


Article

Factors Affecting Success of Entrepreneurship in Agribusinesses: Evidence from the City of Mashhad, Iran

Sayed Saghaian ^{1,*} , Hosein Mohammadi ^{2,*}  and Morteza Mohammadi ³

¹ Department of Agricultural Economic, College of Agriculture, Food and Environment, University of Kentucky, Lexington, KY 40536, USA

² Department of Agricultural Economics, College of Agriculture, Ferdowsi University of Mashhad, Mashhad 9177948978, Iran

³ Department of Economics, Faculty of Literature and Humanities, Hakim Sabzevari University, Sabzevar 9617976487, Iran; m.mohammadi@hsu.ac.ir

* Correspondence: ssaghaian@uky.edu (S.S.); hoseinmohammadi@um.ac.ir (H.M.)

Abstract: Entrepreneurship and innovation are the fuel of economic growth. Understanding the motivational factors that lead to the success of entrepreneurs in agribusiness can be useful in affecting the degree of successful investment that accelerates development and economic growth in the agriculture sector. In this study, we investigated the factors affecting the success of entrepreneurs in the agribusiness sector in Mashhad, Iran, using a two-stage Heckman approach. Factors affecting the success or failure of agribusiness entrepreneurship have received less attention in the literature. In this study, the aim was to determine the factors affecting agricultural entrepreneurship success and entrepreneurs' profits. We generated the data for this study by designing a questionnaire and conducting a survey of active entrepreneurs in Mashhad in 2020. The results showed that entrepreneurship experience, risk-taking behavior, interest rates, and initial capital have a significant impact on the probability of entrepreneurship success and entrepreneur's profits. Policies that could improve the skills of entrepreneurs, provision of initial capital requirements, and financial market efficiency had an effective role in increasing entrepreneurship and innovation in the agribusiness sector. Entrepreneurs in the field of agriculture could consider these factors to have better choices while entering or continuing with their agribusinesses. Our recommendation to policymakers and agribusiness leaders is to establish a friendlier and more stable environment for entrepreneurship and employ policies that help reduce the risk of entrepreneurs' initial investment returns.

Keywords: sustainable entrepreneurship; innovation; business strategy; agribusinesses; economic development; environmental concerns; profits; food security



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1. Introduction

More than one billion people in developing countries live in poverty. The main source of income and livelihood for many poor people in rural areas comes from agricultural activities. The agricultural sector is one of the most important sectors in developing countries in need of sustainable entrepreneurship. The excessive use of chemical fertilizers, insecticides, and frequent use of pesticides and other chemicals in agriculture, especially in the developing countries, have led to environmental crises, resulting in increased soil, water, and air pollution and reduction of agricultural productivity and profitability [1]. Sustainable entrepreneurship in the agricultural sector is one of the solutions that can both help the growth and development of the agricultural sector and significantly reduce environmental crises [2]. The development of agricultural businesses and entrepreneurship is essential and an important policy goal to reduce poverty, induce higher economic development, address environmental concerns, and achieve food security [3].

Sustainable entrepreneurship in the agricultural sector is a form of business that, while meeting the income needs of agricultural actors and farmers, also addresses environmental

concerns [4]. Sustainable agricultural entrepreneurship must be explored as a contributor to the flexibility of the global secure food supply chain [5]. Entrepreneurship is a concept in which the entrepreneur identifies new opportunities and markets with innovative ideas and proper use of resources to create new businesses, products, and processes [6,7]. This process associates itself with numerous risks but often leads to the introduction of new products or services that increase the profitability and productivity of entrepreneurs [8]. This type of entrepreneurship can create jobs, increase energy efficiency, preserve and protect natural resources, and minimize environmental degradation. Big parts of the developing world are rural facing chronic unemployment, and among the goals of entrepreneurship development in the agricultural sectors of developing countries is the creation of new jobs and employment in rural areas [9,10]. However, rural areas remain at a disadvantage because of poor communication and transportation infrastructure, which encourages the migration of skilled labor to urban centers. Policies that support the improvement of infrastructures, such as better roads and broadband internet access, represent important enablers for innovation and entrepreneurial activities in rural areas [11].

