

Validation of the Entrepreneurs' Financing Decision model: the case of Venture Capital

Validation du modèle de décision de financement des entrepreneurs : le cas du Capital-Risque

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Abstract

The aim of this study is to conceptualize entrepreneurs' financing decisions model. This model is developed based on the theory of planned behavior and self-determination. We then tested it on a sample of 182 entrepreneurs and were able to confirm the unidimensionality of our concepts, as well as the reliability (Cronbach's Alpha coefficient like the Composite Reliability) and the convergent and discriminant validity of their measurement scales. In addition, this model was found to be remarkably well-fitted to the data, indicating its suitability for more in-depth analysis.

Keywords: Entrepreneurial finance; Self-determination; Attitude; Intention; financial Awareness.

Résumé

L'objectif de cette étude est de conceptualiser le modèle des décisions de financement des entrepreneurs. Ce modèle est développé sur la base de la théorie du comportement planifié et de l'autodétermination. Nous l'avons ensuite testé sur un échantillon de 182 entrepreneurs et nous avons pu confirmer l'unidimensionnalité de nos concepts, ainsi que la fiabilité (coefficient Alpha de Cronbach comme la fiabilité composite) et la validité convergente et discriminante de leurs échelles de mesure. En outre, il a aussi été observé que ce modèle présente une bonne qualité d'ajustement aux données, ce qui indique qu'il se prête bien à une analyse plus approfondie.

Mots clés : Finance entrepreneuriale ; Autodétermination ; Attitude ; Intention ; Conscience de financement.

Introduction

Entrepreneurs are undeniably the future of all economies as they contribute to the improvement of living conditions and enable developing countries to achieve emergence. However, despite these hopes, ambitions and efforts, their businesses are all facing major operational and financial problems. In fact, their survival and expansion are conditioned by access to finance, which is considered to be their most binding obstacle (Bakhtiari & al., 2020; Asad, Shaheen & Aftab, 2021). Of course, in principle, this is traditional financing (bank and market financing), because these enterprises in the process of creation lack audited financial statements, reputation, sufficient internal cash flows and quality guarantees (Berger & Udell, 1998; Block & al., 2018), and their problems of information asymmetry and agency are more intense (Denis, 2004; Bellavitis & al., 2017; Bakhtiari & al., 2020).

In addition, these entrepreneurs also find it difficult to obtain financing through alternative financing methods. According to Omenguelé and Mbouolang (2023), only 1% of the global market share of alternative financing is used in Africa. According to Berger and Udell (1998); St-Pierre and Fadil (2011); Pare and Demerens (2011), Venture Capital (VC) is granted to very few entrepreneurial firms, i.e. less than 1% of the market share according to Denis (2004). Moreover, in Cameroon, since the creation of the National Investment Company (SNI) in 1964, only 10 “public” companies have been financed. According to Fraser et al. (2015), it is still not easy to say precisely whether this problem stems from demand or supply. On the other hand, numerous studies have focused on the roles and characteristics of VC financing; the Criteria and investment processes of VC companies; etc... (St-Pierre & Fadil, 2011; Paré & Redis; 2011). Among other things, these studies have contributed to the understanding of the supply-side problem, while the factors influencing entrepreneurs' financing decision remain underdeveloped or misunderstood (Moghaddam & al., 2017). In light of this void, we believe it is both beneficial and necessary to scrutinize the factors that can explain entrepreneurs' financing decisions. Hence the question: **What psychological factors explain entrepreneurs' apprehension or predisposition to adopt VC?**

The remainder of this paper begins with an in-depth review of the literature, focusing on the current state of the inquiring into entrepreneurial financing decisions and the theoretical frameworks proposed to explain the decisions, which helps to develop a set of hypotheses. The next section outlines the methodological approach adopted. The empirical findings are then presented and discussed, with particular attention given to the validation of the measurement instruments constructed. This paper concludes with the main implications.

1. Review of the Extant literature

1.1. The problem of Entrepreneurs' choice of financing

The choice of financing and the impact of capital structure have been the subject of a long-standing controversy within the finance literature. This controversy focused on the balance between equity and financial debt that is able to optimize the cost of capital, and maximize the value of the firm (Shabar & al., 2018). In this debate, Modigliani and Miller (1958) supported the thesis of the neutrality of financial structure on firm value under perfect capital market conditions (Mounir, 2022). However, in the second thesis, Modigliani and Miller (1963) admit that it is “naïve” to believe that the market value of firms is just proportional to their expected returns net of tax. Indeed, the deduction of interest charges from taxable income reduces the share of profit that should accrue to the state (Mounir, 2022). Since the tax is incorporated, this reduced share represents a tax advantage, or “tax savings”, in favor of the debt. This thesis paved the way for the integration of taxation, asymmetric information, etc., which gave rise to theoretical bodies such as the *Trade-off Theory* and the *Pecking Order Theory*.

