



ISSN: 2617-6548

URL: [www.ijirss.com](http://www.ijirss.com)



## Factors of failure of Moroccan micro-businesses: The case of community pharmacies

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### Abstract

This article aims to understand and analyze the determinants of the failure of community pharmacies in Morocco. This study adopts a quantitative method based on a questionnaire. Referring to previous academic research, it is hypothesized that failure is explained by three factors: the pharmacist's profile, the organizational characteristics of the company, and the company's environment. The authors of this study examine this hypothesis on a sample of 120 Moroccan pharmacies. The results obtained show that the human and social capital available to a community pharmacist contributes to improving the probability of failure of their business (gender, entrepreneurial environment, motivation). The environment in which the pharmacy is established also contributes to the failure of Moroccan pharmacies through entrepreneurial training and pharmacist support. As for organizational characteristics, it should be noted that there is a positive correlation between the size of the start-up capital and failure. Unfortunately, state support in this area is ineffective, particularly regarding investment subsidies and state coverage of part of salaries, except for exemptions from social security contributions. Anticipating factors that lead to the failure of pharmacies in Morocco.

**Keywords:** Community pharmacist, Determinants of failure, Entrepreneur profile, Environment.

**DOI:** 10.53894/ijirss.v8i1.4803

**Funding:** This study received no specific financial support.

**History:** Received: 3 January 2025/Revised: 7 February 2025/Accepted: 13 February 2025/Published: 19 February 2025

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**Competing Interests:** The authors declare that they have no competing interests.

**Authors' Contributions:** All authors contributed equally to the conception and design of the study. All authors have read and agreed to the published version of the manuscript.

**Transparency:** The authors confirm that the manuscript is an honest, accurate, and transparent account of the study; that no vital features of the study have been omitted; and that any discrepancies from the study as planned have been explained. This study followed all ethical practices during writing.

**Publisher:** Innovative Research Publishing

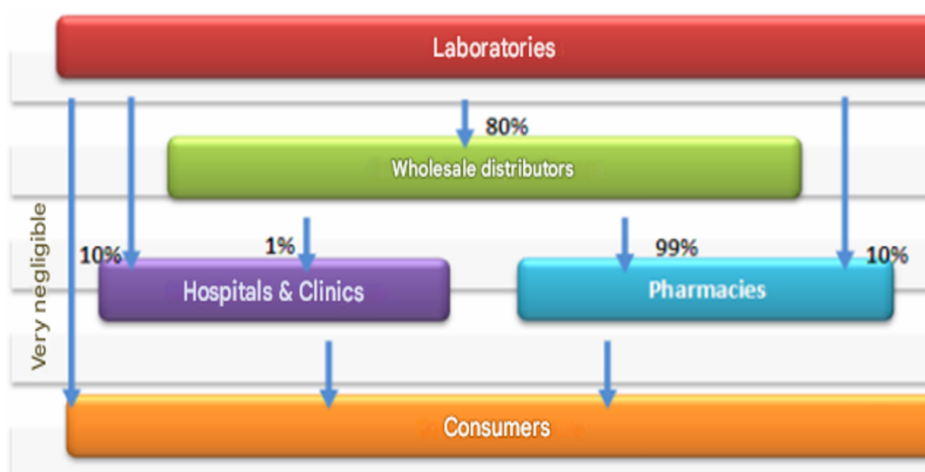
## 1. Introduction

The pharmaceutical industry is a pillar sector for the Moroccan economy, as it occupies the second position in chemical activities with a turnover of 14.5 billion dirhams (1.4 billion dollars). With nearly 40 laboratories, 33 production sites, 50 distributors, and more than 12,000 pharmacies, the Moroccan pharmaceutical industry constitutes the second chemical activity in Morocco and holds the second place on the scale of the African continent [1].

The pharmaceutical industry sector is characterized by numerous pharmaceutical players worldwide, as well as by national companies. This assertion is justified by the omnipresence of 49 production sites in 2018, which made it possible to offer a comprehensive range of medical products. Medicines in Morocco are distributed through two main channels: a direct channel and an indirect channel.

The direct circuit directly establishes two types of structures or institutions. The first type includes laboratories, and the second type comprises pharmacies, the Ministry of Health, military health organizations, or clinics.

The indirect circuit aims to pass, via wholesale distributors, to supply pharmacies. This latter circuit dominates the market and represents nearly 80%, as shown in Figure 1.



