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ORIGINAL

The impact of entrepreneurship support programs on the survival of young agricultural enterprises: A Cox model approach

El impacto de los programas de apoyo a la iniciativa empresarial en la supervivencia de las jóvenes empresas agrícolas: Un enfoque basado en el modelo de Cox

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ABSTRACT

This study examines the factors influencing the survival of new agricultural enterprises created by young entrepreneurs, using a sample of 184 businesses over a three-year period after their creation. The analysis begins with a description of the sample's characteristics and then employs two quantitative approaches: the non-parametric Kaplan-Meier method and the semi-parametric Cox model. Empirical results reveal several key elements that significantly impact business survival. Entrepreneurial training is crucial as it enhances the skills needed to address challenges. Prior experience in the agricultural sector also strengthens entrepreneurs' resilience. Sufficient startup capital is essential for supporting initial operations and handling unforeseen issues. Innovation plays a vital role by enabling businesses to differentiate themselves and adapt to market changes. Finally, activity diversification helps mitigate risks and stabilize income. The study highlights the need for more diverse and adaptive post-creation support to effectively assist these businesses in their long-term development. Better-targeted and tailored support for young entrepreneurs could significantly improve survival rates and foster the sustainable growth of new agricultural enterprises.

Keywords: Support for Agricultural Entrepreneurship; Young Agricultural Entrepreneur; Technical Support Model for Young Agricultural Entrepreneurs; Survival of Small Agricultural Enterprise; Duration Model.

RESUMEN

Este estudio examina los factores que influyen en la supervivencia de nuevas empresas agrícolas creadas por jóvenes emprendedores, utilizando una muestra de 184 empresas durante un período de tres años después de su creación. El análisis comienza con una descripción de las características de la muestra y luego emplea dos enfoques cuantitativos: el método no paramétrico de Kaplan-Meier y el modelo semi-paramétrico de Cox. Los resultados empíricos revelan varios elementos clave que impactan significativamente la supervivencia de las empresas. La formación empresarial es crucial, ya que mejora las habilidades necesarias para enfrentar los desafíos. La experiencia previa en el sector agrícola también refuerza la resiliencia de los emprendedores. Un capital inicial suficiente es esencial para apoyar las operaciones iniciales y enfrentar problemas imprevistos. La innovación juega un papel vital al permitir que las empresas se diferencien y se adapten a los cambios del mercado. Finalmente, la diversificación de actividades ayuda a mitigar los riesgos y estabilizar los ingresos.

El estudio destaca la necesidad de un apoyo post-creación más diverso y adaptativo para asistir eficazmente a estas empresas en su desarrollo a largo plazo. Un apoyo mejor dirigido y ajustado a las necesidades específicas de los jóvenes emprendedores podría mejorar significativamente las tasas de supervivencia y fomentar el crecimiento sostenible de las nuevas empresas agrícolas.

Palabras clave: Apoyo a la Iniciativa Empresarial Agrícola; Joven Empresario Agrícola; Modelo de Apoyo Técnico a los Jóvenes Empresarios Agrícolas; Supervivencia de la Pequeña Empresa Agrícola; Modelo de Duración.

INTRODUCTION

Rapid population growth sharply contrasts with employment opportunities for young people. Each year, millions of young individuals enter the labor market, yet the number of jobs created falls far short of meeting the demand. This gap exacerbates job insecurity for many young people. The inability to find employment poses a significant threat to developing countries. In a dynamic economic and social context, entrepreneurship has become essential for fostering economic growth particularly for stimulating job creation. Encouraging more people to engage in entrepreneurship is therefore essential.

In this way, countries where the entrepreneurial spirit thrives are frequently those that go on to reduce their unemployment rates, highlighting the importance of cultivating an entrepreneurial environment to meet contemporary economic and social challenges. Consequently, the growing number of new businesses created is often an indicator of wealth generated and economic development.