Numerous studies have often sought to show the superiority of one of these theories to better explain the financing decision without reaching a consensus (Serrasqueiro & Caetano, 2015). Lopez-Gracia and Sogorb-Mira (2008) conclude that both contribute equally to explaining capital structure. On the other hand, in the context of small companies, Bellettre (2010) has invalidated the trade-off because it is based on the target debt ratio, whereas these firms struggle to take on debt and suffer credit rationing when they do (Pettit & Singer, 1985). Thus, like Paré and Demerens (2011), they argue that *Pecking Order Theory* is the appropriate one for this type of enterprises. But, according to Holmes and Kent (1991), as discussed by Fraser & al. (2015), the pecking order can also be biased by giving priority to internal funding, whereas this is only due to the discouragement caused by difficulties of obtaining external funding. In addition, St-Pierre and Fadil (2011); Leach and Melicher (2012) argue that these theories are erected in the image of large and mature firms, most of which are listed on a stock exchange, and that, therefore, they are not relevant in the entrepreneurial context.

In the entrepreneurial context, the small size of companies, their young age, the absence of quality guarantees and stable cash flows (Pettit & Singer, 1985; Bellavitis & al., 2017; Belarouci & al., 2021), in addition to their informational opacity and moral hazard problems, are the reasons for their difficulties in mobilizing traditional financing (Berger & Udell, 1998; Block & al, 2018; Bakhtiari & al, 2020). According to Denis (2004); Colot et al. (2010), the failure to take these specificities into account in financial analysis is what justifies the

ineffectiveness of *corporate finance* theories in being able to explain their problematic. Also, these *corporate finance* theories only explain financing decisions in terms of the company's characteristics. Yet Al-Balushi et al. (2018) found that, in this context, the personal characteristics of entrepreneurs are what influence their intention to adopt financing, not those of the firm. Similarly, Chaganti et al. (1996) found that among the characteristics of the environment, the firm and the entrepreneur, it is those of the entrepreneur that play a key role in their financing decisions. According to Ouazzani and Rouggani (2018), it is therefore difficult to understand the financial problems of entrepreneurial firms independently of the characteristics of their managers, who are responsible for making this decision.

The incorporation of the entrepreneurs into financial analysis is the essence of the emerging field of entrepreneurial finance (St-Pierre & Fadil, 2011). It is defined by Pare and Demerens (2011) as the set of relations between the entrepreneur and finance, and its actors in the context of his project to create, manage and develop his business. Thus, “*how and from whom entrepreneurs seek capital to create their businesses*” represent fundamental questions of this field of finance (Au, Chiang & Kwan, 2014). However, studies has focused more on the question of “*from whom do they obtain financing?*”, or on the role of providers of certain types of financing in particular (Block & al., 2018), notably on the questions concerning the role, access and main sources of external financing (St-Pierre & Fadil, 2011) like IPO; venture capital, to the detriment of themes linked to the financial behavior of start-ups in particular (Paré & Redis, 2011; Cumming & Johan, 2017). According to Block et al. (2018); Fraser et al. (2015), research needs to go beyond the usual supply-side issues to better understand the role and influence of entrepreneurs' cognition in their financing decisions.

The question, which refers to “*to what extent do entrepreneurs choose financing?*”, remains underdeveloped and very poorly understood, as mentioned above (Bellavitis & al., 2017). According to St-Pierre and Fadil (2016), only 2% of studies have focused on their preferences and financial knowledge, which they claim to be notorious, in order to understand entrepreneurs financing choices. In principle, the complex relationship they have with their firms indicates that no financial decision can be studied there without taking their personal preferences into account (St-Pierre & Fadil, 2011; Gartner, Frid & Alexander, 2012). According to Petty and Bygrave (1993), their psychological state has an influence on the financial aspects of the firm. Moreover, Norton (1991) states that “models for explaining financing structures must take into account the role of the entrepreneur, his financial preferences, his desires, if we are to better

understand this phenomenon” (Gandégnon, 2020; p. 126). Since any decision is the selection of an intention to act, intentional models can help us understand their funding decisions.

1.2. Theoretical model and Hypotheses development

1.2.1. Decision of finance like a planned behavior

Several intentional models have been developed across various fields of the social sciences over the years. Cornner and Norman (2015) argue that these models operate at a similar level, making it almost futile to have to choose between them since they all have almost the same predictive power. In the same light, Ajzen and Fishbein (2005, p. 193) argue that these theories differ in detail and that there is increasing convergence on a small number of variables that explain much of the variance in behavioral intentions. These general variables that influence the intention to engage in any given behavior represent those that make up the theory of planned behavior or TPB model.