**Figure 1.**  
Drug distribution circuit.  
Source: AMIP from IMS Health.

Today, the health market is undergoing constant change due to several socio-economic factors such as medical progress, public health crises, new expectations of patients, and deficiencies in health insurance. In this sense, some health professions have been subjected to regular injunctions from public authorities to reduce and optimize expenses. This change does not exempt the drug distribution channel. In this context, the pace of reform of the drug channel is accelerated in perfect harmony with the will of the government, particularly with the issuance of Decree 2-13-852 relating to the conditions and methods of setting the public sale price of locally manufactured or imported drugs. This decree, which came into force in 2014, is reflected in the insufficiency of compensatory measures on effective margins, such as the application of smoothed degressive margins.

But the major impact on the Moroccan pharmacy is the deterioration of its profitability. According to CNOP,<sup>1</sup> the average turnover per pharmacy is 750,000 dirhams per year, with profitability that does not exceed 5,000 dirhams per month. Therefore, the public authorities influence pharmaceutical policy and are even order-givers to pharmacists. Any decision to reduce prices is immediately reflected in a drop in margins, which impacts the profitability of the pharmacy.

In addition, pharmacies are subject to another form of competition during the pharmaceutical distribution monopoly: sterile products and medical devices that must pass through the pharmacy but are unfortunately found almost everywhere other than the pharmacy; pharmaceutical products that are sold directly without going through the pharmacy; associations that take advantage of certain situations to sell medicines; the CNOPS pharmacy<sup>2</sup>—which has no place to exist (according to the order of pharmacists). Therefore, the impact of this form of competition should not be overlooked [2].

In another register, the health sector is also impacted by developments in Moroccan pharmacies, which now number more than 12,000 units. This high number of pharmacies is twice the standard recommended by the WHO<sup>3</sup>.

All these constraints, which represent only the tip of the iceberg, constitute a real obstacle for pharmacists to maintain the profitability of their activities. These constraints are just a few examples illustrating the difficulties currently encountered by community pharmacists in sustaining their profitability. Therefore, the holder is obliged to be a better manager to remain competitive. This role is important, even though they are often poorly qualified, as they are not well trained in pharmacy management.

The chief concern of our article is to understand the phenomenon of the failure of Moroccan pharmacies. It is in this context that constitutes the kernel of this article, which the authors of this study will try to answer the following research questions.

- *What are the determinants of the failure of Moroccan pharmacies? At this level, our approach will focus on a dimensional analysis of various determinants relating to the characteristics of the pharmacist, the characteristics of the pharmacy, and the environment of the pharmacy.*

<sup>1</sup>National Council of the Order of Pharmacists.

<sup>2</sup>National Fund for Social Security Organizations.

<sup>3</sup>World Health Organization.

- *What impact do entrepreneurship support and assistance programs have on the failure of this category of business? In other words, do entrepreneurship support and assistance programs effectively meet the specific needs of Moroccan community pharmacies?*

To answer these research questions, this article will be structured around three parts.

- The first part will be dedicated to the theoretical foundations of failure. First, a clear distinction between sustainability and failure will be made, and then the determinants of the phenomenon of failure will be identified.
- In the second part, the empirical methodology adopted will be implemented, and the research results will be discussed. First, the data collection method and the construction of the questionnaire addressed to community pharmacists will be developed. In the second stage, the study will address the characteristics of the pharmacies surveyed that are still operational as of the date of the questionnaire.
- The third part attempts to analyze the determinants of the failure of pharmacies based on the interpretation of the results obtained from an econometric model. A logistic regression will be used to invalidate or confirm the hypotheses. The following section displays the theoretical framework.

The following sections comprise the theoretical framework of the study, methodology, and the findings.

## 2. The Theoretical Framework

### 2.1. Definition of the Pharmacy

The pharmacy is an establishment whose purpose is the retail dispensing of medicines, products, and objects whose preparation and sale are reserved for pharmacists, while respecting the instructions of the order of pharmacists and the provisions in force.

In addition to medicines and products for which dispensation is the exclusive responsibility of the pharmacy, the latter may also advise on or sell various categories of goods, the list of which is established by ministerial decrees [3].

There are many tasks for a community pharmacist, including:

- Ensure the dispensation and proper use of medicines for human and veterinary purposes.
- Ensure that the patient understands and complies with their treatment.
- Adhere to patient support and therapeutic education.
- Carry out master and official preparations.
- Meeting customer expectations through the continued availability of specialties.
- Participate in public health actions (prevention, screening).
- Join health security measures (pharmacovigilance, health alerts, etc.).<sup>4</sup>
- Provide ongoing training for its employees and supervise student interns in pharmacy.