Entrepreneurship, innovation, and creativity are the fuel of the engine of modern economies [12]. Entrepreneurship is a combination of innovation, solutions, and risks that leads to business growth and development. The entrepreneurial spirit of an entrepreneur is reflected in the ability of an individual to combine capital, labor, and natural resources to innovate and organize a business for higher profits, even in the face of high risks [13]. Different incentives are effective in entrepreneurship behavior; among those mentioned in the literature are the creation of jobs, income and wealth, reduction of poverty, enhancement of nutrition and health, gaining reputation and consumer loyalty, the need for independence [14], cultural characteristics, information flow, institutional development, and favorable business environment [15,16]. Entrepreneurs take change as a natural phenomenon and are always positively looking forward to, showing reaction to, and considering entrepreneurship as an opportunity [17]. Investigation of trends of human social life development shows that entrepreneurship has had an important role in the development of societies [18].

Entrepreneurship helps generate overall food security. Entrepreneurs have an important role in economic growth in terms of innovation, efficiency, job creation, competitiveness, productivity, and formation flow of new companies; hence, entrepreneurial revolution and innovation are necessary for economic growth and development [19]. It is a source of opportunity and is closely linked to the economic and social prosperity of countries and is an indicator of development in the developed countries [20]. Entrepreneurs play an important role in economic development cycles; they are the sources and catalysts of development [21]. The emergence and development of entrepreneurship is an important phenomenon in modern economies [22].

Since entrepreneurs have such an effective role in economic growth and development, recognition of motivational factors for their success is important. Since the agribusiness sector plays a vital role in socio-economic development in the areas of job creation and employment, food production, and development, identifying the factors affecting the success of entrepreneurship in the agricultural sector is crucial; scholars in developed and developing countries have considered and paid close attention to these factors [23].

There is a positive relationship between investment in the infrastructure and agribusiness growth and entrepreneurship development [24]. Engaging in agribusiness entrepreneurship improves households' incomes and economic well-being, especially in underdeveloped areas with high poverty rates. Agribusiness entrepreneurship has the potential to generate value-added benefits, diversify incomes, reduce poverty, and provide employment and entrepreneurial opportunities. Even though entrepreneurship has received plenty of attention in developed countries since the late 1970s [25], in many developing countries, entrepreneurship is a new concept that has recently entered their academic and administrative institutions in the last 20 years. Since economic forecasts indicate the worsening of unemployment in many developing countries, this has led to more attention paid to

entrepreneurship development in many of those countries, especially in the agricultural sector, because entrepreneurship has positive effects on employment in the short and long run [26]. A shortage of young farmers is one of the structural problems encountered in developing countries with agricultural history. Active entrepreneurship is considered an important stimulus for business expansion, encouraging agricultural students to engage in agribusinesses. Agricultural-related social enterprises are seen as a vital solution to the challenges ahead and have gradually become part of the core business in underdeveloped areas [27].

Given the importance of agribusiness entrepreneurship, this study investigated whether entrepreneurship firms in this sector have achieved their goals successfully. Understanding the factors that impact the success of agribusiness entrepreneurs is of interest both to the scientific community and to policymakers. Two common success indicators are obtaining financing and achieving acceptable revenues. Location, promoting partners, the age of the company, and the existence of government support are among the main factors that have a significant influence on the success of entrepreneurship [28].

This study aimed to investigate the factors affecting the success of entrepreneurs in the agribusiness sector. To achieve this goal, we first designed a questionnaire containing information about the individual characteristics of entrepreneurs and the important factors affecting entrepreneurial success and then conducted a survey of 86 active entrepreneurs in the field of agribusiness in Mashhad, Iran, in 2020. The main objective was to identify the key success factors influencing agribusiness entrepreneurship, and the other objective was to investigate which factors had the most impact on the success of agribusiness firms and to determine the factors affecting the profitability of agribusiness entrepreneurs. To this end, in the next section, we present a review of the literature to define entrepreneurial success and the factors affecting it, explaining how success has been defined in the literature. The next section provides the details of the methodology used, the study design, data collection and data analysis, and methods of estimation. The next sections present the results, discussions, the main conclusions, and policy and agribusiness implications.