So, given the crucial importance of the viability of new businesses, many private and public initiatives aim to encourage and support business creation and entrepreneurship in particular. This is done through various schemes such as incubators, entrepreneurship houses, and various government programs that facilitate new entrepreneurs' access to the necessary resources. These support instruments first emerged in the 1960s in the United States, in the 1970s-1980s in Europe, and more recently in certain emerging countries. In Morocco, encouragement of private investment and promotion of entrepreneurship began in the 1990s. These efforts are crucial, as they encourage business start-ups and improve the conditions for promoting small businesses, which play a vital role in generating income and employment. These actions have enabled the country to assert itself today as a major center of attraction and a strategic platform on the African continent.

However, despite these promising aspects, several challenges persist, mainly due to the high failure rates of new SMEs. According to a Canadian government study, four out of five newly-created SMEs fail before their fifth anniversary. This reality limits the impact of entrepreneurship on economic growth, job creation and overall development.

Undoubtedly, among all the issues relating to public policies to support business start-ups, the study of their influences and impacts is of crucial importance. Despite the diversity of programs and mechanisms in place in Morocco to encourage entrepreneurship through the academic, political and training spheres, failure rates in business creation and start-up remain high. This raises significant questions as to the factors behind these difficulties. It is against this backdrop that the aim of this research project is to address the following issues:

What are the most important factors affecting the survival of young people's new farming businesses?

In the current Moroccan context, our problem is particularly relevant, given the growing importance of the agricultural sector and the managerial and strategic changes taking place within Moroccan entrepreneurship. With this in mind, our study is of both theoretical and methodological interest. On the theoretical level, it examines the determining factors in the survival of start-ups, exploring the personal characteristics of entrepreneurs, aspects related to their businesses, and the context and preparation for their creation. From a methodological point of view, we used a quantitative approach rare in empirical studies of entrepreneurship, based on the administration of a questionnaire. We chose to focus on the agricultural sector, generally less studied in entrepreneurship research, thus enriching knowledge in economics and management. In this way, several research hypotheses are envisaged in relation to our problematic. Thus, it is necessary to develop hypotheses for our research. These hypotheses will be presented in our literature review.

The rest of the article is presented as follows. Section 2 consists of a review of the literature on factors affecting the survival of new agricultural enterprises. Section 3 presents data collection, the variables considered, the methodology used for feature selection and model construction. Section 4 presents the empirical results. Finally, sections 5 and 6 are devoted to discussion and conclusions respectively.

Literature revue

The Impact of Entrepreneur Profile on Survival

Gender and Survival

Research presents mixed findings on the impact of gender on business survival. A study in the Netherlands

reported that businesses started by men had higher success rates.[1] Conversely, another study found that women-led businesses were more likely to survive,[2] while a third study concluded that there were no significant differences in survival rates between male and female founders.[3]

Hypothesis 1a: Businesses founded by men are more likely to survive than those founded by women.

Education and Survival

Studies on the impact of education on business survival have shown varied results. Bates et al.[4] indicated that longer education positively influences business survival, while Randelli et al.[5] found a negative effect in Italy.

Hypothesis 1b: The length of the entrepreneur's education is positively related to the probability of business survival.

Previous Occupation and Survival

Previous managerial experience often benefits business survival. Entrepreneurs with prior managerial roles are better prepared to handle challenges, while those starting businesses out of necessity may lack this advantage.

Hypothesis 1c: The probability of survival is higher for entrepreneurs who were active before starting their business.

Entrepreneurial Background and Survival

Having entrepreneurial parents can positively affect business survival. Entrepreneurs from such backgrounds often have informal business experience and resources that aid their success.

Hypothesis 1d: The probability of survival is higher for entrepreneurs whose parents are self employed.

Motivation and Survival

Motivation is crucial for business success. Highly motivated entrepreneurs are more likely to succeed, with intrinsic goals, desire for independence, and future security being key motivators.

Hypothesis 1e: The type of motivation in the entrepreneur affects business survival.