### 2.2. Survival or Failure?

The field and the literature advocate the term "survival" as synonymous with success or performance, especially during the start-up phase [4]. Certainly, this phase, described by Gibb [5] as "the valley of death," is one of the most critical in the life of a company. This has led many authors to note that during the first years of its existence, the success of a company is expressed essentially in terms of survival [6, 7]. According to a large number of young companies, the concern to stay alive prevails over all others; thus, surviving becomes a success in itself [7]. To aspire to growth or success, it is imperative to ensure survival [8].

It is important to note the difference between "survival" and "failure." Although these two terms are used interchangeably, it is worth making a distinction between the two concepts [9]. The definition of failure remains ambiguous from a semantic point of view and differs according to the perceptions of business leaders [10]. In addition, for some authors, it is about maintaining management control, while for others, the priority is rather on ensuring the organization's continued existence [10].

The way to approach the survival of a company also depends on the temporal dimension. Surviving in the short to medium term does not have the same causes or implications as surviving in the long term. The first case concerns survival, but in the long term, it is related to the domain of sustainability [11].

Amghar, et al. [12] examined the different dimensions of entrepreneurial failure within Very Small and Medium Enterprises (VSMEs), adopting a qualitative approach to understand the internal and external factors contributing to this failure.

As demonstrated above, it can be concluded that when one is interested in SMEs, particularly in start-ups, the concept of "survival" is almost essential. For the reasons mentioned above, as well as for practical considerations, the choice of a single concept promotes conceptual clarity [8]. For the same reasons, the authors of this study go beyond the debate on the definition of failure by substituting a term that seems more neutral: "cessation of activity."

Indeed, the closure can be voluntary or involuntary; it is said to be voluntary when it depends on the will of the stakeholders, in particular, in the case of VSEs, it is the manager. This refers to the subjective criteria mentioned in the section on success and defended by many authors [13-15]. And for good reason, can a VSE be considered sold with a capital gain as a failure? Will the owner-manager who closes his company to create another one or even to seize the opportunity of a highly rewarding job (financially, but not only) consider himself to be failing?

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<sup>4</sup> PSF-CI Operations Department, Pharmaceutical Unit, *PSF-CI Pharmaceutical Guide, Understanding and Promoting Good Pharmaceutical Practices*, Reference: DISP /PO/ SIE /001/G/ REV00, Dec 2003, p 11.

The entrepreneur/company homogeneity is significant [16]. In order to raise any conceptual nuance, Khelil, et al. [17] suggest a composite definition.

A phenomenon that manifests itself through the entry of a new company into a spiral of economic failure (destruction of resources) and/or the entry of the entrepreneur into a psychological state of disappointment. In the absence of financial and/or moral support, this entrepreneur may witness the disappearance of their company.

This so-called definition combines the most widespread dimensions in addressing failure, such as the disappearance of the company, economic failure, and the disappointment of the entrepreneur.

Throughout this work, the choice of this type of failure is motivated as follows: a weakness or scarcity of information on the failure. Therefore, the literature on failure still remains valid in our work, while remaining aware that these are two distinct concepts. If the terms associated with failure and survival are clarified, what about the factors that generate them?

### 2.3. Determinants of Failure

#### 2.3.1. The Influence of Entrepreneur-Related Factors on Failure

There are several factors that explain the impact of the characteristics and profile of the entrepreneur on the failure of their business. These determinants can be classified into three groups: the entrepreneur's motivation for creation, their general human capital, and their social capital.

Failure depends on people's willingness to become entrepreneurs [18]. This willingness refers to entrepreneurial motivation, which represents one of the determinants influencing business failure.

In addition, Wiklund and Shepherd [19] note that today's motivations and behaviors will impact the future of the company, as those who experience failure in their business are those who do not believe in it [20]. In this regard, Gasse [21] attests that several studies on entrepreneurs of micro-businesses have confirmed the predominance of the psychosociological aspect during the creation of new businesses. Because they seek autonomy and independence, they want to become their own boss and take initiatives in this direction [22].

Abriane and Aazzab [23] examined a study in which they utilized the case method to analyze the causes of entrepreneurial failure, emphasizing the impact of leaders' managerial skills.

Research on the characteristics of the business created by the so-called necessity entrepreneur, "who creates a business in order to get a job," implicitly assumes that he or she is in an unfavorable economic situation. Block and Wagner [24] estimate that necessity entrepreneurs tend to favor niches characterized by barriers to entry, low investments, and low remuneration/profitability. Indeed, the necessity entrepreneur does not always possess the essential skills required for the exercise of the entrepreneurial profession, and the absence of these skills can be a direct cause of failure [25]. This is all the more true since, due to the limited resources they generally have, so-called necessity entrepreneurs prepare less for the creation phase [24]. This lack of managerial skills is exacerbated by the absence, or near absence, of experience.