According to Girandola and Fointiat (2016), behavior is reasoned when it is voluntary, i.e. a person can decide whether or not to perform it. It is behavior under the voluntary control of an individual, which does not require skills, abilities or opportunities, and which depends only on motivation or intention (Liska, 1984). As soon as the individual no longer has control over the situation, or the behavior no longer depends on his or her will, he or she must need the necessary competence and ability to carry it out. This behavior is then said to be “planned”, and the competence he needs to act is the perceived behavioral control, which refers to the perceived difficulty or ease of adopting this behavior (Kolvereid, 1998). Given that the conditions and requirements for securing funding may be perceived by entrepreneurs as restrictive, they may be reluctant to adopt them, making the financing decision a behavior that entrepreneurs plan before executing. And since that intention is a disposition to behave, which captures the subjective probability that the individual in question will perform the behavior (Ajzen, 1991), it is recognized as the major predictor of behavior and its direct antecedent, reason why we focus on the Theory of Planned Behavior or TPB intentional model.

TPB assumes that attitude, perceived norm and perceived behavioral control influence an individual's intention to engage in a behavior. This specific attitude in question here refers to “the extent to which a person evaluates a behavior favorably or unfavorably” (Ajzen, 1991). Subjective norm, also known as social pressure (Norman & Cornner, 2015), is a person's belief as to whether people or groups of people important to them would approve or disapprove their performance of behavior under consideration, or that they themselves would or would not undertake the behavior in question (Ajzen & Fishbein, 2005; Fishbein & Ajzen, 2010).

Perceived behavioral control, on other hand, is the extent to which individuals believe they are capable of performing a given behavior (Fishbein & Ajzen, 2010). It refers, among other things, to their degree of belief about the personal and environmental factors that can help or hinder their attempts to perform the behavior.

Ajzen (1991); Schlaegel and Koenig (2014); Ali, Zani and Kasim (2014) based on meta-analysis, found that there are significant and positive relationships between these 3 determinants and intention to adopt a given behavior. This is also the case for studies such as those by Jaffar and Musa (2016); Shaikh et al. (2020); Ouazzani and Rouggani (2018); Asad et al. (2021) which were conducted in the context of either personal or Islamic finance. In our context and according to the general rule, the more favorably entrepreneurs evaluate the adoption of VC and believe that their referents would approve of it, and that they perceive more facilities than difficulties in resorting to this mode of financing if they so desire, the more willing they will be to resort to it. Hence, the following hypothesis:

H1: Entrepreneurs' Attitude, Subjective Norm and Perceived behavioral control interact with the determinants of their intention to adopt venture capital

1.2.2. Effect of Entrepreneur's Self-determination on their financing decision

According to Lachapelle et al. (2022; p. 27), self-determination consists in acting with conviction according to one's own mind or will, without exaggerated external constraints". It thus qualifies the desire to pursue activities of deep personal interest (Deci & Ryan, 2000). According to its authors, self-determination theory or SDT (Deci & Ryan, 1980) is based on three basic psychological needs: autonomy, competence and social belonging (Deci & Ryan, 2000). However, as outlined in the definitions, this theory considers motivation for autonomy as a fundamental and central need that underpins self-determination (Chung & al., 2018). Several authors have associated this theory with that of planned behavior (Williams & al., 2018; Luqman, Masood & Ali, 2018; Khan, Hameed & Akram; 2023).

TPB assumes that the relative weight of each of the three predictors of intentions is contingent on the behavior studied and the domain of study. Thus, in the field of finance, Sapienza et al. (2003; p.111) find that "the motivation for self-determination may lead entrepreneurs to make suboptimal financing decisions" because even when external financing is available, their fear of risking independence leads some of them to avoid it. Yet when a company is financed by venture capitalists, they often demand a seat on the company's board of directors, they also often demand voting rights far in excess of their cash flow rights and also the contractual right to replace the entrepreneur with a new manager if commitments are not met (Bellavitis & al.,

2017). This means that this financing is associated with a significant reduction in the entrepreneur's decision-making and control rights (Denis, 2004).

As a result, venture capitalists tend to play an active role in most of the company's major decisions. However, entrepreneurs create businesses by pursuing, in addition to financial objectives, a variety of non-financial objectives such as the preservation of independence, quality of life, autonomy (St-Pierre & Fadil, 2011); developing their own ideas (Rogers, 2009), etc. By the way, certain entrepreneurs say: *"i don't want to give my business to venture capitalists ... some venture capitalists have wanted ... to come invest in my business, but they want to take the control which i'm not ready for"* (Moghaddam & al., 2017, p.86). They choose financing according to whether it enables them to transfer risk, maintain control, control information asymmetry and is less costly (Gartner & al., 2012). But according to Petty and Bygrave (1993), their financing decisions depend more on their preference for risk-taking than on a strict assessment of the costs of different financing options. Also, Paré and Demerens (2011); Fraser et al. (2015) argue that these decisions depend on their *preferences, entrepreneurial goals, risk perceptions and control aversion*.

