1%
3	Joint Ventures	5	2.2%
4	Private	56	24.6%
	Total	**228**	**100%**

Feed production firms in Vietnam are mainly organized in the form of limited liability companies (49.1%), shareholdings account for 24.1%, private sector accounted for 24.6%, joint ventures accounted for 2.2%.

Regarding the level of application of management accounting in Vietnamese food production firms, we surveyed and obtained a statistical data of the level of application of management accounting as below:

Table 3: Level of application of management accounting in food manufacturing firms

No	Contents	Very Low	Low	Medium	High	Very High
1	Technical cost management accounting	-	194	20	14	-
2	Estimation management accounting techniques	-	138	76	14	-
3	Management accounting techniques to evaluate results	-	191	25	12	-
4	Strategic management accounting techniques	-	193	24	11	-
5	Management accounting techniques to support decision making	-	192	25	11	-

We made average statistics of variables on the level of application of management accounting at firms in Vietnam on SPSS software and obtained average statistical data below:

	N	Min	Max	Mean	Std. Deviation
POSS1	228	1	5	3.25	.780
POSS2	228	1	5	3.28	.739
POSS3	228	1	5	3.24	.706
POSS4	228	1	5	3.22	.714

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POSS5	228	1	5	3.31	.764
Valid N (listwise)	228				

Table 4: Average level of application of management accounting

With the analysis results, it can be seen that the level of application of management accounting in Vietnamese food production firms is not high with mean higher than 3 and less than 4. In which, cost management accounting technique has been applied with mean of 3.25; cost management accounting techniques have mean of 3.28; management accounting techniques evaluate results with mean of 3.24; strategic management accounting techniques with mean of 3.22; management accounting techniques support decision making with mean of 3.31. The food production firms in Vietnam still pay little attention to strategic management accounting, the level of application of strategic management accounting techniques is still quite low.

On the factors affecting the level of application of management accounting in food production firms in Vietnam. We detected that:

Regarding to the firm size, firms with capital under 100 billion dong accounted for 83.3%, firms with capital over 100 billion dong accounted for 16.7%. Firms with fewer than 200 employees account for 83.4%, 16.6% of firms have more than 200 employees. The number of firms with a production capacity of less than 60,000 tons/year accounted for 83.8%, 16.2% of firms with a capacity of over 60,000 tons/year. That proves that small and medium-sized food processing firms account for a large proportion, while large-scale firms are not many. Thus, large-scale feed processing firms account for a low proportion in Vietnam. According to previous studies, scale is an important factor affecting the application of management accounting. Firms have a large scale, have a high level of application of management accounting and vice versa. Regarding the level of competition, through the average analysis of the level of competition (Table 5), it can be seen that the level of price competition is above average (mean is 3.28). The level of volume competition is lower than price competition (mean is equal to 3.26). The number of competitors is also relative (mean equals 3.27). The competition among feed production firms is relatively large, especially among the big feed giants, manipulating the feed market. The big giants belong to FDI firms, with the 3F model (Farm - Feed - Food). Feed giants have super large scale, modern technology, feed factory system and distribution channels throughout Vietnam.

Table 5: Average statistics of competitive variables

	n	Min	Max	Mean	Std. Deviation
COMPE1	228	1	5	3.28	.845
COMPE2	228	1	5	3.26	.813
COMPE3	228	1	5	3.27	.827
Valid N (listwise)	228				

Regarding the perception of management accounting of enterprise managers, we collect survey results through Table 6. The survey results show that the managers of industrial

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production firms have a relative awareness of management accounting. Variable level of understanding of management accounting has mean of 3.68; meaning that the managers of industrial production firms in Vietnam have basic understanding of management accounting. The useful variable of management accounting has a mean of 3.62, showing that managers are aware of the role of management accounting in managing and operating the business. The variable the need to apply management accounting in firms has a mean of 3.67, showing that managers have a clear need for the application of management accounting in firms. Thus, the Vietnamese food production firms have a clear understanding and need to apply management accounting. This is the condition for successful application of management accounting in those firms.