The theoretical foundations of human capital are rooted in the economic thinking led by Adam Smith, John Stuart Mill, Alfred Marshall, and Irving Fisher. The latter stressed that investment in humans generates economic benefits for both individuals and societies. This concept was then developed by Gary Stanley Becker and Theodore W. Schultz. In his book *Human Capital*, the American economist Gary Becker defines human capital as "the set of productive capacities that an individual acquires through the accumulation of general or specific knowledge, know-how, etc." In this book, Becker stresses that each worker has their own capital that comes from their personal, innate experiences, as well as their training. Indeed, human capital increases when it is invested.

Borrowed from the entrepreneurial world, the theory relating to human capital provokes a sharp debate among researchers, and several empirical analyses prove the close and positive relationship between the human capital of the entrepreneur and the performance of their company, as indicated in works [26-33].

In summary, the work of Unger, et al. [34] justifies the close and positive link between human capital and business success by providing certain arguments.

- Human capital enhances the entrepreneur's vigilance and develops their capacity to detect and exploit opportunities.
- Human capital enhances the entrepreneur's ability to analyze their project.
- Social capital refers to the ability of individuals to leverage their social structures and networks to support their entrepreneurial activities [33].

The social network impacts business failure in several ways [30]: access to useful, reliable, exclusive, and low-redundancy information; access to potential customers and suppliers; access to inexpensive (sometimes free) and loyal labor; and access to financing. Of all these contributions, access to financing is the most significant.

*Hypothesis H<sub>1</sub>: Pharmacy failure is positively correlated with the characteristics of the pharmacy pharmacist's profile.*

#### 2.3.2. The Influence of Organizational Factors on Failure

The paradigm of resources and skills is the successor to Penrose's work (1959, 2009) on the origin of firm growth. Supporters of this theoretical vision argue that the growth of a company results from both tangible and intangible productive resources. However, if a firm fails to generate a rent, this affects its survival; it is for this ultimate reason that the company finds itself in need of creating resources, or else its initial stock of assets would be compromised [35].

In this regard, a study titled "Small and Medium Enterprises Survival During the Global Crises" (2024) explored the theoretical perspectives supporting the survival of small and medium enterprises (SMEs) during times of crisis. It identifies the strategies and practices that have enabled SMEs to overcome the challenges posed by global crises [36].

Indeed, for a newly created company and during its start-up phase, its initial assets allow it to be protected, as Fichman and Levinthal [37]; Hannan and Freeman [38]; Johannisson [39]; Lasch, et al. [40]; Lawrence and Lorsch [41] and Levinthal

[35] assert. This sensitive phase of the company's life, referred to by the authors as "Honeymoon 12," is characterized by its length. According to Headd [42], the probability of failure of the firm is notably linked to its initial assets (endowment =). In addition, Aldrich and Ruef [43] analyzed failure in terms of the mortality of new businesses, emphasizing organizational factors influencing their failure.

Therefore, the more assets the company has, the more time it will have to generate new resources. Consequently, the vulnerability of firms is identified when an insufficient result depletes their initial assets [35].

In the same vein as these works, several analyses have aligned themselves with the fact that start-up capital represents a preponderant element in the growth and failure of small firms [27-29, 31, 40, 44-47]. As for Fichman and Levinthal [37]; Lasch, et al. [40]; Lawrence and Lorsch [41]; Levinthal [35]; Nelson and Winter [48]; Pennings, et al. [31]; Saridakis, et al. [47] and Stearns, et al. [49], financial capital is of great importance, especially at the start-up level of the company before it can generate liquidity and recruit the resources it will need.

It is evident that the more human resources a company has at its start-up and creation, the more sustainable it will be [27, 45, 50-52]. On the other hand, even if companies are exposed to the same resources, they will not have the same probability of failure.

In this context, a paradigm established by Baker and Nelson [53] emerged, highlighting the potential for some companies to overcome the observation of resource shortages that could lead to their failure and even enable growth. Baker and Nelson [53] described the capacity available to certain small companies. A substantial body of literature on the role of resources in organizational failure remains insufficient to address a dilemma: how two companies with the same resources do not have the same probability of failure.