However, Sapienza et al. (2003) distinguish self-determination motivation in terms of entrepreneurs' perception of the threat posed by a funding source to their self-determination (or perceived risk of decision control), and the overall value they place on maintaining this self-determination, which is risk aversion (risk of decision control aversion). Indeed, entrepreneurs may be averse to the risk of venture capitalists controlling their decisions, but may not concretely perceive this risk if they adopt this method of financing. These two variables are therefore distinct because risk aversion is a personality trait while perceived risk is an attitude. In essence (Broadly speaking), their decisions to adopt financing are linked to both their risk tolerance and their need for independence (Gartner & al., 2012). In contrast, Chung et al. (2018) found that autonomous motivation for face mask use is linked to the intention to wear face masks through the mediation of both attitude, subjective norm and perceived control. According to this Self-Determination Theory (SDT), self-determination involves the joint satisfaction of autonomy with relatedness (subjective norm) and competence (Perceived Control). Thus, we formulate the following hypotheses.

H2: *Entrepreneurs' Risk of Decision Control Aversion interact with the determinants of their intention to adopt Venture Capital.*

H3: *Entrepreneurs' perceived risk of losing control of their decisions interact with the determinants of their intention to adopt Venture Capital.*

1.2.3. Importance of financing Awareness on Entrepreneur's financing decision

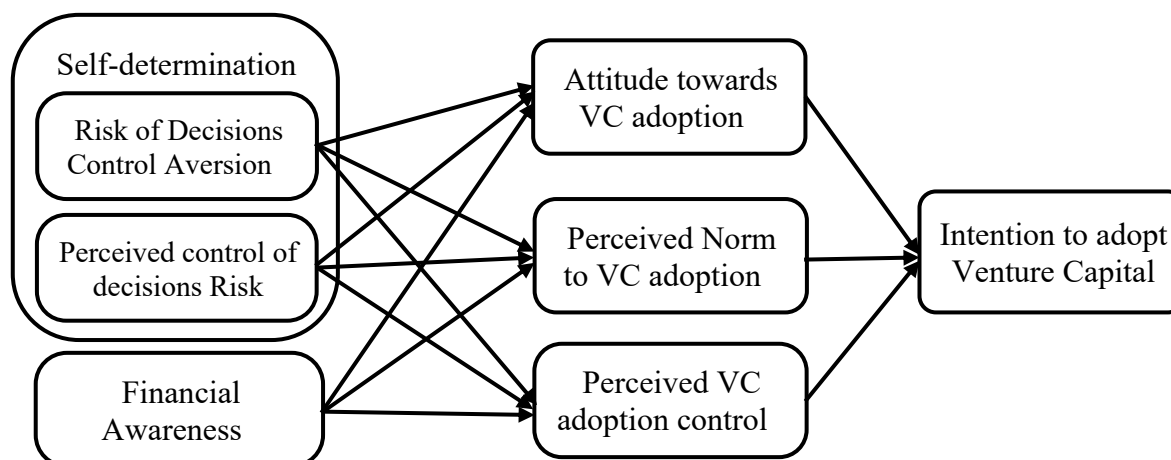
The entrepreneur gives birth to a business from his or her imagination, and must also have financial competence (Nguyen, 2020) because according to Romdhane and Khefacha (2020), access to finance is a necessary condition for business development. According to Hourquet and Roger (2002), competencies are often considered to be one of the keys to entrepreneurial success. The financial competence referred to here goes beyond financial literacy, which refers to general knowledge about personal finances (Yahaya et al., 2019). It is actually about their knowledge (the understanding and recognition of existing negotiable elements, the content of products/services as well as their functions) and financing awareness which is the ability to understand and manage various financial mix strategies, to know more, and to be aware of external service providers (Eniola & Entebang, 2017).

According to a consensus, entrepreneurs are limited in their analysis of possible information about financing methods, both about their risks, and about the real ambitions of investors (St-Pierre and Fadil, 2016). These limitations affect how they define and evaluate the financing options available to them. In general, it is recognized that financial knowledge even limited to the essentials is necessary for an entrepreneur to make financing choices in his or her best interest (Leach and Melicher, 2021). Yahaya et al (2019); found that financial knowledge significantly influences financial attitudes. For Singh et al (2016), it is the second most important determinant of attitude towards daily reliance.