2. Background Literature

The success of a business depends on innovation, entrepreneurship, and the business environment. In addition, the fight against poverty, frustration and depression with employment and education, enthusiasm for business, and concerns about social participation affect an entrepreneurial career [29]. Entrepreneurial success is defined in terms of two main goals: financial and subjective or non-financial goals [30]. The entrepreneurs are considered successful based on their financial performance, such as profits or income [31], and the non-financial aspect of performance that comprises factors such as customer satisfaction, personal development, and entrepreneurs' awareness [32].

Occupational qualifications, family resources, and work environment are the main determinants of the decision to become an entrepreneur [33]. Moreover, entrepreneurs with managerial experience and skills, an impressive entrepreneur in the family, practical knowledge, and having workers with unique skills obtain higher scores in the general index of entrepreneurial success [34]. Variables such as the total amount of investment, education, and government support policies have positive effects on the entrepreneurial success [35]. Microcredit financing is another factor that has a major impact on the success of entrepreneurial activities [36].

In many developing countries, government plays an important role in the success of entrepreneurs. Government incentives and support policies in many ways are those, such as financial and technical assistance, training programs and workshops, development and consultancy, and information resources [37]. Entrepreneurship is an important factor in economic growth, and favorable government programs can encourage entrepreneurship via programs that provide favorable financial access for entrepreneurs. Government programs that reduce barriers to entry, support growth and development, and provide better access to credit encourage entrepreneurial opportunities. Governments can enhance opportunities by

improving access to capital, reducing barriers to new investment, and continuing to support entrepreneurs beyond the initial startup phase through development programs [38].

Lack of infrastructure, political environment, market access, and related skills and experiences have a significant effect on the success of entrepreneurs [39]. Moreover, business and managerial knowledge and skills, personality traits (such as flexibility, risk-taking, discerning, etc.), and entrepreneurial experience are positively correlated with entrepreneurial success [40]. Furthermore, education of entrepreneurs, demand for the products or services, the availability of physical space for business development, and the availability of sufficient financial resources have a positive impact on micro-entrepreneurship growth [41]. Educational support for entrepreneurship development has had a positive effect on entrepreneurial self-efficacy [42]. Professional experience and education are essential success factors for entrepreneurship and have a great impact on the development of entrepreneurial skills and self-employment [43].

Motivational factors such as achieving a better business environment and common factors such as having competitive products/services are among the motivations of entrepreneurs in starting new businesses [44,45]. Entrepreneur performance depends on factors such as type of business, ability to take risks, customer service, human capital, and quality of goods sold [46]. Developing entrepreneurial capacities, innovation, risk-taking, financial, and infrastructural capacities by entrepreneurs in the agricultural sector were considered a priority [47]. Entrepreneurship promotion is supported by access to financial resources, entrepreneurial culture, taxes, regulations, coordinated training, and support in all areas mentioned by specialized organizations such as entrepreneurial associations and clubs, government agencies, and business centers. Empirical studies identify factors affecting entrepreneurship such as technology, culture and institutions, level of economic development, demography, government spending, individual characteristics, characteristics of the social environment, education, and ease of access to financial resources [48].

Levels of entrepreneurial activity vary by gender, age, and educational attainment. In general, men are more likely to start new businesses, younger people are also more likely to do so, and graduates are more likely to start a new business. The four specified motivations for entrepreneurship are: to make a difference in the world, to build a high income, to continue a family tradition, and to earn a living when jobs are scarce. Moreover, there are many reasons to exit a business. The most obvious relates to insufficient sales or profitability, the burden of taxation or bureaucracy, the failure to access resources, including finance, or changes in personal circumstances [49].