Table 6: Average statistics of the level of knowledge about management accounting

	N	Min	Max	Mean	Std. Deviation
AWARE1	228	1	5	3.68	.952
AWARE2	228	1	5	3.62	.965
AWARE3	228	1	5	3.67	.940
Valid N (listwise)	228				

Regarding the qualifications of accountants, we collect through Table 7. Survey data shows that the qualification level of accountants in food production firms in Vietnam is quite high (mean of 3.25). The level of knowledge of management accounting of accounting staff is quite clear (mean of 3.22). The need to apply management accounting of accountants is quite high (mean of 3.25). The survey on the level of accounting staff shows that the industrial production firms have a high ability to successfully apply management accounting.

Table 7: Average statistics of accounting staff qualifications

	N	Min	Max	Mean	Std. Deviation
QUAL1	228	1	5	3.25	.918
QUAL2	228	1	5	3.22	.869
QUAL3	228	1	5	3.25	.902
Valid N (listwise)	228				

Regarding the level of management decentralization, we collect data through Table 8. Food production firms have divided firms into departments with fairly clear functions (mean of 3.28). The variable that the manager of each department has specific responsibilities has mean of 3.33, showing that the firms have clearly defined the responsibilities of the departmental manager. The variable that the department manager has full authority to make management decisions has a mean of 3.25, showing that the manager is clearly delegated authority, has relatively high decision-making authority within his/her management scope. These are also good conditions for successful application of management accounting.

Table 8: Average statistics of the level of management hierarchy

	N	Min	Max	Mean	Std. Deviation
DECENTR1	228	1	5	3.28	.876
DECENTR2	228	1	5	3.33	.901
DECENTR3	228	1	5	3.33	.862

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Valid N (listwise)	228				

4.3. Results of the reliability of the scales

We conducted Cronbach's Alpha test for all independent and dependent variables in the research model to check the reliability of the scale of variables (Table 9).

Table 9: Cronch's Alpha test results

	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted	Cronbach's Alpha
SIZE1	.650	.754	.811
SIZE2	.663	.739	
SIZE3	.673	.729	
COMPE1	.684	.740	.820
COMPE2	.663	.762	
COMPE3	.672	.752	
AWARE1	.604	.701	.774
AWARE2	.593	.714	
AWARE3	.631	.672	
QUAL1	.686	.667	.795
QUAL2	.611	.749	
QUAL3	.618	.742	
DECENTR1	.720	.759	.839
DECENTR2	.708	.772	
DECENTR3	.680	.798	
POSS1	*.626*	*.836*	*.854*
POSS2	*.720*	*.810*	
POSS3	*.629*	*.834*	
POSS4	*.719*	*.811*	
POSS5	*.648*	*.829*	

The results show that all observed variables have Corrected Item-Total Correlation greater than 0.3. Cronbach's Alpha coefficient of the scale is greater than 0.6, so the scale ensures reliability. 4.4. Exploratory factor analysis

Independent variables

Table 10: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.819
Bartlett's Test of Sphericity	Approx. Chi-Square	1363.030
	df	105
	Sig.	.000

EFA analysis results show that KMO = 0.819 > 0.5, so factor analysis is appropriate. Sig. (Bartlett's Test) = 0.000 (sig. < 0.05) shows that the observed variables are correlated with each other in the population. The table of variance analysis is as follows:

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Table 11: Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	4.920	32.798	32.798	4.920	32.798	32.798	2.302	15.348	15.348
2	1.867	12.447	45.245	1.867	12.447	45.245	2.233	14.890	30.238
3	1.650	11.002	56.247	1.650	11.002	56.247	2.203	14.686	44.924
4	1.357	9.048	65.295	1.357	9.048	65.295	2.164	14.428	59.352
5	1.177	7.848	73.143	1.177	7.848	73.143	2.069	13.791	73.143
6	.539	3.595	76.739						
7	.527	3.512	80.251						
8	.472	3.145	83.395						
9	.434	2.892	86.288						
10	.410	2.737	89.024						
11	.384	2.562	91.587						
12	.382	2.550	94.136						
13	.337	2.247	96.383						
14	.277	1.849	98.232						
15	.265	1.768	100.000						

Extraction Method: Principal Component Analysis.