*Hypothesis H<sub>2</sub>: Pharmacy failure is positively correlated with the initial characteristics of the pharmacy.*

### 2.3.3. The Influence of Contextual Factors on Failure

The entrepreneurial environment has not attracted the attention of researchers Berryman [52] and Stearns, et al. [49], something that seems illogical in the entrepreneurial field since the analysis of the company cannot be dissociated from its environmental context [39]. Environmental analysis is largely inspired by contingency theory, evolutionary theory [48, 54], and the ecology of populations of organizations, as Hannan and Freeman [38] contend.

Indeed, a report on "Small Businesses in Fragility: From Survival to International Trade Centre [55] assesses the impact of conflict and fragile situations on business performance. It introduces a fragility exposure index and demonstrates that businesses can reduce their vulnerability by strengthening their competitiveness, including collaborating with business support organizations, improving financial management, and retaining skilled staff.

As for contingency theory, the distinction between organizations is established by analyzing the characteristics of their environment. The performance of an organization is a function of its ability to adapt to the characteristics of its context Lawrence and Lorsch [41].

In the same vein, the company cannot be dissociated from environmental determinants. As a result, the problem of failure requires an understanding of environmental factors [49].

Furthermore, evolutionary theory explains that firms that are well mobilized have a chance to survive, while less viable firms fail. In other words, selection is carried out by market mechanisms [56]. The population ecology school considers that when the population of firms increases, resources become depleted, which leads to the mortality of the least efficient firms.

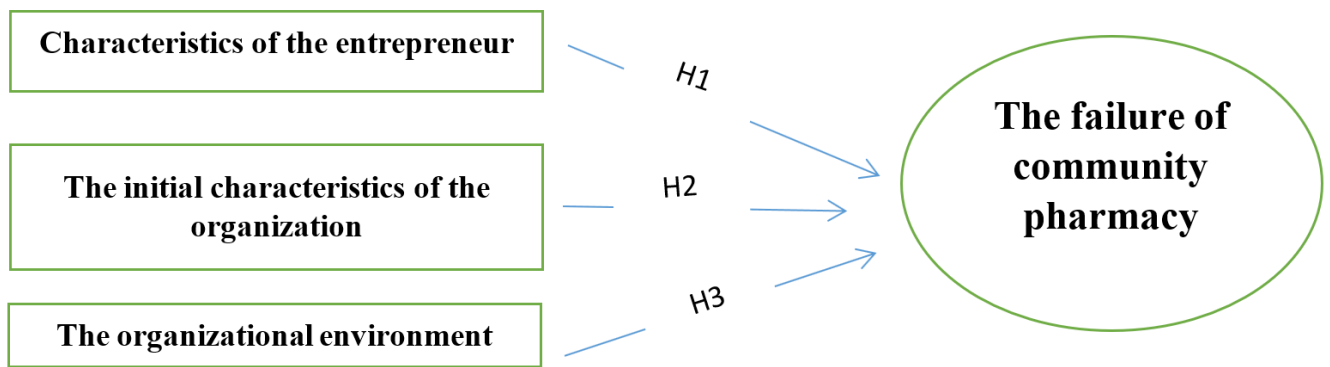
In this sense, EL MANDILI [57] analyzed entrepreneurial failure based on two theoretical approaches: the deterministic perspective, which emphasizes the constraints of the external environment, and the voluntarist perspective, which considers that the manager, through his decisions, influences the destiny of his company.

That said, the weakest organizations are ousted by the environment, and the failure rate is a function of the company's adaptation to its environment and its developments [58].

From our literature review, it seems clear that most of the work mentioned in this context aims to root itself in one of the theories mentioned above. The literature review of the present study demonstrates that the majority of empirical studies focusing on the influence of the environment on business failure are sometimes explicitly and often implicitly part of one or more of these theories. The studies that are part of this perspective tend to focus on the sector, given that the unit of analysis for these theories is not the company but the population [56].

*Hypothesis H<sub>3</sub>: Pharmacy failure is positively correlated with the pharmacy environment.*

Thus, similar to the main conclusions from the research on failure, the authors of this study proceed to develop the conceptual model below to formulate the research hypotheses. Factors referring to the pharmacist's profile, the characteristics of their pharmacy, and their context are taken into consideration.



**Figure 2.**  
The conceptual model.

In order to answer these different questions and to understand the failure of pharmacies, an approach is set for this research.

### 3. Methodological Approach

Obviously, the main purpose of this article is to identify the factors influencing the failure of the Moroccan pharmacy. To achieve this goal, a chi-square test will be used to invalidate or confirm the hypotheses already stated by choosing 5% as the degree of significance. The data collection approach adopted involves several stages: The choice of the database, the selection of pharmacies and indicators of the factors explaining the failure of the Moroccan pharmacy.