Literature shows that entrepreneurs play a key role in the economic growth and development of countries [50], and therefore, as stated above, understanding the motivational factors of their success is important. However, there are few empirical studies about factors affecting the success of entrepreneurs, especially in developing countries; this research is aimed to fill that gap. In this research, the main factors affecting entrepreneurship success in the agribusiness sector are considered using a two-stage Heckman regression approach. Identifying the factors affecting entrepreneurship success is important, especially for policymakers and agribusiness leaders in developing countries, to better manage scarce resources to achieve higher economic development and growth. A contribution of this study is that it differentiates between the intent and the action in entrepreneurial success. In the first stage, it examines factors affecting the success of entrepreneurs, and in the second stage, a set of observations, i.e., those who were not successful in their investment, are censored, and then factors affecting the rate of success (profits) for successful entrepreneurs are investigated.

3. Materials and Methods

3.1. Study Design

The design of this study consisted of design of a questionnaire and conducting a survey to collect primary data. The primary data consists of two parts. In the first part of the questionnaire, the entrepreneurs' demographic characteristics such as age, education, gender, entrepreneurial activity experience, expertise in the field of entrepreneurship,

and the satisfaction with business were considered. The second part of the questionnaire included information such as entrepreneurship experience, economic factors affecting entrepreneurship such as interest rates, risk of entrepreneurship, government policies, and the business environment.

3.2. Data Collection

The present study is applied research in terms of purpose and descriptive-survey research in terms of method. The research tool is a questionnaire that contains two sections with 29 questions, including information about the personal characteristics of respondents and questions related to the factors affecting entrepreneurial success in agribusinesses. The statistical population of the present study is entrepreneurs' who are active in agricultural businesses in the city of Mashhad, Iran, in 2020. The observations were 168 entrepreneurial units according to the Agricultural Jihad Organization of Khorasan Razavi Province. However, only 86 questionnaires of agribusiness entrepreneurs were completed due to the limitations of access to entrepreneurs and unanswered questionnaires. Gender, entrepreneurial background, entrepreneurship expertise, education, and business satisfaction were questions in the first part of the questionnaire. In the second part, information about economic factors affecting entrepreneurship such as investment, entrepreneurial profits, employment, credit and bank facilities, interest rates, initial capital, entrepreneurial risks, government policies, and business environment were obtained. With the model specification, variables of education level, entrepreneurship experience, average interest rate, risk of entrepreneurship, business environment, income, and other related variables were selected for the first stage of the two-stage Heckman regression approach. Descriptive statistics of dependent variables and independent variables used in the model are presented in Tables 1 and 2. In the first stage, the dependent variable is the success or failure of the entrepreneur, defined as a zero when entrepreneurs have failed in achieving their goals in the business and one when entrepreneurs have succeeded in achieving their business objectives. The dependent variable for the second stage of the model is the degree of success for the entrepreneurs who succeeded. The profit level of entrepreneurs was selected as the dependent variable in this stage, and entrepreneurial experience, average interest rate, risk, business environment, initial capital, and other related variables were selected as the independent variables.

Table 1. Frequency of dependent variable in the probit model.

The Dependent Variables	Frequency	Percent Frequency
Entrepreneurial success	38	0.44
Entrepreneurial failure	48	0.56
Total	86	100

Table 2. Descriptive statistics of the explanatory variables.

Variable	Description	Mean	S.E
Education	education of managers (continuous)	16.56	2.76
Entrepreneurship	Entrepreneurship experience (continuous)	8.9	7.3
Interest rates	The effect of interest rate; Low = 0 and high = 1 (dummy)	0.67	0.48
Risk-taking behaviour	Low = 0; high = 1 (dummy)	0.72	0.45
Business environment	The effects of business environment; Low = 0; high = 1 (dummy)	0.75	0.44
Appropriate legislations	Low = 0; high = 1 (dummy)	0.67	0.48
Income	Annual income (continuous in million IRR)	20,477.3	9744.1
Profit	Annual profit (continuous in million IRR)	11,169.5	6976.76
Initial capital	Initial capital (continuous in million IRR)	73,333.3	4824.61

Source: Research findings.