In Islamic finance, studies such as those of Jaffar and Musa (2016); Shaikh, Ur Rahim and Taimoor (2020), have proven that a greater level of awareness of financial products is directly related to positive attitudes towards these products. Asad et al. (2021); Usman et al. (2022); Al-Balushi et al. (2018) suggested that when people are more aware of the available financing options and better understand the available products, they show greater intention to use them. In contrast, TPB has shown that it is attitude, perceived norm and perceived control that are directly dependent on cognitive factors. Consequently, Awareness only influences intention through its three determinants at the same time. In our context, Ngongang and Motsoguem (2017) found that only 3.3% of companies in Cameroon are aware of venture capital. The persistence of financing difficulties could stem from entrepreneurs' reluctance to use entrepreneurial financing methods like Venture capital, following their low awareness of these financing options. This is why we formulate the following hypothesis:

***H4:** Entrepreneurs' financial Awareness interact with the determinants of their intention to adopt Venture Capital.*

These hypotheses are represented in the conceptual model above:



Source: Auteurs

2. Research Methodology

This study is part of an explanatory logic of entrepreneurs' behavior towards VC. It aims to validate the constructs used to conceptualize their financing decisions, following a behavioral approach that allows us to study their decisions in the most realistic way. This study is so based on TPB and self-determination theory, and is thus founded on a hypothetical-deductive approach. By formulating these hypotheses, this study takes a positivist epistemological stance, which is consistent with the organization set up to collect the data that will make it possible to test this model, namely the quantitative method. To collect this data, the strategy employed is survey, and the instrument used is the questionnaire. To construct this instrument, the items were all taken from existing literature, and then harmonized on seven-point Likert scales.

For financial awareness, the items used are adapted from Jaffar and Musa (2014) and then harmonized on 7 points, ranging from *Very bad* to *Very good*. The items used to measure the Aversion to the risk of control decisions are those reflecting the desire for autonomy and come from Wehmeyer and Sands (1996). For the behavioral attitude scale, the items are from Amin et al. (2011). For the subjective norm, the items are adapted from Ajzen (2020); however, we replaced their item on the disappointment of relatives with that of Fichten et al. (2014). For the perceived control, we adapted the scale from Jaffar and Musa (2014). Regarding intention, we found the scale provided by Fichten et al. (2014) to be the most comprehensive. The method used to collect data is the reasoned choice method, employing the “snowball” technique. Indeed, nascent entrepreneurs are only identified in business creation formalization centers and incubators. The managers of these centers connected us with their networks of entrepreneurs.

This enabled us to collect some questionnaires online; however, most were collected face-to-face, resulting in a total of 182 usable responses.

In order to validate this conceptual model, we conduct exploratory and confirmatory factor analysis. We utilize SPSS 25 and Amos 21 software to assess the unidimensionality, reliability and validity of constructs. The measure used to assess convergent validity is the Average Variance Extracted (AVE), which is obtained from the squared saturations of the indicators associated with the construct. Its minimum acceptable value is 0.50, which indicates that the concept explains 50% of the variance of its component indicators (Civelek, 2018; Hair & al., 2021). The results are obtained after a purification process to retain only those items that meet the necessary conditions. This process starts with an initial Principal Component Analysis (PCA), using a “Varimax” rotation. This PCA identifies the seven dimensions representing the constructs of our model. We then use these items to perform confirmatory factor analysis in Amos, and based on their factorial contribution (or scores) obtained, we calculate their reliability and estimate their convergent validity (Rho vc). To check their discriminant validity, we can again perform a PCA with the “Oblimin” rotation, which allows us to estimate the correlations between the different constructs, however it is partial and that is why we prefer the results from Amos. Finally, in order to assess the fit of our model to the data, a final factor analysis is carried out using the maximum likelihood method and the “Oblimin” rotation. This enables us to obtain a second, so-called “implicit” Chi-square, which is needed to calculate the various fit indices according to Gignac (2009) and to compare them with those of Amos.