The Impact of Business Characteristics on Survival

Capital and Survival

Research indicates that higher startup capital generally improves the survival chances of new businesses.[6] Crépon, B., & Duguet[7] found that although businesses with larger initial capital may initially have lower survival rates, they benefit from increased survival rates in the long term. However, Cressy[8] argued that human capital is more crucial than financial capital for survival.

Hypothesis 2a: The probability of survival increases with the size of the initial startup capital.

Financial Support and Survival

Studies show mixed results regarding the impact of financial support on survival. Battistin, E., Gavosto, A., & Rettore, E.[9] found that public financial aid could increase the risk of failure over time. In contrast, Crépon, B., & Duguet[7] concluded that public aid positively affects the survival of businesses started by former unemployed individuals but has a negligible effect on those started by former employees.

Hypothesis 2b: The probability of survival is lower for businesses that received financial support (e.g., family funding, bank loans, public subsidies).

Geographic Location and Survival

The impact of geographic location on business survival varies. Studies by Randelli, F., & Ricchiuti, G.[11] and McElwee, G., & Atherton, A[12] suggest that businesses in densely populated areas have a higher survival rate. For agricultural businesses, local environmental conditions are also critical.

Hypothesis 2c: Agricultural businesses located in an ambient agricultural environment have a higher probability of survival.

Activity Diversification and Survival

Diversification is often seen as a strategy to reduce risk and ensure business survival. Multiple researchers have shown and argue that diversification can enhance resilience and adaptiveness, contributing to higher survival rates for agricultural businesses.

Hypothesis 2d: The probability of survival is higher for businesses with a high level of diversification.

Business Similarity and Survival

Experience in a similar field can significantly improve survival rates. Entrepreneurs with relevant prior

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experience and industry-specific knowledge tend to have better survival chances due to their understanding of products, processes, and relationships.

Hypothesis 2e: The probability of survival is higher for businesses that are similar to the entrepreneur's previous activity.

Land Access and Survival

Access to land is crucial for agricultural businesses. Limited access to credit and land can be major constraints on development and survival.

Hypothesis 2f: Access to land is a critical factor for the survival of agricultural businesses.

Innovation and Survival

Innovation plays a key role in agricultural survival. While studies on agricultural innovation are relatively recent, the ability to adopt new technologies and methods is associated with better survival outcomes.

Hypothesis 2g: The probability of survival is higher for projects that incorporate innovation.

The Impact of Preparation and Creation Context on Survival

Entrepreneurial Training and Survival

Entrepreneurial training provides benefits in terms of access to information and financial resources. Studies show that entrepreneurs who receive professional advice and training have better chances of success and performance.[15,16]

Hypothesis 3a: The probability of survival is higher for businesses that engage in entrepreneurial training.

Feasibility Study and Survival

Thorough preparation, including a business plan and feasibility study, is crucial for project success.[17] However, Davidson[18] did not confirm this relationship.

Hypothesis 3b: The development of a business plan increases the probability of business survival.

Post-Creation Support and Survival

Post-creation support can facilitate access to public aid, but its direct impact on survival is debated. Crépon, B., & Duguet[7] report positive results, while Lavoisier[19] notes limited effectiveness.

Hypothesis 3c: The probability of survival is higher for businesses that have benefited from post-creation support.

METHOD

Our research employs a positivist approach to explain agricultural business survival among young entrepreneurs using a survey questionnaire. We adopt a hypothetico-deductive method, starting with a literature review to develop hypotheses, followed by empirical research. Findings are analyzed to evaluate how explanatory variables impact business survival, consistent with our positivist stance.

We use a comprehensive survey method involving a questionnaire for young agricultural entrepreneurs. The questionnaire bridges theory and practice, making it crucial for our research. Before finalizing the questionnaire, a pre-test was conducted with other entrepreneurs to improve question clarity and understanding. All questions are closed-ended, requiring respondents to select from provided options. To maximize response rates, we employed various methods for distributing the questionnaire.