3.3. Hypotheses

For agribusiness entrepreneurship, information on the factors that influence its possible success would allow identification of success variables for functioning entrepreneurs. In general, entrepreneurship is determined by several success factors that were described in the literature review. This paper focused on factors that affected the success of agribusiness entrepreneurship and distinguished between factors that have an impact on the success of entrepreneurs and those that affect the level of profitability of agribusiness entrepreneurs. Hence, the testable hypothesis of this research is:

Hypotheses 1 (H1). *The factors that effect on the success or failure of entrepreneurs are not the same as the factors that effect on the level of profitability of entrepreneurs.*

3.4. Data Analysis

Descriptive statistics of data are reported in Tables 1 and 2. In Table 1, the frequency of dependent variable for the first stage probit regression is reported. According to Table 1, around 44% of entrepreneurial activities in the agribusiness sector were successful and had favorable results.

In Table 2, the description of explanatory variables is reported. Among explanatory variables, some of them are continuous, while the others are dummy variables. Among explanatory variables in Table 2, the level of manager's education, entrepreneurship experience, annual income, annual profit, and initial capital are continuous variables, while the effects of interest rate on entrepreneurship success, the effect of risk-taking behavior, personal efforts, business environment, and finally the effects of appropriate rules are qualitative variables.

3.5. Methods

In this study, we used the two-stage Heckman regression approach to investigate factors affecting entrepreneurial success. The reason for using this model is that logit or probit models do not have the ability to distinguish between factors affecting the success or failure of a business and factors affecting the success rate of a business at the same time. Some factors affecting the success or failure of agricultural businesses could be different from the factors that affect the success rate of those businesses, and therefore, a model is used that can address these two issues simultaneously [51]. The structure of the Tobit model is expressed as the following:

$$\begin{aligned} Y_i &= \beta' X_i + U_i & Y_i^* &> 0 \\ Y_i &= 0 & Y_i^* &\leq 0 \\ i &= 1, \dots, n \end{aligned} \quad (1)$$

where Y_i^* is the latent variable, Y_i is the observed variable, β' is the vector of model parameters, X_i is the vector of independent variables, U_i is the disturbance term, and n is the total number of observations. For entrepreneurs that have been successful, Y_i^* is the success rate and for entrepreneurs that have been unsuccessful, Y_i^* is considered to be zero. In other words, cutting threshold was taken as zero.

The Tobit model utilizes observation of both groups of potential entrepreneurs and actual entrepreneurs to resolve Type I error (non-random sampling). However, it does include the risk of Type II error (lack of differentiation between the factors affecting the decision to be an entrepreneur and factors affecting the success rate of entrepreneurship). Heckman suggested a two-step method for resolving the second problem. Heckman's two-step method is based on the assumption that a set of variables can affect the decision to engage in a specific activity, and another set of variables can affect the volume of participation in that activity after making the initial decision. Hence, the two groups of variables are not necessarily similar [51].

Accordingly, the first step is estimating a model that shows the probability of being successful in entrepreneurship, and for this part, the following probit regression model was used:

$$\begin{aligned} Z_i &= \beta'X_i + v_i & i &= 1, 2, \dots, n \\ Z_i &= 1 & \text{if } Y_i^* &> 0 \\ Z_i &= 0 & \text{if } Y_i^* &< 0 \end{aligned} \quad (2)$$

where Z_i is a dependent variable of the first step, if an entrepreneur is successful, take the value 1; otherwise, its value is zero. In fact, the first step estimates factors affecting success or failure of the entrepreneurs. Furthermore, in this step, inverse Mills ratio (*IMR*) is created as $\lambda = \frac{\phi(\beta'X_i)}{\Phi(\beta'X_i)}$, by calculating the ratio of the standard normal density function to the standard normal cumulative distribution function.

The second step of the model estimates the relationship between independent variables and the rate of entrepreneurial success simply by using the positive values of observations Y_i on X_i and *IMR* obtained from the first step of probit analysis. Its functional form is as follows:

$$Y_i = \beta'X_i + \sigma IMR_i + e_i \quad (3)$$

In fact, the second step of the model estimates how the explanatory variables affected the amount of entrepreneurial success of firms. The *IMR* coefficient expresses the error caused by sampling, and if it is statistically significant, then it indicates that removing the zero observations from the sample will cause biased estimates [52]. In addition, the presence of *IMR* variable in the above linear regression model removes the variance heteroscedasticity of the initial model and permits the use of ordinary least squares estimator (OLS) [53].

