

RISK OF ENTREPRENEURIAL DISCONTINUITY AND DISSATISFACTION IN THE INFORMAL SECTOR IN CAMEROON

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Abstract:

This research note aims to examine the interactions between entrepreneurial discontinuity and entrepreneurial dissatisfaction among promoters of informal non-farm production units in Cameroon. The analysis is based on a sample of 4432 promoters of informal production units (IPU), taken from phase 2 of the second survey on employment and the informal sector in Cameroon (INS, 2010). Drawing on the literature review, the econometric results, obtained using a recursive bivariate probit model, reveal a positive and significant interaction between entrepreneurial failure and entrepreneurial dissatisfaction. In addition, economic failure, professional experience, lack of opportunities, strong regulation and taxation of economic activities and difficulties in accessing bank credit significantly influence the risk of disappearance of IPUs. Moreover, IPU promoters facing difficulties (i) in managing their activities, (ii) in accessing bank credit and (iii) in selling their products due to a lack of customers are likely to suffer from entrepreneurial dissatisfaction.

Key words: Entrepreneurial discontinuity, entrepreneurial dissatisfaction, informal production unit, Cameroon

JEL classification: L25, L26, N87, Q17

1. INTRODUCTION

This paper analyzes the interactions between entrepreneurial discontinuity and dissatisfaction among promoters of non-agricultural informal production units in Cameroon. To achieve this objective, it uses a recursive bivariate probit model applied to data from the 2^{ème} Enquête Elargie au Secteur Informel (EESI 2) conducted by the INS (2010). It challenges the integrative approach developed by Smida and Khelil (2010) to explain entrepreneurial failure.

The above-mentioned theoretical model attempts to analyze entrepreneurial failure by taking into account three approaches: one centered on the predominance of the entrepreneurial context, one centered on the primacy of resources and one centered on the importance of entrepreneurial motivation. Each of these approaches is distinguished by its theoretical basis, its conception of entrepreneurial failure and the determinants of this failure. According to the authors, none of these approaches taken separately is completely satisfactory: "it suffers from the limitations that the other approaches try to fill". They define entrepreneurial failure in a joint or overlapping manner through three dimensions: entrepreneurial discontinuity (D), economic failure in terms of resource destruction (E) and entrepreneurial dissatisfaction (I).

We suspect the presence of a simultaneity bias between entrepreneurial dissatisfaction and discontinuity that has been ignored in the literature, notably by Smida and Khelil (2010). Indeed, it is possible that these two factors interact: entrepreneurial discontinuity may influence entrepreneurial dissatisfaction, and vice versa. To our knowledge, no study has empirically explored the interactions between entrepreneurial discontinuity and entrepreneurial dissatisfaction.

Moreover, studies that have focused on one of its dimensions of entrepreneurial failure have mainly focused on formal sector firms (Teurlai, 2004; Batjargal, 2005; Lasch & al, 2005; Smida & Khelil, 2010; Ellis, 2011) and little on informal sector firms (Benjamin & Mbaye, 2012; Zogning & al, 2017). It therefore seems important to extend the examination of these two dimensions of entrepreneurial failure to the informal sector, especially given its strong implications for employment opportunities, productivity and tax revenues in Cameroon. The interest in studying more precisely the case of an African country is not only to fill the current knowledge gap; this study is also justified in some respects.

Indeed, faced with the difficulties presented by Cameroonian public authorities, the informal sector has come to the rescue of the formal model since the second half of the 1980s. To appreciate the informality of IPU, we can see that 91.90% of them do not have a taxpayer number and do not keep formal accounts in accordance with the OHADA accounting plan (INS, 2010). In the informal sector, there seems to be a low proportion of IPU that employ at least one employee, i.e. 5.70%. Moreover, the wage rate, which is the ratio of wage employment to total employment, is low in the informal sector, at 8.60%. On the other hand, own-account workers are in the majority (70.60%) and work in industries such as food processing, garment manufacturing, construction, other industries, trade, transport, catering, repair and other services (INS, 2010).