Our sample is focusing on young agricultural entrepreneurs who received project support. An exhaustive survey was conducted with 184 entrepreneurs. The data collection spanned approximately six months. After data collection, responses were entered and coded in STATA for statistical analysis based on their categories

The survival of newly created businesses is the dependent variable, assessed by whether the business is operational three years after its creation. This is measured as a binary variable: 1 if operational and 0 if not. The explanatory variables of the study are shown in table 1.

RESULTS

Descriptive analysis

Exploring and describing the data is a preliminary and fundamental phase before tackling the study of the model and hypotheses. After this step, we will analyze the collected data to identify the characteristics of the respondents in our sample.

From the analysis of the trend in the business start-up rate among young agricultural entrepreneurs, we observed that only 66,30 % of businesses survive the first year. This percentage further declines by the third year, reaching 47,83 %, indicating that one in three businesses created by young agricultural entrepreneurs does not make it to its third anniversary.

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Table 1. Table of intrinsic and extrinsic explanatory variables

Intrinsic Variables:	Extrinsic Variables:
• Sexe: Binary (Men = 1, Women = 0). • Age: Continuous. • Education Level: Categorical (Low, Medium, High). • Previous Occupation: Employed or Unemployed. • Entrepreneurial Environment: Membership in an entrepreneurial community (Yes/No). • Motivation: Categorical (Unemployed, Influence of Surroundings, New Idea/Opportunity, Desire to Entrepreneur).	• Nature of Agricultural Activity: Categorical (Commercial, Stationary, Subsistence). • Startup Capital: Categorical (Minimal, Very Low, Low with Awareness, Significant). • Business Similarity: Prior experience in the same sector (Different/Same). • Geographical Location: Agricultural development zone (Yes/No). • Financial Support: Received or not (Yes/No). • Entrepreneurial Training: Received or not (Yes/No). • Business Plan Preparation: Prepared or not (Yes/No). • Land Status: Categorical (No Access, Negotiated Access, Autonomous Access). • Innovation: Use of innovation (Yes/No).

The survey of young agricultural entrepreneurs reveals several key characteristics. There is a marked male predominance, with 84,8 % of businesses founded by men. Education levels vary, with the majority being medium-skilled entrepreneurs (47,5 %). Most entrepreneurs were previously employed (65,6 %), and many were influenced by a family background in entrepreneurship (72,7 %). The main motivations include the desire for independence (20,1 %) and economic opportunity (27,1 %), while 32,6 % of young graduates are driven by a lack of employment to start their own business. Commercial farming (51,1 %) and seasonal farming (33,2 %) are the predominant sectors, despite many starting with modest capital (42 % with no significant capital). A large proportion of entrepreneurs have acquired relevant skills from previous jobs (65,8 %). Geographically, there is a preference for agricultural development zones (59,8 %). Most benefited from financial support (74,5 %) and comprehensive entrepreneurial training (91,8 %), with the majority producing a business plan (94,4 %). Innovation is widespread in their activities (88 %), though post-creation support from public bodies remains rare (6 %).

To complete our descriptive analysis, we calculated cross-tabulated statistics for different pairs of variables. Correlation, which measures the strength of the relationship between two explanatory variables, is generally low, indicating a lack of significant multicollinearity between the variables.

Company activity status by gender

The failure rate of businesses founded by women (57,24 %) is not significantly different from that of businesses founded by men (51,30 %). This observation diverges from the trend generally reported in the literature, where male entrepreneurs are often considered more likely to succeed than their female counterparts. Further econometric analysis will be required to confirm or refute this finding.

Company activity status by level of education

The most highly-skilled entrepreneurs (Bac + 5 and over) represent a significant majority of surviving businesses, with a survival rate of 54,91 %. On the other hand, medium-skilled young people (technicians, senior technicians) and low-skilled young people (agricultural training) show similar survival rates, at 45,89 % and 46,02 % respectively. These results call into question human capital theory, suggesting that length of education increases the chances of survival for start-ups. An econometric study will be needed to confirm or invalidate this observation.

