Financial Factors Affecting on Investment Decision of Organic Agribusiness SMEs in Chiang Mai Province, Thailand

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Abstract

Small and Medium Enterprises (SMEs) contribute immensely to the economic development of any country especial in Thailand. SMEs have to know about financial management combined with the uncertainty of the business environment which often leads SMEs to serious problems regarding financial performances. Organic agribusiness SMEs is the one of businesses which give precedence to develop on investment as well. In addition, the main objective of this study explores financial factors affecting investment decision of organic agribusiness SMEs by finding the effect between financial factors and investment decision. Primary data is collected by using questionnaires, and a multiple regression analysis is applied to determine the relationship of financial factors and investment decisions, independent variables are 4 financial variables which are working capital management, capital budgeting evaluation, debt financing, and equity financing. Dependent variables are investment decisions including cash, account receivable, inventory, and fix assets. Therefore, the results indicate significant effects among capital budgeting evaluation, debt financing, equity financing and investment decision which are positive relationships. However, there is the insignificant effect between working capital management and investment decision for SMEs in organic agribusiness. Moreover, SMEs organic agribusiness have to pay more attention on every financial factors which can be useful for investment decision making and make more benefit for their organic agribusiness also.

Keywords: Financial Factors, Investment decision, Organic Agribusiness, Small and Medium Enterprises (SMEs)

Introduction

Small and Medium Enterprises (SMEs) can contribute massively to the economic development, and drive forces for the encouragement of the economy in any countries. Review the development and meaning of sustainable agriculture, concerned with the history and nature of organic farming. Moreover authors focused on sustainable agriculture, although there was still no consensus on this more specific aspect of sustainability. Chiang Mai is a smarter city by using technologies to help transform agriculture industries and create other new drivers of creative economic growth. Government agencies have been encouraging organic agriculture and also trying to develop local economic in order to increase income of farmers. Particularly organic agribusiness SMEs in Chiang Mai should establish higher performance in their firms by continuing to make more income and profit, so they should have efficient financial management. For that reason, managers of organic agribusiness SMEs have to make financing decisions about

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investment decision, financing decision and dividend decision for the great financial performances. In addition, they should have knowledge of financial management combined with the uncertainty of the business environment often conducts firms to serious financial problems such as insufficient working capital, no capital budgeting, accounts receivable management problems, lack of raw material and inventory. Moreover, Ang (1991) & Ang (1992) present problems of finance in small businesses which are unconcern with public trend firms. The financial problems are complicated of agency and asymmetric information, and optimal financial decision is difficult to provide for different types of small businesses. Smith & Watkins (2012) indicate that financial obstacle of SMEs in South African is lack of risk management. In addition, there are many financial management problems and obstacles in small businesses to protect and solve financial problems, this paper investigates the effects of financial factors and investment decision for organic agribusiness SMEs in Chiang Mai Thailand. The financial factors are working capital, capital budgeting evaluation, debt financing and equity financing which have effects of Investment decision, and investment decision are cash, account payable, inventory, and fix asset. Therefore, organic agribusiness SMEs will have benefits in making investment decision by concerning about financial factors in order to reduce risks and create more profits in their organic agribusiness SMEs.

Research Objectives

The objectives of this paper are:

1. To find the effect between working capital management and investment decisions of SMEs in organic agribusiness

2. To discover the effect between capital budgeting evaluation and investment decisions of SMEs in organic agribusiness

3. To explore the effect between debt financing and investment decisions of SMEs in organic agribusiness

4. To examine the effect between equity financing and investment decisions of SMEs in organic agribusiness

Literature Review

This paper is reviewed about financial factors affecting investment decisions that relate to conceptual framework below. Ilias (2010) mentions financial management into three financial decisions which are investment decision, financing decision, and assets management decision. Investment decision is the most important decision in financial, the owner has to determine the amount of total assets which are current assets and fix assets. Literature reviews are separated into four parts: working capital management, capital budgeting evaluation, debt financing, and equity financing.