The informal sector in Africa has become so important that the Bretton Woods institutions and the International Labor Office have resolved to encourage it and to include its activities in the development strategies of the African continent. According to these institutions, the informal sector is profitable, productive and creates jobs. Its expansion appears to be a response to population growth and the high demand for jobs in Cameroon. For example, the informal sector has become the main provider of jobs in Cameroon in recent years, accounting for 90% of jobs created in the country (INS, 2010). However, this situation could be at risk in the future, as INS (2010) reveals that (i) 89.20% of informal sector businesses are at risk of disappearing, (ii) 90.90% of informal-sector businesses are experiencing problems of dissatisfaction with the growth of their activities, and (iii) 84.060% of informal-sector businesses have not experienced an increase in profits.

The rest of the article is organized as follows: (i) section 2 is devoted to the literature review, (ii) section 3 presents the methodology of the study, (iii) section 4 is dedicated to the discussion of the statistical results and (iv) section 5 highlights the econometric results.

2. LITERATURE REVIEW

The integrative approach of Smida and Khelil (2010) defines entrepreneurial failure through its three dimensions: entrepreneurial discontinuity (D), economic failure in terms of resource destruction (E), and entrepreneurial dissatisfaction (I). These three dimensions environment, resources and entrepreneurial motivations each linked to one of the three approaches mentioned above, constitute, according to Smida and Khelil (2010), an indissociable whole for understanding entrepreneurial failure. For this reason, they combine these three dimensions of entrepreneurial failure in order to construct a composite indicator of entrepreneurial failure.

This combination of the three dimensions of entrepreneurial failure will allow Smida and Khelil (2010) to establish a typology of four categories of entrepreneurial failure: (i) total failure, (ii) zero failure, (ii) partial failure and (iv) marginal failure. We speak of "total failure" when all three dimensions of entrepreneurial failure are observed, i.e. when the company is in a situation of entrepreneurial discontinuity, economic failure and entrepreneurial dissatisfaction. We say that there is "zero failure" when none of the three dimensions of entrepreneurial failure are transcribed (i.e. the enterprise is marked by entrepreneurial survival, economic performance and entrepreneurial satisfaction).

Marginal failure occurs when only one of the three dimensions of entrepreneurial failure is recorded at the firm level. This marginal failure is then decomposed into three scenarios: positive exit, survival with entrepreneurial deception, and "survival with resource destruction". The positive exit occurs when there is entrepreneurial discontinuity, economic performance and satisfaction of

the entrepreneur. Survival with entrepreneurial disappointment takes place when there is entrepreneurial survival, economic performance and entrepreneurial dissatisfaction. Lastly, survival with resource destruction occurs when there is entrepreneurial survival, economic failure and satisfaction of the entrepreneur.

We speak of "partial failure" when only two of the three dimensions of entrepreneurial failure are observed at the firm level. This "partial failure" is subdivided into three scenarios, namely "marginal survival", "exit with destruction of resources" and "exit with disappointment of the entrepreneur". We say that there is:

- "marginal survival" in the case of entrepreneurial survival, economic failure and entrepreneurial dissatisfaction ;
- "exit with resource destruction" in situations of entrepreneurial discontinuity, economic failure and entrepreneurial satisfaction ;
- "exit with entrepreneurial disappointment" in circumstances of entrepreneurial discontinuity, economic performance and entrepreneurial dissatisfaction.

Contrary to the integrative approach of Smida and Khelil (2010), it is possible that entrepreneurial dissatisfaction and discontinuity interact with each other. Indeed, according to Cooper and Artz (1995), entrepreneurial satisfaction is a relevant measure of performance and is instrumental in deciding the fate of the venture. It is considered a factor that plays an important role in the decision to continue or discontinue the entrepreneurial activity. Naffziger et al (1994) argue that entrepreneurs continue their business to the extent that their expectations are met. Entrepreneurial dissatisfaction which may arise from over-ambitiousness leading the entrepreneur to "set the bar too high" and to want to "do too much" induces stress marked by anxiety, overwork and depression (Afzalur, 1996). This can ultimately lead to a decline in the company's economic performance and jeopardize its survival.

Entrepreneurial dissatisfaction can also fuel doubt in the entrepreneur, leading to a state of indeterminacy and hesitation between continuing the enterprise and giving up. According to Valéau (2006), "doubt is part of a process that, beyond the potential of situations and actors, remains relatively indeterminate: from a subjective point of view, entrepreneurs hesitate; from an objective point of view, the outcome of this process remains uncertain.