4. Results and Discussions

4.1. The First Stage Regression Results and Discussions

The results of estimating the first-stage probit model are reported in Table 3. The estimated coefficients in Table 3 indicate the influence of independent variables on the probability of entrepreneurial success. Among the variables used in this model, entrepreneurship experience, interest rate, risk-taking behavior, business environment, and the quality of rules have a significant effect on the probability of entrepreneurship success. Among all explanatory variables, the interest rate has a negative effect on the probability of entrepreneurial success. In other words, entrepreneurs believe that interest rate has a significant effect on the probability of entrepreneurial success, and when interest rates increase, the probability of entrepreneurial success decreases.

Table 3. The results of the first stage probit model.

Variable	Coefficient	SD	Z-Stat.	$p > z $	Marginal Effect
Education	0.17	0.43	0.4	0.69	0.06
Entrepreneurship experience	0.07	0.03	2.16	0.03	0.56
Interest rates	−1.68	0.94	−1.78	0.07	−0.46
Risk taking	0.9	0.5	1.81	0.07	0.34
Business environment	1.57	0.55	2.85	0	0.94
Appropriate legislation	0.8	0.44	1.82	0.07	0.3
Initial capital	0.25	0.1	2.5	0.4	0.11
Income	0.19	0.37	0.5	0.62	0.19
Intercept	4.1	2.67	1.54	0.12	

Source: Research findings.

According to the results in Table 3, with an increase in the entrepreneur's experience, the possibility of entrepreneurial success increases. The marginal effect for this variable shows that with an increase in entrepreneurship experience by one year, the possibility of success would increase by 0.56%, holding other variables constant at their mean values. In addition, the entrepreneur's risk-taking behavior, appropriate legislation, and business

environment had a positive and significant effect on the possibility of entrepreneurial success. In other words, when one has an appropriate business environment, makes appropriate rules for business, and promotes risk-taking behaviors for entrepreneurs, the possibility of entrepreneurship success could increase. Moreover, initial capital had a positive impact on the probability of entrepreneurial success, and with an increase in initial capital by one unit, the possibility of success would increase by 11% when other variables are constant at their mean values. Interestingly, the education of managers and income had an insignificant effect on the probability of success for agribusiness entrepreneurship.

Information about measures of the well-fitting model is presented in Table 4. According to Table 4, LR statistics is 22.70, and it is significant at the probability level of one percent, which means the total regression is statistically significant.

Table 4. Goodness of fit measures for Probit model.

Log-Like Intercept only	−40.75
Log-Like Full Model	−29.4
LR (8)	22.7
LR (<i>p</i> -value)	0
R ² McFadden's	0.28
R ² ML (Cox-Snell)	0.32
R ² Cragg-Uhler	0.42
R ² Count	0.73
Deviance	58.8

Source: research findings.

4.2. The Second Stage Regression Results and Discussions

The estimation results for the second stage of the two-stage Heckman model in the form of a linear regression model are shown in Table 5. At this stage, based on the results of the probit model, the reverse coefficient of the Mills ratio is calculated, and in the second stage, it is entered into the model as an explanatory variable. The estimation results indicate that the impact of this variable on entrepreneurial success is significant, indicating the necessity of using a two-step Heckman model to avoid sampling bias.

Table 5. The results of the second stage Heckman approach.

Variable	Coefficient	Std. Error	<i>t</i> -Test	<i>p</i> > <i>t</i>
Education	0.02	0.034	0.59	0.64
Entrepreneurship experience	0.06	0.01	4.82	0
Risk-taking behavior	0.052	0.022	2.36	0.02
Business environment	−0.43	0.34	−1.26	0.28
Initial capital	0.05	0.17	0.31	0.76
Interest rates	−0.32	0.18	−1.82	0.07
Inverse Mills ratio	0.44	0.22	2.03	0.04
Intercept	−0.32	0.32	−0.99	0.33

Source: research findings.