With the above results, Eigenvalues = 1,177 > 1 at the 5th factor, so the 5 factors extracted from EFA have the meaning to summarize the information of the observed variables the best. Total variance extracted: Rotation Sums of Squared Loadings (Cumulative %) = 73.143% > 50%. This proves that 73.143% of the variation of the data is explained by 5 factors. The results of the factor matrix analysis are as follows:

Table 12: Rotated Component Matrix

	Component				
	1	2	3	4	5
DECENTR2	.841				
DECENTR1	.841				
DECENTR3	.841				
COMPE3		.859			
COMPE1		.811			
COMPE2		.794			
SIZE3			.834		
SIZE2			.829		
SIZE1			.802		
QUAL1				.833	
QUAL2				.795	

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QUAL3				.782	
AWARE2					.816
AWARE3					.772
AWARE1					.764
Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.					
a. Rotation converged in 5 iterations.					

Dependent variable

Table 13: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.845
Bartlett's Test of Sphericity	Approx. Chi-Square	471.524
	df	10
	Sig.	.000

KMO test results show that KMO = 0.845 > 0.5, so factor analysis is appropriate. Sig. (Bartlett's Test) = 0.000 (sig. < 0.05) shows that the observed variables are correlated with each other in the population. Total Variance Explained (Table 14).

Table 14: Total Variance Explained

	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	**% of Variance**	**Cumulative %**	**Total**	**% of Variance**	**Cumulative %**
1	3.170	63.397	63.397	3.170	63.397	63.397
2	.633	12.654	76.051			
3	.475	9.500	85.551			
4	.406	8.114	93.665			
5	.317	6.335	100.000			
Extraction Method: Principal Component Analysis.						

The results of the rotation matrix show that there is a factor extracted from the observed variables included in the EFA analysis. The extracted variance was explained as 63.397% at the eigenvalue of 3.170 > 1. Component Matrix (Table 15).

Table 15: Component Matrix

	Component
	1
AWARE2	.837
AWARE4	.835
AWARE5	.781
AWARE1	.763
AWARE3	.762
Extraction Method: Principal Component Analysis.	
a. 1 components extracted.	

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4.4. Correlation analysis

The results of the Pearson correlation analysis are shown below:

Table 16: Pearson Correlation

		POSS	SIZE	DECENTR	QUAL	COMPE	PERC
POSS	Pearson Correlation	1	.633**	.570**	.549**	.464**	.479**
	Sig. (2-tailed)		.000	.000	.000	.000	.000
	N	228	228	228	228	228	228
SIZE	Pearson Correlation	.633**	1	.286**	.290**	.364**	.273**
	Sig. (2-tailed)	.000		.000	.000	.000	.000
	N	228	228	228	228	228	228
DECENTR	Pearson Correlation	.570**	.286**	1	.257**	.223**	.386**
	Sig. (2-tailed)	.000	.000		.000	.001	.000
	N	228	228	228	228	228	228
QUAL	Pearson Correlation	.549**	.290**	.257**	1	.348**	.413**
	Sig. (2-tailed)	.000	.000	.000		.000	.000
	N	228	228	228	228	228	228
COMPE	Pearson Correlation	.464**	.364**	.223**	.348**	1	.308**
	Sig. (2-tailed)	.000	.000	.001	.000		.000
	N	228	228	228	228	228	228
AWARE	Pearson Correlation	.479**	.273**	.386**	.413**	.308**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	
	N	228	228	228	228	228	228
**. Correlation is significant at the 0.01 level (2-tailed).							

PEARSON correlation analysis showed that all Pearson correlation sig values between the independent variables and the dependent variable were less than 0.05. Thus, the independent variables are all linearly correlated with the dependent variable.