The decision to definitively end one's entrepreneurial activities is not an easy one and can have a powerful psychological component. This period is marked by entrepreneurial dissatisfaction that manifests in questioning, immense doubt, low self-esteem, discouragement, overworking or shattered illusions (Valéau, 2006).

Furthermore, the survival of a business can affect the satisfaction of the entrepreneur (Carree & Verheul, 2011; Olcay & Kunday, 2016). Indeed, if the latter is not faced with a risk of disappearance and has a surplus accounting balance, the promoter will be satisfied if these were the objectives set at the outset. An entrepreneurial activity is simultaneously an economic project and a life project (Bruyat, 1994). The risk of entrepreneurial disappearance can lead to economic failure and not provide the promoter with a suitable life (too much work, too much stress, family difficulties, illness, etc.), hence entrepreneurial dissatisfaction. On the other hand, a risk of entrepreneurial discontinuity accompanied by a less favorable economic situation may not reduce the entrepreneur's satisfaction if it provides them with a life that suits them perfectly (Hernandez, 2006).

True entrepreneurs, according to some authors (Shaver, 1995; Cardon & McGrath, 1999), do not give up in the face of the challenges that are likely to generate entrepreneurial dissatisfaction. Afzalur (1996) believes that "entrepreneurs are fascinating; they alternate between the ecstasy of success and the agony of failure, bouncing back to live again. They have a strong need for excitement and risk". Similarly, Valéau's (2006) qualitative explorations reveal that "entrepreneurs may feel like quitting, but are reluctant to disengage given their previous investments."

3. METHODOLOGY

In this section, we will proceed to the econometric specification of the model; then, a descriptive statistics analysis of the model variables will be performed; finally, we will make an econometric estimation of the model and analyze the results.

In the case of cross-sectional data, when causality between the variables is presumed and the explained and the explanatory variables are qualitative, the recursive bivariate probit model is often used (Lollivier, 2001). According to Lollivier (2002), the likelihood maximization procedure is practically unavoidable when the two variables [1] are qualitative. In models with discrete variables, problems of logical consistency make it difficult to express behaviours directly simultaneously. Indeed, one cannot introduce entrepreneurial satisfaction as an explanatory variable in the entrepreneurial discontinuity equation and entrepreneurial discontinuity as a determinant in the entrepreneurial dissatisfaction equation simultaneously. One direction of the relationship must be favored (Brunet & Havet, 2009).

For these reasons, and given the problematic of this study, we have chosen to estimate a recursive bivariate probit [2] which allows us to simultaneously model the probability of experiencing a risk of entrepreneurial discontinuity and its influence on the probability of having a high level of entrepreneurial dissatisfaction. The chosen model is recursive in the sense that the knowledge or lack thereof of a risk of entrepreneurial discontinuity is retained as the main element of the entrepreneurial dissatisfaction equation. Moreover, this model offers the advantage of introducing a correlation between the error terms of the two equations (the entrepreneurial discontinuity equation and the entrepreneurial dissatisfaction equation). This makes it possible to control for unobserved heterogeneity, which is likely to affect the estimation of the influence of certain socio-demographic and professional characteristics.

More precisely, the formal framework of the chosen specification is as follows:

$$Y_{i,DISE} = \begin{cases} 1 & \text{si } Y_{i,DISE}^* = Z_{ij}Y_{DISE} + \mu_{i,DISE} > 0 \\ 0 & \text{si } Y_{i,DISE}^* = Z_{ij}Y_{DISE} + \mu_{i,DISE} \leq 0 \end{cases} \quad (4)$$

$$Y_{i,INSA} = \begin{cases} 1 & \text{si } Y_{i,INSA}^* = Y_{i,DISE}\alpha + V_{ij}Y_{INSA} + \mu_{i,INSA} > 0 \\ 0 & \text{si } Y_{i,INSA}^* = Y_{i,DISE}\alpha + V_{ij}Y_{INSA} + \mu_{i,INSA} \leq 0 \end{cases} \quad (5)$$