#### 3.1. Presentation of the Database

Obviously, the main purpose of this article is to identify the factors influencing the failure of the Moroccan pharmacy. To achieve this goal, a chi-square test will be used to invalidate or confirm the hypotheses already stated by choosing 5% as the degree of significance. The data collection approach adopted involves several stages: the choice of the database, the selection of pharmacies, and the indicators of the factors explaining the failure of the Moroccan pharmacy.

The database consists of general information for each company regarding the main information in the database as follows:

- Legal form and situation.
- Creation date.
- Phone number/email address of the person responding to the survey.
- Year of creation of the pharmacy.
- Year of start of activity.
- Number of employees (Total workforce) as of 12/31/2020.

#### 3.2. Methodological Approach to Accessing the Field

The survey was conducted on a sample of 120 pharmacies from all regions of the Kingdom. These pharmacies were selected according to the database entrusted to the researchers. In this sense, this study covers the entire population.

Through the available data and theoretical knowledge regarding the explanatory factors of failure, and in light of many similar surveys conducted in Morocco, while considering the specificities of the Moroccan pharmacy, there are particularly three surveys carried out by the High Commission for Planning. A questionnaire consisting of 11 items was developed to translate the factors contributing to the failure of pharmacies in Morocco.

Regarding the analysis of data obtained during telephone interviews and electronic mailings, the collected data were coded and processed using the SPSS software program. Out of the 120 pharmacies surveyed, only 34 responses were obtained, representing a response rate of 29%.

#### 3.3. Measurement of Variables

The present study distinguishes between two types of variables:

- Variable to be Explained

The failure rate refers to the share of pharmacies that still fail (in our case, we retained the year of creation as 2016). Of the 36 pharmacies surveyed, we found that only 26 pharmacies closed; i.e., a failure rate of 76.47%.

- Explanatory Variables

The explanatory variables are summarized in the following table.

**Table 1.**

Explanatory variables.

Explanatory variables		items
Entrepreneur-related variables		
Motivation		-Have a job
		-The taste for enterprise and independence
		-No income
Human capital	Gender	-Man
		-Women
	Age	-Under 30 years old
		-Between 30 and 40 years old
		-Over 40 years old
	Entrepreneurial training	-Yes
		-No
Share capital	Entrepreneurial relationship	- Yes
		-No
Organization-related variables		
Legal status	The legal form	-Natural person
		-SARL
		-ITS
		-Others
The initial capital	The amount of start-up capital	-Less than 1,000,000 DH
		-Between 1000000 DH and 2000000 DH
		-More than 2000000DH
Preparation for creation	Business plan	-Yes
		-No
Context-related variables		
Geographic Areas	Implementation area	-Urban area
		-Rural area
Post-creation assistance	Public support	- Investment grants
		-Social and tax exemptions
		-Public monitoring and support
Follow up of their bank	Banking support	- Yes
		-No

The authors of this study have devised a questionnaire that encompasses the dimensions of failure, namely: factors relating to the entrepreneur, the organization, and the environment. Each dimension is associated with specific variables. These will be translated in turn through the items of the questions presented.

### 3.4. Choice of Statistical Methods

In this study, the implementation of the model aims to confirm or refute a hypothesis concerning an association between an exposure factor X and an event Y. We will thus attempt, through the selection of variables, to provide a coherent and rational interpretation of the survival risk. We will therefore agree to support a lower score than the results obtained with the majority of variables in order to remain in a context of interpretation rather than description. Based on the above, this study utilized logistic regression through the SPSS software program.

Despite these advantages, logistic regression also has a couple of shortcomings, similar to the methods that preceded it. In particular, the explanatory variables and coefficients estimated by the maximum likelihood (ML) method are dependent on the economic and financial context and the data used as a basis for calculating the score function [59, 60]. Logistic regression also requires a large sample size to ensure a good level of stability in the results.

Referring back to the above-mentioned literature review, the analysis of this study aligns with research conducted by Altman [61]; Emanuel and Lawson [62] and Ohlson [63], who opted to use empirical logistic regression based on a multivariate analysis of risk. Its purpose is to develop a statistical model capable of "rating" companies based on their difficulty, using less restrictive statistical hypotheses. More importantly, it is interesting to mention the advantages of the logit model. Logistic modeling, or dichotomous regression, remains the most favored econometric expression for studying and analyzing the dependency relationship between a dichotomous qualitative variable and a certain number of quantitative and qualitative factors of socio-economic phenomena of a qualitative nature [64].