Working capital management

Ilias (2010) mentions a**ssets management decision,** the owner has to manage efficient assets and has to use working capital management for current assets to minimize illiquidity risk. García-Teruel&Martínez-Solano (2007) explore working capital management of small and medium-sized Spanish companies. The results demonstrate a negative significant effect of the number of day accounts receivable on profitability of SMEs. Deloof (2003) examines the effect of working capital management on corporate profitability of large Belgian non-financial firms. The firm calculates number of day accounts receivable to measure the trade credit policy and inventory policy, and also the firms have to use cash conversion cycle to evaluate of working capital management. Ang (1991) explores that the owners have to manage working capital to make the appropriate liquidity of their businesses.

Capital budgeting evaluation

Ilias (2010) mentions assets management decision, the owner has to manage efficiently assets. For fix assets, the owner had to calculate capital budgeting evaluation for fix assets management to make more return on assets. Ang (1991) indicates that the owners of small businesses make the correct investment decision by accepting positive net present value projects which are dependent on costs of capital, optimizing performance, and unique characteristics of small businesses and owners. Ang (1992) explains that investment decisions showed overinvestment or underinvestment in projects. Gill, Biger, & Mathur (2010) insist that the profitability of the firm is significantly affected on cash conversion cycle.

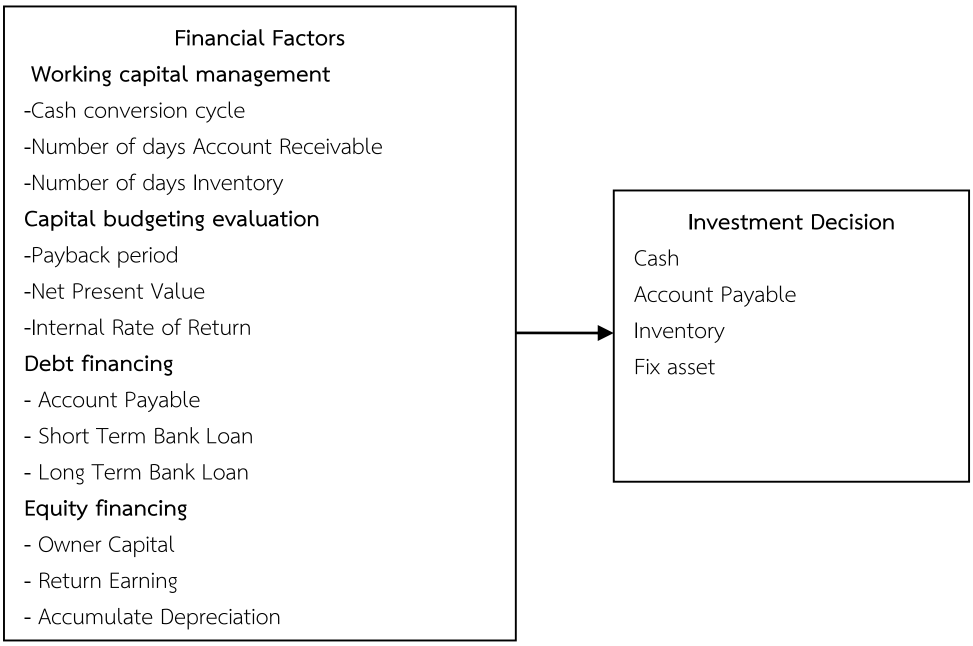
Debt financing

Financing decision can be separated into debt financing and equity financing. Theoretical construct capital structure is described as the mix of debt and equity that a firm uses to finance its operations (Gitman, 2003). Fatoki & Asah (2011) indicates that firm and owner characteristics force on sources of debt finance in SMEs. They explicate external financing for SMEs in South Africa which depends on owner characteristics. Moreover, owners have to prepare assets guarantee for financing loan and should have knowledge development of financial management. The study suggests that owners of SMEs should attend seminars and training programs to improve their financial management. Frelinghaus, Mostert, & Firer (2005) refer that main source of financing is loans or liabilities of SMEs. Romano, Tanewski, & Smyrnios (2001) explicate debts of the firms which are significantly associated with firm size, family control, business planning, and business objectives. Ilias (2010) mentions financial management in financing decision, the owner has to find the sources of fund which are borrowings from bank. Ang (1991) explores the primary sources are owner capital and debt finance from personal borrowings, friends and relatives loan, and banks loan. Moreover, banks would often require personal assets, guarantees, and insurance policies as collateral loans.