The results in Table 5 show that the variables of entrepreneurship experience, risk-taking behavior, and inverse Mills ratio are significant at the 5% level and interest rates are significant at the 10% level. The initial capital has not had any significant effect on the amount of profit in this stage. The results indicate that if the entrepreneurship experience increases by one year, the profit rises by 6%, holding all other variables constant in their mean. Other scholars also reached similar results [54]. In addition, the risk-taking behavior of the entrepreneurs increases profits at a rate of 0.052%, holding all other variables constant at their mean values.

In general, entrepreneurs accept four types of risks: financial risk, job risk, social and family risk, and mental risk [55,56] show that the effect of risk perception on profits is significantly positive and robust. Furthermore, the interest rate has a significant and

negative effect on the entrepreneurs' profits by 32%. Many borrowers use microfinance loans to seed their small entrepreneurial businesses, and high interest rates are likely to increase the financial burden of those borrowers [57]. Therefore, increasing interest rates could decrease entrepreneurship profits and entrepreneurial incentives. Furthermore, in this stage, the business environment did not have a significant effect on the profitability of the entrepreneurs; however, in the first stage of the model, it had a significant effect on the success of the entrepreneurs.

Overall, some variables that affected the success of entrepreneurs had an insignificant effect on the profitability of entrepreneurial activities. For example, the variables of initial capital and business environment had a significant effect on the success of entrepreneurs in the first stage of the model, but in the second stage, their effects on profitability were insignificant. Hence, the research hypothesis was not rejected, and the factors that affected the success or failure of entrepreneurs were different from the factors that affected the level of profitability of entrepreneurs. Finally, the IMR coefficient was statistically significant, indicating that removing the zero observations from the sample could cause biased estimates, and hence, the use of the two stages Heckman model was justified.

5. Conclusions

Entrepreneurship is an important factor for economic growth, especially in developing countries, and identification and assessment of factors affecting the success of entrepreneurship are essential. Investigating the motivational factors that lead to the success of entrepreneurs can be useful; it affects the success of investors. Different motivational factors affect the entrepreneurship activities, among which willingness to succeed, income and wealth, and the need to feel useful and independent are important. Entrepreneurship in the agriculture sector is more important in developing countries because many developing countries have a comparative advantage in some areas of agricultural activity and production; therefore, by increasing the entrepreneurship activities in the developing countries, major problems such as employment and economic growth could be resolved.

In this study, the two-stage Heckman approach was used to identify the factors affecting the success of entrepreneurship in the agribusiness sector of Mashhad, Iran. The results showed that entrepreneurship experience, interest rates, taking risks, and initial capital have a significant effect on the probability of entrepreneurship success and profitability of entrepreneurs. However, some variables that affected the success of an entrepreneur did not have a significant effect on the profitability of entrepreneurial activity. Initial capital and business environment had a significant effect on the success of entrepreneurs, but their effect on profitability was insignificant. Therefore, the factors that affect the success of entrepreneurs are not the same as the factors that affect the level of profitability of entrepreneurs; hence, the research hypothesis is not rejected.

Since interest rates and the business environment are controlled by government policy, government policies and actions can be recognized as critical factors affecting entrepreneurship success. Therefore, based on the results of this study, it is suggested that the government apply policies that lead to appropriate rules and regulations and stabilization and enforce appropriate interest rate policies that provide incentives to entrepreneurs and producers by reducing the risk of entrepreneurs' initial investment returns. Overall, the government could enforce relevant laws and policies that create the right environment for entrepreneurship success.

Policies to improve risk-taking behavior, improve skills of entrepreneurs, initial capital provision, and improvement of financial market efficiency and competition had an effective role in increasing entrepreneurship in the agribusiness sector. Some of the limitations of this study include the no-response of some of the entrepreneurs in the field of agricultural businesses to the research questions and the total number of entrepreneurs studied. We suggest in future research the use of online methods and the provision of some form of incentive for participants to complete the questionnaires more completely to increase the sample size.

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