3. Results of Exploratory and Confirmatory factors analysis

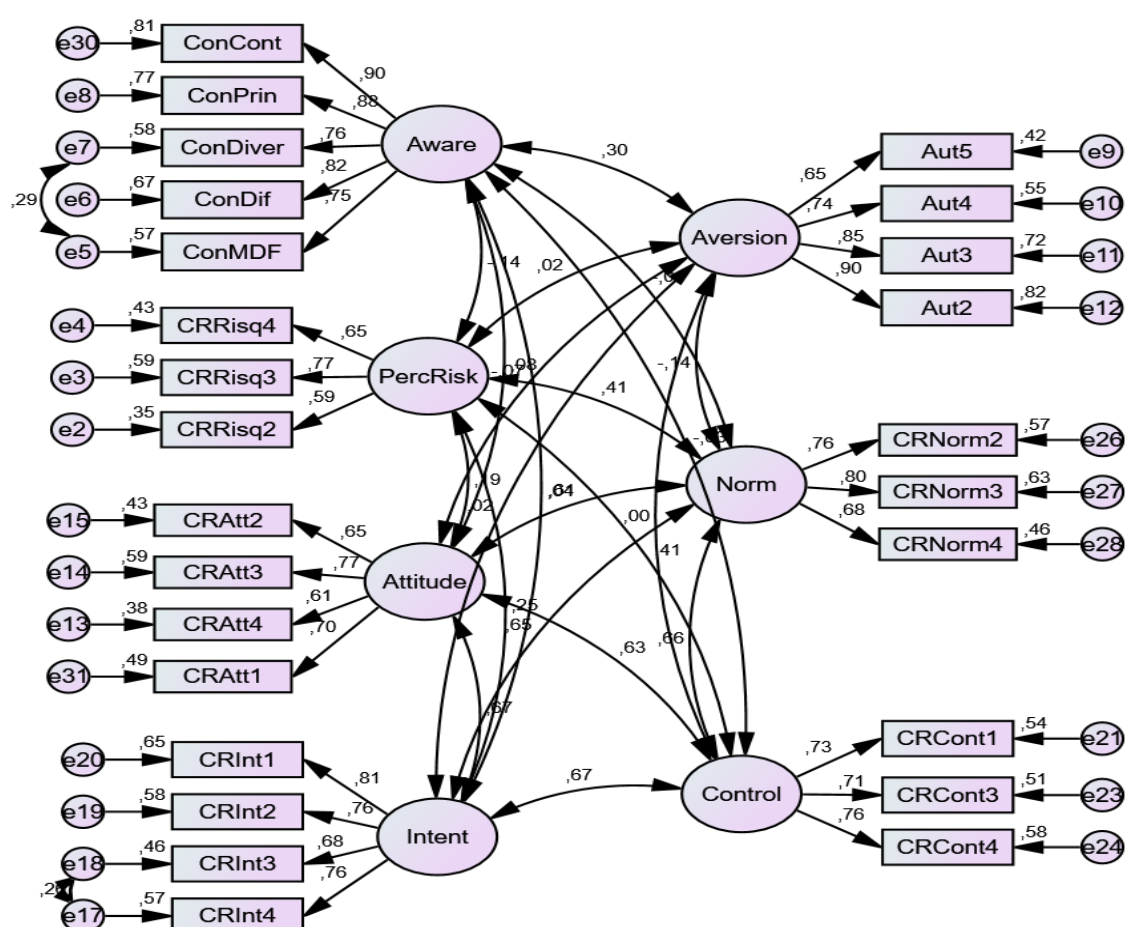
Before conducting the factorial analysis, the normality test is performed. This test is verified through the Kurtosis and Skewness values, which are considered normal when they are between -2 and +2 (Civelek, 2018). This test showed that our data follow a normal distribution, as all the items used have skewness and kurtosis coefficients ranging from -0.481 to 0.289 and from -1.320 to -0.168 respectively. This indicates that the state of the data is sufficient. We then performed a series of factor analyses, all of which yielded a KMO index of 0.815, an identical and significant Bartlett's Sphericity test and the “same percentage of total variance explained (70,586%)”. The results are presented starting with the PCA and CFA loadings associated with their reliability and convergent validity (table1), followed by the model “Fit index” (table 2) and the Discriminant validity (table 3).

Table 1: Confirmatory factor Analysis

Constructs	Communa- lities	Fact. Score (PCA)	CFA loadings	AVE PCA/CFA	CR/Cronba ch's Alpha
Financial Awareness					
Awareness of mechanisms	,817	,896	,900	,728/,679	,913/,906
Awareness of principles	,811	,885	,878		
Awareness of differences	,730	,842	,819		
Awareness of diversification	,723	,834	,760		
Aware of appropriate funding	,712	,805	,752		
Control Risk Aversion					
Free to make his own choices	,817	,882	,903	,684/,625	,869/,863
Free in daily actions	,772	,856	,850		
Free in his decisions	,696	,827	,744		
Passing business to next generation	,601	,737	,648		
Intention to adopt VC					
I'll try to adopt Venture Capital	,779	,848	,678	,529/,568	,840/,777
It's possible that I'll resort to the VC	,680	,734	,758		
I would appeal to the VC	,693	,673	,809		
I'm determined to adopt VC	,618	,635	,758		
Perceived norm of VC adoption					
Disappointment of important people	,739	,806	,679	,569/,555	,789/,779
Approval of important persons	,714	,778	,796		
Waiting for relatives that i adopt VC	,604	,673	,756		
Attitude towards VC adoption					
VC is the best method of financing	,673	,766	,653	,502/,470	,779/,770
Adopting VC is Beneficial	,654	,743	,769		
Adopting VC is a good idea	,623	,691	,698		
I would appreciate the VC adoption	,632	,627	,614		
Perceived VC adoption control					
Able to overcome obstacles	,714	,800	,733	,587/,544	,781/,771
Adoption of VC seems easy to me	,713	,798	,714		
Full Control of the VC adoption	,649	,695	,764		
Perceived Control Risk					
No longer managing by free choice	,759	,847	,655	,690/,458	,715/,798
Risk of deprivation of freedom to act	,727	,829	,770		
Perceived risk to being ejected	,702	,815	,593		
KMO Index				,815	
Total Variance Explained				70,586%	
Rotation Method				Varimax	