4.5. Multivariate regression analysis

From the proposed research model, we build a regression equation for the level of application of management accounting in food production firms in Vietnam with the following form:

$$POSS = \beta0 + \beta1*SIZE + \beta2*COMPE + \beta3*AWARE + \beta4*QUAL + \beta5*DECENTR$$

In which: APPLI is the dependent variable; SIZE, COMPE, AWARE, QUAL, DECENTR are independent variables; β0,β1, β2, β3, β4, β5 are regression coefficients.

First, we conduct the F test. The results for the analysis of variance table, below:

Table 17: Analysis of variance table

ANOVAa						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	53.836	5	10.767	95.856	.000b
	Residual	24.936	222	.112		
	Total	78.772	227			

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a. Dependent Variable: POSS
b. Predictors: (Constant), SIZE, AWARE, COMPE, DECENTR, QUAL

The results show that Sig test F = 0.00 < 0.05, so the regression model is significant.

Table 18: Model Summary

Model Summaryb					
Model	**R**	**R Square**	**Adjusted R Square**	**Std. Error of the Estimate**	**Durbin-Watson**
1	.827a	.683	.676	.33515	1.808
a. Predictors: (Constant), SIZE, AWARE, COMPE, DECENTR, QUAL					
b. Dependent Variable: POSS					

The research model synthesis shows that R-squared adjusted is 0.676 = 67.6%. Thus, the independent variables included in the regression analysis affect 67.6% of the change of the dependent variable. The author carried out multivariate regression analysis to obtain the following results:

Table 19: Results of multivariable regression analysis

Coefficientsa								
Model		**Unstandardized Coefficients**		**Standardized Coefficients**	**t**	**Sig.**	**Collinearity Statistics**	
		B	**Std. Error**	**Beta**			**Tolerance**	**VIF**
1	(Constant)	.119	.150		.797	.426		
	DECENTR	.249	.032	.323	7.702	.000	.809	1.236
	AWARE	.073	.033	.098	2.214	.028	.723	1.382
	QUAL	.209	.034	.268	6.178	.000	.758	1.320
	COMPE	.105	.035	.126	2.953	.003	.784	1.276
	SIZE	.310	.034	.390	9.229	.000	.800	1.250
a. Dependent Variable: POSS								

The results of multivariable regression analysis showed that all variables have an impact on the dependent variable because the sig t-test of each independent variable is less than 0.05. The VIF coefficients of the independent variables are all less than 10, so there is no multicollinearity.

The linear regression equation on the factors affecting the level of management accounting application in the agricultural production firms in Vietnam is written in the form:

POSS = 0.119 +0.249*DECENTR + 0.073*AWARE + 0.209*QUAL +0.105*COMPE +0.31*SIZE

Thereby, it can be seen that the firm size has the biggest impact on the possibility of applying management accounting in Vietnamese food production firms. This proves that the larger the firm size, the higher the possibility of applying management accounting in the enterprise. The results of the study are consistent with some studies such as Abdel and Luther (2008).

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Decentralization is a factor that has a great impact on the possibility of applying management accounting in the agricultural production firms of Vietnam. Firms with a high degree of decentralization, the higher the possibility of applying management accounting. The results of the study are consistent with the study of Chenhall and Langfield (1998).

The level qualification of accounting staff is a factor that has a relative influence on the possibility of applying management accounting in industrial production firms. This result is consistent with the results of Adamad (2014).

The perception of management accounting of the managers of industrial production firms has a relative influence on the possibility of applying management accounting in those firms. This study is consistent with the research results of Abdel-Kader & Luther (2008); Adam (2014).

The level of competition affecting the the possibility of applying management accounting in agricultural production firms is the lowest. Admad (2012) also has similar research results with this study.

Feed production firms in Vietnam need to focus on applying effective management accounting tools to serve corporate governance and improve competitiveness. However, with small and medium-sized firms, outdated technology, weak financial potential, and low level of application of management accounting, leading to management accounting has not been used effectively in small firms. Therefore, small and medium firms need support from the state and the Feed Association to increase their potential, apply modern technology, make good use of international accounting, and improve competitiveness.