Company activity status according to entrepreneurial motivation

The table analyzed reveals that young entrepreneurs motivated by a strong desire for entrepreneurship and independence have the highest business survival rate, at 92,04 %. Among unsuccessful entrepreneurs, 7,96 % were individuals with a taste for entrepreneurship, 33,95 % had a new idea or opportunity, and 62,19 % were young people who had followed the example of those around them. On the other hand, those who started a business out of necessity, due to unemployment, have the highest failure rate, reaching 88,34 %. In the literature, it is generally argued that the more motivated the entrepreneur, the greater the chance of survival, which is the opposite of entrepreneurship by necessity, and can be verified by econometric analysis.

Company activity status by geographic location

Businesses set up in an agricultural development zone accounted for the highest proportion of surviving businesses, with a rate of 95,7 %. This was not the case for businesses set up in nonagricultural development zones, which accounted for the highest proportion of failed businesses, at 68,60 %. This result seems to support the hypothesis that areas with a high economic density are more likely to encourage the survival of new businesses. This observation remains to be validated or invalidated by the econometric study.

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Non-parametric analysis (Kaplan-Meier)

In this section, we begin by describing the survival times of the surveyed companies using a nonparametric approach, specifically the Kaplan-Meier method. The results from the non-parametric Log-Rank test reveal that survival probabilities vary significantly depending on the entrepreneur's prior activities. Throughout the observation period, the survival curves for businesses created by previously active individuals are higher than those for businesses started by unemployed entrepreneurs. This difference is attributed to the greater professional experience of the former group, confirming that businesses created by active entrepreneurs have the highest likelihood of survival, whereas those created by unemployed individuals have the lowest.

We also found that businesses established by young people motivated by a passion for entrepreneurship and independence have a longer survival rate (92 %) than those created due to a new idea or opportunity (66 %) or those inspired by their social circles (38 %). Entrepreneurs whose main motivation was to avoid unemployment have the lowest business survival rate (12 %). The homogeneity test of the survival functions allows us to reject the hypothesis of equality among the survival functions of the different businesses, even at a 1 % error level.

Regarding entrepreneurial training, the population is divided into two groups: entrepreneurs who received training before starting their business and those who did not. The findings indicate that businesses created by entrepreneurs who received training have a longer survival time. This supports the hypothesis that entrepreneurs who seek professional advice are more likely to sustain their businesses.

The highly significant result of the Log-Rank test at 0,0011 demonstrates notable differences in survival functions depending on whether a business plan was developed before the company was established. From the outset, the survival curve for businesses without a prior business plan declines more rapidly than for those with a plan. By the end of the third year, the survival probability for businesses without a plan is approximately 20 %.

The Kaplan-Meier graphical representation shows that the survival curves for businesses in commercial or stationary agricultural activities with productive potential intersect during the initial years but significantly diverge by the third year. Toward the end of the first year, survival rates for businesses in subsistence agriculture decline sharply, suggesting that the more commercial the activity, the greater the survival chances—confirming results previously reported in the literature.

Additionally, businesses started by young entrepreneurs from entrepreneurial families are more likely to survive than those from non-entrepreneurial backgrounds. This can be explained by the critical role played by the entrepreneur's family and network in providing material, financial, informational, intellectual, emotional, and psychological support during the critical conception and pre-start-up phases.

The survival curves for newly-created farm businesses with no or negotiated access to land intersect several times, indicating that survival risks vary over time for different sub-populations. Businesses with independent access to land survive more easily. The homogeneity test of survival functions is significant, confirming that access to land is a crucial factor in farm business survival.

Businesses that received financial support at start-up consistently show higher survival rates compared to those that did not, particularly as the observation period progresses. The deteriorating survival rate of businesses without financial support stabilizes by the last year but remains lower than that of businesses with financial backing, validating the hypothesis that financial support improves survival probabilities.

Businesses that incorporate innovation and technical progress into their agricultural activities are more likely to survive. Conversely, businesses that do not innovate experience a steady decline in survival, particularly from the first year to the third. The homogeneity test for survival functions is significant at 0,0009, confirming that the probability of survival is higher for projects that employ innovation.