## 4. Results and Discussion

Statistical tests, also called significance tests, are of interest to most scientific fields. A "significant result" at one of the unmissable thresholds of 0.05 or 0.01 is, according to Elafi, et al. [65], nowadays one of the rules within the scientific

community; indeed, it has become almost obligatory as soon as it is a scientific work. The significance test has recently emerged as a label of "scientificity."

Given the quality of our variables, we use the chi-square test and the ANOVA test.

**Table 2.**

Logistic regression model.

Variable's explanatory	Coefficient $\beta$	Significance
Gender:		
- <i>Man</i>	-0.57	0.02
- <i>Female</i>	(Ref)	(Ref)
Legal status:		
- <i>Natural person</i>	(Ref)	(Ref)
- <i>SARL</i>	-0.425	0.359
- <i>ITS</i>	-0.354	0.859
- <i>Others</i>	0.235	0.903
The pharmacist's age:		
- <i>Under 30 years old</i>	-3.144	0.057
- <i>Between 30 and 40 years old</i>	(Ref)	(Ref)
- <i>Over 40 years old</i>	-1.555	0.077
Entrepreneurial relationship:		
- <i>Yes</i>	-0.854	0.004
- <i>No</i>	(Ref)	(Ref)
Motivation:		
- <i>Taste for enterprise and independence</i>	-2.992	0
- <i>No income</i>	-1.386	0.035
- <i>Unemployed</i>	-0.985	0
Capital of startup:		
- <i>&lt; 1000000 DH</i>	(Ref)	(Ref)
- <i>≥ 1000000 DH and &lt; 2000000 DH</i>	-1.425	0.005
- <i>≥ 2000000 DH</i>	-0.614	0
The implantation geographical:		
- <i>Urban Area</i>	1.004	0.035
- <i>Rural area</i>	(Ref)	(Ref)
Public support:		
- <i>Investment grant</i>	0.612	0.815
- <i>Exemptions from social and employer charges</i>	1,621	0.042
- <i>State coverage of part of the salaries</i>	-1.338	0.087
Training entrepreneurial:		
. <i>No</i>	2.254	0
. <i>Yes</i>	(Ref)	(Ref)
Elaboration of a Plan Business:		
. <i>Yes</i>	-0.252	0.824
. <i>No</i>	(Ref)	(Ref)
Accompaniment post-creation:		
. <i>Yes</i>	-1.032	0.008
. <i>No</i>	(Ref)	(Ref)
Follow up of their bank:		
. <i>Yes</i>	(Ref)	(Ref)
. <i>No</i>	2,484	0.352

Source: NB: (Ref): modality of reference.

Furthermore, when addressing the "motivation" variable, it is clearly evident that having a taste for enterprise and independence, or possessing a new idea or opportunity, constitutes an asset that contributes to reducing the risk of business cessation compared to a business leader whose idea for creation stems from simply being unemployed. This result conforms to the works of [Cressy \[66\]](#). The pursuit of an opportunity favors failure, in contrast to situations where the creation of a business was a necessity to escape unemployment.

Following the results obtained, the variable "genre" is significant. This means that the pharmacies created by men are more perennial compared to those created by women. This postulate is consistent with that of Kaplan-Meier, where the failure curve relative to men is above that relative to women. In the same vein, [Robb and Watson \[67\]](#) dispelled in their study the myth that companies owned by women are less efficient and less sustainable than those owned by men.

Focusing on the effect of the "Age" variable, it is noticeable that it is not significant in its different modalities. In other words, the age category of the community pharmacist influences neither failure nor the pharmacy. Regardless of age, it does not affect the failure of the pharmacy business.

As for "the training of the entrepreneurial spirit of the community pharmacist," it has a significant influence on the success or failure of the pharmacy. Pharmacies are more likely to survive when their pharmacists undergo entrepreneurial training before the establishment of the pharmacy. Indeed, this training allows pharmacists to explore the financial and commercial techniques of the business world. One way to explain this effect is that some pharmacists acquire managerial and financial skills, enabling them to manage their pharmacies effectively.

Concerning "the entrepreneurial relationship," the results disclose that having an entrepreneurial relationship influences the failure of the pharmacy. Referring to the literature review, particularly the theory of social capital and network theory Hayter [68] which refers to the ability of the individual to benefit from the entrepreneurial environment in which he lives. Besides, this result is consistent with those of Cooper, et al. [28], who showed that having parents who are owners of a company contributed to failure.