Equity financing

Equity financing is a part of financial decision in financial management. Frelinghaus, Mostert& Firer (2005) investigate that debt is one of the principal sources of financing for SMEs because of the insufficiency of internal equity and the inaccessibility of external equity. Berger &Udell (1998) investigate the feature of small business finance which is the most difficult fields to find the financial data. They make a few surveys on small business finance for financing sources which provide private equity and debt financing. Cassar (2004) explains financing which is related to assets investing, and capital structure of start-ups. The results are steady with the theoretical models such as information asymmetries, agency theory, and transaction costs. Romano, Tanewski&Smyrnios (2001) signify that financing decisions depend on debt to equity ratios, term of liabilities, sources of finance, and experience of owners in capital structure for understanding attitudes of risk. They explicate debts and family loans that are negatively associated with capital and retained earnings. Gitman (2003) mentions firm finance is a ratio of debt and equity which is capital structure. Romano, Caneghem&Campenhout (2010) consider information quality, external capital and liabilities. In addition, if the firms have high information quality, the firms will get more external capital and low cost of liabilities. On the opposite, if the firms have low formation quality, the firms cannot get external capital, and will have high cost of liabilities. Modigliani and Miller (1963) investigate that value of the firm is not dependent on the choice of capital structure or financing decision of the firm, and capital structure describe in terms of the static trade-off theory and the market value of a firm is affected by its future growth on investment.

Figure 1 Financial Factors Affecting on Investment Decision



Research Hypotheses

According to the literature review and research conceptual framework, the hypotheses are constructed. There are four dimensions of independent variable which are related to investment decision of organic agribusiness SMEs in Chiang Mai. Therefore, there are 4 hypotheses as follows:

H1 : Working capital management has the effect on investment decision.

H2 : Capital budgeting evaluation has the effect on investment decision

H3 : Debt financing has the effect on investment decision

H4 : Equity financing has the effect on investment decision

Methodology

This study focuses on organic agribusiness SMEs in Chiang Mai, Thailand. The methodology is quantitative designed research using multiple regression analysis (MRA). Data is collected through a survey using self-administered questionnaires which had 3 parts of questions. The questionnaire comprises of both close-ended and open-ended questions. The reliability of questions in questionnaire is 0.864 which measured by Cronbach's alpha value. The KMO value equal to 0.825 shows that the sample size is adequate (greater than 0.8). For the validity of the questionnaire, the questionnaire is rechecked content validity by three financial experts, Content Validity Index (CVI) has 1 to 4 scale leaves, the questions are used in questionnaire have to get at least scale 3, so all items of questionnaire are validated. This research applies inference statistic (Multiple Regression Analysis) to find the relationship between financial factors and investment decision making. The financial factors are: 1) Working capital management including cash conversion cycle, number of days account receivable, and number of days account inventory, 2) Capital budgeting evaluation consist of payback pried, net present value, internal rate of return, and 3) Debt financing including account payable, short-term bank loan, long term bank loan, 4) Equity financing consist of owner capital, return earning, and accumulate depreciation. Investment decisions making are cashes, account receivables, inventories, and fix assets.

Population and Sample

The study focuses on organic agribusiness SMEs in Chiang Mai province which has the name list, telephone number, and e-mail address from 280 SMEs Thailand list database of Thailand department of business development (DBD). The total population size in this study is 150 SMEs by using stratified sampling. The qualified questionnaires without any missing and error are about 57.33 percent. Finally, the sample size of organic agribusiness SMEs is 86 samples who are SMEs owners or financial staffs.