The analysis also reveals that companies benefiting from post-creation support have a longer survival time compared to those without such support, whose survival curve declines steadily until the end of the observation period. The highly significant homogeneity test at 0,0022 supports the hypothesis that companies receiving post-creation support have a higher probability of survival.

The survival of newly-created businesses is greater when the entrepreneur's prior activity aligns with the business itself, as this experience provides essential know-how for the business's development. The non-parametric Log-Rank test at 0,0000 validates the hypothesis that the probability of survival is higher for projects similar to the entrepreneur's previous activities.

Finally, the Kaplan-Meier curve and the homogeneity test of survival functions at 0,0000 confirm that agricultural businesses established in an agricultural environment have a higher probability of survival. The graphical representation of survival functions shows that businesses with little or no start-up capital experience a considerable drop in survival rates during the second and third years. This finding supports the hypothesis that larger start-up capital increases the probability of business survival.

Semi-parametric analysis

The semi-parametric Cox proportional hazards model is advantageous, as it does not require assumptions about the specific distribution of the survival time variable. This model facilitates the simultaneous examination of multiple explanatory variables that may affect survival, allowing for the inclusion of various individual

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characteristics without needing to define a particular distribution for the duration variable. In our analysis, we utilized STATA (version 12.0) to estimate the model, and the results are presented in the table below. The second column of the table contains the β parameter estimates, which reflect the impact of each explanatory variable on the logarithm of the risk. For easier interpretation, the first column shows the exponential of these β coefficients, known as the "hazard ratio." A hazard ratio less than 1 indicates a reduction in the risk of the event, thus extending the company's survival time, while a hazard ratio greater than 1 signifies an increased risk of the event, leading to a shorter lifespan for the company.

Table 2. Cox model estimation results

Explanatory variables	Hazard ratio	Coefficient ß	Significativity
Sex:			
• Men	0,8931866	-0,1129598	0,680"
• Women	Ref		
Education level			
• Low qualified	Ref		
• Medium qualified	0,9650357	-0,0355902	0,876"
• Highly qualified	0,8545467	-0,1571842	0,612"
Entrepreneurial formation:			
• No	Ref		
• Yes	0,3366381	-0,6863632	0,041**
Elaboration of a business plan:			
• No	Ref	Ref	
• Yes	0,3366381	-1,088747	0,004***
The nature of agricultural activity			
• Commercial agriculture	Ref		
• Stationary agriculture with productive potential	1,054178	0,6876804	0,005***
• Subsistence agriculture	1,446228	0,863886	0,001***
Anterior occupation			
• unemployed	Ref		
• active	0,2297778	-1,470643	0,000***
Agricultural entourage			
• NO	Ref		
• Yes	0,5338455	-0,6276488	0,003***
Motivation:			
• Unemployed	Ref		
• Example of the entourage	0,4401722	-8205893	0,002***
• New idea or opportunity	0,2485942	-1,391933	0,000***
• Entrepreneurial spirit	0,0480548	-3,035414	0,000***
Post-creation support			
• No	Ref		
• Yes	1,49e-15	-34,13797	1,000"
Similarity of business			
• Different activity	Ref		
• Same activity	0,3028861	-1,194399	0,000***
Land status			
• Project without access to land	Ref		
• Project with negotiated access to land	1,148242	0,1382319	0,521"
• Project with independent access to land	0,0258537	-3,655301	0,000***
Support for land			
• No	Ref		
• Yes	0,0199044	-3,916814	0,000***
Innovation			
• No	Ref		
• Yes	0,4517071	-0,7947214	0,003***
Geographical location			
• Zones not under agricultural development	Ref		
• Agricultural development zone	0,0277143	-3,585806	0,000***
Startup capital			
• Quasi non-existent at creation	Ref		
• Very low at creation	1,45125	0,3724249	0,325 ns
• Low, but the manager is aware of this at the outset	0,191416	-1,653306	0,000***
• Considerable at creation	4,11e-17	-37,73156	1,000 ns

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DISCUSSION

The analysis reveals several key findings regarding the survival of new agricultural enterprises. Gender and educational background of the entrepreneur do not significantly affect the survival rates of these businesses. This is consistent with Robb and Witson,[3] who found no notable differences in business performance based on the entrepreneur's gender, and contradicts Cooper et al.[15], who suggested a positive link between education and business success.