The second and third columns of this table represent respectively the communalities and factor scores of the items retained after a purification process specific to the Principal Component Analysis (PCA) (removal of items with a communality of less than 0.5, as well as those that are highly correlated with several dimensions). We thus obtain the measurement models whose loadings are all close to or greater than 0.7; more precisely, which are between 0.627 and 0.896. These items represent 70,586% of the total variance explained, a good KMO index of 0,815 and a significant Bartlett's sphericity test, it means that the necessary conditions are met and that the factorial structure is valid. The forth column represent the standardized regression coefficients of the confirmatory factor analysis (CFA), performed only on these retained items. These loadings that can be optionally read in the graph below are all greater than the minimal acceptable threshold of 0.5 (Asad & al. 2021). This means that there is more variance shared between the items and their dimension than there is variance error, indicating that more than 50% of the item variance is due to its construct.

Graphic: Path model diagram



The fifth column of this table refers to the AVE or Rho_{vc} , which are calculated from the PCA (numerator) and CFA (denominator). As we can see, all these constructs have AVE values

greater than 0.5, ranging from 0.550 to 0.759 when measured from the PCA's scores. However, in the CFA, Attitude and Perceived risk have values of 0.470 and 0.458 respectively, which are below but close to the acceptable threshold of 0.5. This indicates that the indicators share more variance with their own latent variable than with others; and that these scales meet the criteria for convergent validity (Civelek, 2018; Hair & al., 2021). Furthermore, this table shows in column 6 that the composite reliabilities (Joreskog's Rho), calculated from the CFA loadings, are ranged from 0.798 to 0.930, and are therefore all above the acceptable threshold of 0.7 (numerator). Similarly, the Cronbach's Alpha reliability for each of these constructs is also all above the 0.7; ranging from 0.770 to 0.906 (denominator). This leads us to conclude that there is internal consistency between the indicators measuring each concept. We can therefore consider these measurement scales reliable.

Subsequently, another factor analysis called partial confirmatory analysis (Gignac, 2009) is carried out to assess the quality of fit of the model. This analysis uses the maximum likelihood method as the factor analysis technique and "Direct Oblimin" as the rotation method. This type of rotation is used to obtain the Chi-square values needed to calculate the goodness-of-fit indices, which are compared to those obtained in Amos in the following table.

Table 2: Fit indices for the conceptual model

	Fit Index					
	NFI	RMSEA	CFI	TLI	χ^2/df	GFI/AGFI
Thresholds	> 0,90	< 0,08	> 0,90	> 0,90	< 3	> 0,90
With SPSS (*)	0,907	0,044	0,972	0,944	1,356	/
With Amos	0,930	0,038	0,968	0,962	1,782	0,937/0,920

The first indices (*) are all calculated from the formulae indicated by Gignac (2009), and the parsimony index is calculated from the χ^2 of the implicit model and its degrees of freedom. The results show that for both SPSS and Amos, the absolute AGFI/GFI indices are all above 0.9, the minimum threshold required to be valid and that the RMSEA index is below the maximum threshold of 0.08. They also reveal that the incremental indices, namely NFI, CFI and TLI, are all above 0.9, which is the minimum threshold required to be valid. They also show that the χ^2 index on the degree of freedom for SPSS (1.356) and Amos (1.782) are closer to 1. According to Civelek (2018), this parsimony index is significant and the model is therefore sufficiently fitted. We can therefore consider that our model has good goodness of fit and that the psychometric properties of our scales are validated.

To check discriminant validity, it is assessed by comparing the AVE of each construct with its correlation coefficients with other constructs. The rule states that the square root of the AVE of a construct must be greater than the correlations between this construct and other constructs. According to Table 3, the inter-dimensional correlation coefficients are all lower than the square root of AVE of the dimension where it's compared. With these findings, we confirm the existence of discriminant validity between these constructs.