Results and Dicossion

Table 1 presents the relationships between financial factors and investment decision. Financial factors are taken as independent variables while investment decision is taken as a dependent variable. The results show the correlation coefficient R is 0.687, R^2 is 0.472, and adjusted R^2 is 0.446. The result for R^2 means that 47.2 percent of the variation in investment decision can be explained by the variability in the affected of financial factors which are working capital management, capital budgeting evaluation, debt financing, and equity financing.

Table 1 : The Relationships Between Financial Factors and Investment Decision

R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics	
			R Square Change	F Change
.472	.446	.430	.4326	18.135

The results of financial factors affecting on investment decision of SMEs in organic agribusiness on table 2 indicate significant variables affecting financial factors and investment decision. The dependent variable is investment decisions which are cash, account receivable, inventory, and fix asset. Independent variables include: 1) Working capital management which are cash conversion cycle, number of days account receivable, and number of days inventory, 2) Capital budgeting evaluation which are payback pried, net present value, internal rate of return, 3) Debt financing which are account payable, short-term bank loan, long term bank loan, and 4) Equity financing which are owner capital, return earning, and accumulated depreciation. The results on table 2 indicate significant relationships among capital budgeting evaluation, debt financing, equity financing, and investment decision, and also they were positive relationship. However, the result shows insignificant relationships between working capital analysis and investment decisions.

In addition, the regression equation of the analysis is as follows:

$$Y = a + b_1(x_1) + b_2(x_2) + b_3(x_3) + b_4(x_4)$$

Y = Investment decision

X_1 = Working capital management

X_2 = Capital budgeting evaluation

X_3 = Debt financing

X_4 = Equity financing

Thus, the regression model is applied of the variable at individual and collective levels as shown on Table 2.

$$Y = 1.045 - 0.081 X_1 + 0.200X_2 + 0.253X_3 + 0.390X_4$$

The regression model is applied to check the significance of the variable at individual and collective levels. The regression equations of the analysis should be:

$$Y = 1.045 + 0.200X_2 + 0.253X_3 + 0.390X_4$$

The intercept of 1.045 means the average value of the dependent value (investment decision) given that there is no change in any of the independent variables (working capital management, capital budgeting evaluation, debt financing, and equity financing). From the regression equations, capital budgeting management, debt financing, and equity financing are positive significance with the dependent variable and this means that a 1 unit increases in capital budgeting evaluation will lead to a 0.2 increase in investment decision, a 1 unit increases in debt financing will lead to a 0.253 increase in investment decision, and a 1 unit increases in equity financing will lead to a 0.390 increase in investment decision. However, the result indicates insignificance between working capital management and investment decision. Lastly, we test the multi-collinearity by using VIF value. The results of VIF are between1.663 to 2.151 which are less than 10 then this study had no multi-collinearity.

Table 2 : The Results of Financial factors Affecting Investment Decision

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	1.045	.418		2.502	.014
Working capital management	-.081	.111	-.076	-.730	.467
Capital budgeting evaluation	.200	.108	. 195	1.858	.067*
Debt financing	.253	.129	. 227	1.953	.054*
Equity financing	.390	.109	.425	3.588	.001**

*P < .10, **P < .05

According to hypotheses constructed in this study, there are 4 research hypotheses results as follow on Table 3. The results of research **hypotheses 1 (H1) is rejected** that shows working capital management will not be effect on investment decision. However, the results of research **hypotheses 2, 3 and 4 (H2, H3, and H4) are accepted** that demonstrate capital budgeting evaluation, debt financing, and equity financing will be effected with investment decision.