However, having prior entrepreneurial training is crucial; businesses led by individuals with such training tend to have longer lifespans and lower failure rates. This is because trained entrepreneurs often have better access to financing and institutional support. The significance of drawing up a business plan is also confirmed, as it aids in effective project management and completion of necessary formalities, aligning with Brüder & Preisendörfer[2] and Hansen.[17]

The nature of the farming activity plays a significant role in survival. Commercial enterprises with diversified products have a higher likelihood of enduring, supporting McElwee, & Atherton[12] findings on the benefits of diversification in agriculture. Entrepreneurial motivation and previous employment status also impact survival positively; entrepreneurs driven by independence and those who were previously employed are more likely to succeed, which aligns with Cressy.[8]

Additionally, having a family member involved in entrepreneurial activities increases a business's survival chances, supporting the theory of social capital and networks. The variable related to post-creation support, however, did not show the expected significance.

Businesses started in the same field as the entrepreneur's previous occupation, as well as those with access to land and sufficient startup capital, are more likely to thrive. These findings are consistent with research by Cressy[20], Bosma, Van Praag, Thurik, & De Wit[1], and Crépon & Duguet[7]. Financial support also contributes to lower failure rates, though the hypothesis regarding its impact is nuanced; having received financial support is associated with reduced risk of cessation.

Innovative practices and technological advancements improve survival rates, (that innovation is critical for long-term success. Finally, businesses located in agricultural development zones are more successful compared to those outside these areas, emphasizing the role of a supportive entrepreneurial environment.[10]

In summary, entrepreneurial training, business planning, commercial activity, motivation, prior employment, social capital, land access, initial capital, financial support, innovation, and geographic location are all influential factors in the survival of new agricultural enterprises.

CONCLUSION

The question raised in this research is that of the survival of businesses created by young agricultural entrepreneurs. Taking into account non-parametric estimates of survival curves (Kaplan Meier) and semi-parametric estimates (Cox model), based on data from a survey of young agricultural entrepreneurs benefiting from a support program for the creation of new agricultural enterprises, we found the influence of factors linked to the entrepreneur's profile, the characteristics of his or her enterprise, and the preparation for its creation, on its survival. This non-parametric estimation enabled us to observe not only the shape of the survival curve, but also that of the hazard curve, which led us to choose the semi-parametric approach. Based on the results of the Cox model estimation, we concluded that most of the hypotheses put forward were empirically verified. An entrepreneur's human and social capital, i.e. his or her previous experience, entrepreneurial entourage and entrepreneurial drive, all contribute to improving the probability of business survival). The context in which the business is set up - in other words, environmental conditions and innovation - also plays an important role in the durability of the new enterprise, as does the search for information on setting up and accessing new agricultural technologies through entrepreneurial training courses. It should also be noted that there is a positive correlation between the size of start-up capital and survival. As for the post-creation support provided by credit organizations to new promoters, this does little to reduce the risk of entrepreneurial failure. Given that these types of start-up support are rather ineffective, it would be better to provide these young entrepreneurs with other forms of support, such as accompaniment, coaching and so on. Despite the important contributions made by this study, particularly in highlighting the factors influencing the survival of new farm businesses and the impact of support programs, several limitations should be noted. Some crucial information on the post-creation financial situation was absent from the data collected, thus constituting a gap. In addition, the three-year observation period could be extended to five years to improve the validity of the results. In conclusion, although this research has shed some light on the impact of support programs on the survival of young agricultural enterprises, it paves the way for future research. The latter could replicate this analysis in other contexts or sectors, in order to accurately assess the adequacy of government programs to the needs of beneficiaries and minimize potential negative effects.

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