Furthermore, referring to the legal status of the pharmacy, it is evident that this variable is significant. By choosing as a reference category those that were created in the form of "Natural person," it is noticeable that launching a pharmacy under the legal form "SA, SARL" significantly impacts the sustainability of the pharmacy by reducing the failure rate of this category.

*Hypothesis H<sub>1</sub> is confirmed: Pharmacy failure is positively correlated with the characteristics of the pharmacy pharmacist's profile.*

As for the "geographical location" of the project, pharmacies located in rural areas have a higher risk of experiencing entrepreneurial failure compared to pharmacies situated in urban areas. This can be explained by the fact that pharmacies established in rural areas suffer from unfavorable conditions (poor infrastructure, or even failure in some cases), which represents an obstacle for them and has sometimes led to their closure. This result conforms to the works of Randelli and Ricchiuti [69]; Neffke, et al. [70] and Falck [71], who established a positive relationship between the number of new businesses in different geographical locations.

For the "start-up capital" variable, it is noted that companies that have started their activity with an initial capital between 1,000,000 DH and 2,000,000 DH are more sustainable than those whose start-up capital is less than 1,000,000 DH. The more significant the investment, the greater the risk of failure. This result aligns with many previous works carried out, such as those of Crépon and Duguet [72] and Cooper, et al. [28].

The "development of a Business Plan" variable appears to be insignificant. This may be explained by the fact that, in general, this document remains an obligation for the creators of micro and small businesses to satisfy an administrative procedure at the bank level. This result contradicts the findings of Brüderl, et al. [30] and Hansen [73], who advocate for the role and importance of preparing projects for business creation.

*Hypothesis H<sub>2</sub> is confirmed: Pharmacy failure is positively correlated with the initial characteristics of the pharmacy.*

According to the results of the "Public support" variable, it was possible to identify that the investment subsidies prove to be insignificant and that the pharmacies which have not benefited from public aid, such as tax and social exemptions, are surviving. This result is in line with the work of Battiston, et al. [74] in their study of young Italian companies. However, in their study, Pfeiffer and Stocking [75] examined the influence of subsidies on unemployed creators of businesses and found that public aid has a negative impact on business failure. Companies established in Germany are at a disadvantage.

Eventually, "bank monitoring" of the share of the organization's credit is very significant and contributes to extending the failure time of VSEs. Support for organizations allows the pharmacist to carry out their projects and develop their social networks. This aligns with the conclusions of Sammut [76], who notes that support must be presented as a practice of pre-creation assistance (through entrepreneurial training) and followed by post-creation monitoring. However, our estimates show that post-creation monitoring by bank investment (BTS) is not significant because it is limited to a simple reminder for the repayment of the credit.

*Hypothesis H<sub>3</sub> is confirmed: The failure of pharmacies is positively correlated with the pharmacy environment.*

## 5. Conclusion

This paper allowed us to identify the main characteristics of pharmacists in Morocco and the factors that may be associated with the probability of failure of the pharmacies established by these pharmacists. In addition, the authors of this study noted the particularity of public support granted by the State to this category of professions. This article utilized a survey of a cohort of 120 companies from all regions combined, covering the period from 2016 to 2021. To achieve this, the study adopted the questionnaire method.

According to the results obtained, one concludes that most of the hypotheses advanced are empirically verified. The human and social capital available to a community pharmacist helps to improve the probability of success of their business (the genre, the entrepreneurial entourage, motivation). The environment in which the pharmacy is established also contributes to the challenges faced by Moroccan pharmacies, through entrepreneurial training as well as the support of the pharmacist.

As for the organizational characteristics, it should be noted that there is a positive correlation between the size of start-up capital and failure. Unfortunately, state support in this area is proving ineffective, particularly in terms of subsidy investments and the state's assumption of part of the salaries, with the exception of exemptions from social charges.

## 6. Limitations and Perspectives

Indeed, within the framework of the selected variables, the authors of this study encountered some difficulties regarding certain information about the financial situation and balance sheets. Unfortunately, the data used in this study do not provide any information on these issues. Another limitation arises from the nature of the data, which is restricted to a sample. This raises the question of whether these results can be generalized to the entire country.

This work opens up several research perspectives. It has highlighted the emerging aspect of failing small businesses. This field of study and investigation could be expanded in various ways, such as implementing methods for identifying the Cox or Cox PLS duration. This would help determine the timeline of business failures among VSEs and propose appropriate programs and solutions promptly to mitigate negative impacts.

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