Table 3 : Research Hypotheses results

Research Hypotheses	Results
H1 : Working capital management has the effect on investment decision	Rejected
H2 : Capital budgeting evaluation has the effect on investment decision	Accepted
H3 : Debt financing has the effect on investment decision	Accepted
H4 : Equity financing has the effect on investment decision	Accepted

Discussion

This paper investigates financial factors affecting investment decision of SMEs in organic agribusiness SMEs in Chiang Mai, Thailand. The methodology is quantitative designed research using multiple regression analysis. Data is collected through a survey using self-administered questionnaires. In addition, independent variables are: 1) Working capital management including cash conversion cycle, number of days account receivable, and number of days inventory, 2) Capital budgeting evaluation consist of payback pried, net present value, internal rate of return, 3) Debt financing including account payable, short-term bank loan, long term bank loan, and 4) Equity financing consist of owner capital, return earning, and accumulated depreciation. The dependent variable is investment decisions which are cash, account receivable, inventory, and fix asset. The results are positive significant effect among capital budgeting evaluate, debt financing equity financing, and investment decision of SMEs in organic agribusiness. However, the result discovers insignificant effect between working capital analysis and investment decisions. Therefore, the owners and managers of organic agribusiness shall concern about financial factors which affected investment decision making such as capital budgeting evaluation, debt financing, equity financing, and also working capital management for reducing risks in return on assets and making more high performance in financial management.

Conclusion

The results discovered financial factors affecting investment decision of SMEs in organic agribusiness that are positive significant relationship among capital budgeting evaluate, debt financing equity financing and investment decision. For more details, Investment decision are cash, account receivable, inventory, and fix asset , and financial factors are: 1) The capital budgeting evaluation which are payback period, net present value, and internal rate of return that have affected on investment decision which are the same results of Ang (1991) indicates that the owners of small businesses make the correct investment decision by accepting positive net present value projects, Ang (1992) The results of investment decisions showed overinvestment will have profitability of the projects, and underinvestment will have unprofitability in projects. 2) Debt financing are account payable, short-term bank loan, long term bank loan that affected on investment decision which authors agree which Frelinghaus, Mostert & Firer (2005) investigate that debt is one of the principal sources of SMEs, and Fatoki & Asah (2011) indicates that owner characteristics force on sources of debt finance in SMEs. 3) Equity financing are owner capital, return earning, and accumulated depreciation that affected on investment decision which authors agree with Cassar (2004) who explains about financing which is related to assets investing, and capital structure of start-up, and also authors agree with Berger & Udell (1998), Ang (1991), and Gitman (2003) who described sources of financing which provide by private equity and debt financing which is capital structure for small businesses. Moreover, Fatoki & Asah (2011) and Ang (1991) explicate external financing from banks loan which have to require personal assets, guarantees, and insurance policies as collateral loans. Authors disagree with Romano, Tanewski, & Smyrnios (2001) who explicate debts and family loans are negatively associated with capital and retained earnings. In addition, The other results are: Fatoki & Asah (2011) indicates that firm and owner characteristics force on sources of debt finance, Caneghem & Campenhout (2010) consider information quality, external capital and liabilities that are affected on amount of loan, and cost of liabilities, Romano, Tanewski, & Smyrnios (2001) show financial decision is depend on experience of owners in capital structure for understanding attitudes of risk. 4) Working capital management are cash conversion cycle, number of days account receivable, and number of days inventory that have not affected on investment decision , the result indicate the right theory for investment is not dependent on working capital which are current asset and current liability. The opposite results are Ang (1991) the owners have to manage working capital to make the appropriate liquidity of their businesses. Deloof (2003) and Gill, Biger, & Mathur (2010) examines that the effects of working capital management on corporate profitability by using cash conversion cycle. García-Teruel & Martínez-Solano (2007) demonstrate a negative significant affected of the number of days accounts receivable on profitability of SMEs in Span.

Recommendation

Recommendation for this study are as the following. The owners of organic agribusiness SMEs should have more careful consideration in capital budgeting evaluation, debt financing, and equity financing affecting on investment decisions. However, the owner should pay attention to working capital management which effects on liquidity to reduce risks and create more benefits on assets investment and success of financial decision making. Future study should study deeply on financial factors and on short- term investments, or financial factors and long-term investments. Moreover, future research is recommended to study more on financial problems which specify short-term problems and long-term problems. Therefore, the research can make clearly succession on financial problems and financial management.

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