In order to have a successful application of international accounting in Vietnamese food production firms. From the study of multivariate regression model of the factors affecting the application of management accounting in Vietnamese food production firms, we propose a condition to promote the successful application of management accounting in those firms as follows:

- On the side of the State: the system of legal documents on international accounting in our country is still very thin. Up to now, there is no specific guiding document on management accounting. Only Circular No. 53 on management accounting has been issued in 2006. However, the basic contents are oriented such as guiding the management accounting process and the work. The propagation of management accounting in firms has not been improved. Currently, management accounting has not really been applied and organized in small and medium firms, including small and medium firms in the field of industrial production. Therefore, the authorities need to implement some of the following solutions for management accounting to be conducted methodically in firms:

+ The State should have specific regulations on the scope of work of financial accounting and international accounting. It is necessary to issue legal documents guiding the contents and methods of implementing management accounting in firms. From there, firms will have a legal basis to apply management accounting and have specific orientations. It is necessary to regulate the responsibility of the Vietnam Association of Accountants and Auditors in guiding the content of the implementation of management accounting.

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+ Renovate training in universities and colleges in the modern direction of international accounting organization. It is necessary to renew the content and methods of training management accounting in accounting training schools. It is necessary to equip learners with in-depth knowledge of management accounting in the 4.0 technology period and fierce competition.

- On the side of Vietnam Animal Feed Association: improving product quality is a decisive factor for success or failure in competition. At the same time, using materials to reduce environmental pollution is an important factor in enhancing the position and sustainable development of firms. Therefore, in order to further improve product quality in feed production firms, the Vietnam Feed Association needs to more closely manage feed quality. It is necessary to have strong handling measures against feed production firms that violate regulations on quality of feed and banned substances in feed.

- On the side of Vietnam Association of Accountants and Auditors: it is necessary to stipulate the task of studying new circulars and decrees on management accounting for accountants of firms. The Association of Accountants and Auditors should actively open training courses on management accounting in order to improve the organization and implementation of management accounting in firms.

- On the side of firms producing animal feed in Vietnam: Vietnamese food processing firms need to implement the following solutions:

+ Raise awareness about the role of management accounting for business managers. Need to raise awareness of business managers about management accounting. Firms need to develop specific plans to foster management accounting knowledge for managers. Accordingly, from senior to low-level managers in industrial production firms, all must go to study and foster knowledge of management accounting organized by the Association of Accountants and Auditors in accordance with the State's regulations when specific documents are available.In order to have a response to learning to improve the level of management accounting awareness, in addition to the legal document that requires business managers to participate in knowledge training, the Vietnam Association of Accountants and Auditors needs to have a form of widespread propaganda to firms so that managers can increase their participation in learning and improving their knowledge of management accounting.

+ To complete the management organization and organization of production and business in food production firms.

Firms should have a clear assignment of duties of departments in the business. The decentralization of management in the feed production firms should be clear, the administrator at each level will be responsible within the scope of management decentralization.

+ Improve the level of management accounting performance of accounting staff in feed production firms feed production firms need to organize for accountants to be required to study and improve their level of management accounting in addition to the financial accounting function. It is necessary to arrange a number of positions specializing in performing more management accounting tasks such as the general accounting department in the enterprise that undertakes many management accounting contents such as making estimates.

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+ Equipped with modern technology in accounting work in feed production firms

Firms need to immediately implement ERP software integration in management and accounting work. When applying software in the entire management and accounting activities (financial accounting and management accounting), the work efficiency will be very high. All information in the departments is integrated into the system via ERP, the collection and processing of financial accounting and management accounting information will be quick and comprehensive. However, investment in ERP requires quite high costs and must be fostered throughout the enterprise in the use of software. This is a long-term and stable solution for businesses in corporate governance in general and accounting work in particular.

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