Table 3 : Model Discriminant Validity

Factors	Intention	Aware	Risk	Aversion	Control	Norm	Attitude
AVE	,568	,679	,458	,628	,544	,555	,470
$\sqrt{\text{AVE}}$	,754	,824	,677	,792	,737	,745	,686
Intention	,754						
Awareness	,039	,824					
Perceiv Risk	,254**	-,145**	,677				
Aversion	,017	,305**	,022	,792			
Control	,665**	-,030	,409**	-,004	,737		
Perc. Norm	,652**	-,014	,414**	-,137**	,664**	,745	
Attitude	,671**	,075	,192**	-,075	,632**	,610**	,686

** Correlation is significant at the 0.01 level (2-tailed)

However, we find strong correlations between intention and attitude ($r = .671$), perceived behavioral control ($r = .665$) and perceived subjective norm ($r = .652$). On the other hand, among the antecedents, only Perceived Risk is correlated with Intention ($r = .254$). It is also strongly correlated with Perceived Control ($r = .409$) and perceived Norm ($r = .414$), but rather weakly correlated with Attitude ($r = .192$), as is Risk Aversion with Perceived Norm ($r = -.137$). Financing Awareness, on the other hand, correlates neither with Intention nor with any of its determinants. However, strong correlations were observed between this Awareness and Risk Aversion ($r = .305$) and between this Awareness and Perceived Risk ($r = -.145$). These strong correlations between these antecedents confirm that our model has two blocks, the first relating to the TPB model and the second to its antecedents.

4. Discussions and Conclusion

4.1. Summary of findings

The results of this study allowed us to confirm the unidimensionality of the concepts or latent variables that make up our conceptual model and to verify the reliability of the measurement scales for each of these concepts. Secondly, we found that these measurement models met the

conditions of convergent and discriminant validity, and that the structural model showed a good goodness of fit. This confirms, on the one hand, the robustness of the TPB for each behavioral domain and, on the other hand, the validity of the antecedents of this model, namely financing awareness, decision control risk aversion and perceived decision control risk in the case of adopting Venture Capital. This model could therefore be used to explain entrepreneurs' financing decisions. In an attempt to answer the question "How do entrepreneurs choose financing methods?", it would then be possible to use it to explain their behavior (adoption or non-adoption) of any given financing method.

In this model, as mentioned earlier, strong positive correlations were obtained between attitude, perceived subjective norm, perceived behavioral control and intention. Since correlation is the standardized value of covariance, analysis of the covariance table showed that these correlations were significant. In other words, we can estimate with 99% confidence that the covariances and consequently the correlations obtained between attitude and intention, subjective norm and intention, and perceived control and intention are all significantly different from 0. In other words, there is less than a 1% chance that the variance of one is not due to the variance of the other. These findings are similar to those of Amin et al. (2011), Jaffar and Musa (2014), Ibrahim, Fisol and Haji-Othman (2017) and Asad et al. (2021). These results show a likely tendency for intention to evolve upwards as each of its three determinants vary upwards, thus confirming hypothesis H1.

However, for the antecedents of aversion to decision control, perceived risk of decision control and financial awareness, we found that aversion only covariates significantly with subjective norm. Perceived risk, on the other hand, covariates significantly with attitude, subjective norm, perceived behavioral control and intention. In this case, H2 is partially supported, while H3 is fully supported. Next, like Asad et al. (2021), we find that awareness is not significantly correlated with attitude, norm and perceived control, nor with intention; a result that otherwise contradicts that of Ibrahim, Fisol and Haji-Othman (2017). In our case, we find that H4 is not verified. This confirms that our model has two blocks, the first of which relates to the TPB model and the second to its antecedents.

4.2.Conclusion

The goal of this study was to validate the entrepreneurs' financing decision model, which was built from the theories of planned behavior and self-determination. The results confirmed the model's validity and revealed significant correlations between the variables, suggesting a relationship between them. Therefore, this study sheds light on the psychological factors that

could explain entrepreneurs' financing decisions, breaking with the traditional approach of basing this decision solely depends on profit-related calculations.

However, the weakness of this study is that it is based on the analysis of correlations. This means that even if two variables are highly correlated, there may not be a causal relationship between them. Additionally, this validation is based on a medium-sized sample, which could lead to the erroneous elimination of certain important items. Future studies on funding decisions would do better to take into account the ratio of the number of observations per item. They would also do better to consider all items to ensure that all important aspects are included and to avoid losing information by eliminating items that are nonetheless important for a significant part of the population. Researchers could also perform inferential analysis, such as structural equation modeling, to determine whether these relationships are causal. We then wonder: Could their socio-demographic characteristics explain their financing decisions? At what level might they be situated in this financing decision model?

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