Where the residuals $(\mu_{i,sante}; \mu_{i,satisvie})$ follow a bivariate joint normal distribution:

$$\begin{pmatrix} \mu_{i,DISE} \\ \mu_{i,INSA} \end{pmatrix} \rightarrow N \left[\begin{pmatrix} 0 \\ 0 \end{pmatrix}, \begin{pmatrix} 1 & \rho \\ \rho & 1 \end{pmatrix} \right] \quad (6)$$

Equations (1) and (2) respectively model the fact that the individual is likely to experience an entrepreneurial discontinuity ($Y_{i,DISE} = 1$) and that he has an entrepreneurial dissatisfaction ($Y_{i,INSA} = 1$). The parameter α captures the impact of the risk of entrepreneurial discontinuity on entrepreneurial dissatisfaction. Its sign is a priori indeterminate. An entrepreneurial discontinuity risk may or may not contribute to entrepreneurial dissatisfaction.

This modeling will allow us to know if these effects compensate each other; if not which one dominates. Some identification constraints must be imposed in order to estimate all the parameters. As in all probit models, the variances of the residuals are not identifiable, and therefore the first restriction is to normalize them to 1 (see equation 3). The only other restriction is required by the recursion of the model. Since the residuals of the latent equations are not independent, the parameters of the entrepreneurial dissatisfaction equation cannot be identified unless the determinants of entrepreneurial dissatisfaction (V_{ij}) include all determinants of entrepreneurial discontinuity risk (Z_{ij}). The identification constraint requires that at least one of the explanatory variables in the entrepreneurial discontinuity equation is not included in the entrepreneurial dissatisfaction equation.

The log-likelihood associated with this model has the expression :

$$\ln L = \sum_{i=1}^N Y_{i,DISE} Y_{i,INSA} \ln[\Phi_2(Z_{ij} \gamma_{DISE}, \alpha + V_{ij} \gamma_{INSA}; \rho)] + Y_{i,DISE} (1 - Y_{i,INSA}) \ln[\Phi_2(Z_{ij} \gamma_{DISE}, -\alpha - V_{ij} \gamma_{INSA}; -\rho)] + (1 - Y_{i,DISE}) Y_{i,INSA} \ln[\Phi_2(-Z_{ij} \gamma_{DISE}, V_{ij} \gamma_{INSA}; -\rho)] + (1 - Y_{i,DISE})(1 - Y_{i,INSA}) \ln[\Phi_2(-Z_{ij} \gamma_{DISE}, -V_{ij} \gamma_{INSA}; \rho)] \tag{7}$$

With Φ_2 the distribution function of the standardized bivariate normal distribution. For example [3]:

$$\Phi_2(Z_{ij} \gamma_{DISE}, \alpha + V_{ij} \gamma_{INSA}; \rho) = \int_{-\infty}^{Z_{ij} \gamma_{DISE}} \int_{-\infty}^{-\alpha - V_{ij} \gamma_{INSA}} \phi_2(\mu_{i,DISE}, \mu_{i,INSA}, \rho) d\mu_{i,INSA} d\mu_{i,DISE} \tag{8}$$

With

$$\phi_2(\mu_{i,DISE}, \mu_{i,INSA}, \rho) = [1/2\pi(1 - \rho^2)^{1/2}] \exp\{(-0,5(\mu_{i,DISE}^2 + \mu_{i,INSA}^2 - 2\rho\mu_{i,DISE}\mu_{i,INSA})/(1 - \rho^2))\} \tag{9}$$

We can write the following system of simultaneous equations:

$$DISE = \begin{cases} 1 & \text{si } DISE^* = \beta_1 SEX_i + \beta_2 AGE_i + \beta_3 EDU_i + \beta_4 EXP_i + \beta_5 NMOT_i + \beta_6 EPTC_i + \beta_7 DAC_i + \beta_8 TRIT_i + \beta_9 EPMC_i + \varepsilon_2 \geq 0 \\ 0 & \text{si } DISE^* = \beta_1 SEX_i + \beta_2 AGE_i + \beta_3 EDU_i + \beta_4 EXP_i + \beta_5 NMOT_i + \beta_6 EPTC_i + \beta_7 DAC_i + \beta_8 TRIT_i + \beta_9 DOG_i + \varepsilon_2 \leq 0 \end{cases} \tag{10}$$

$$INSA = \begin{cases} 1 & \text{si } INSA^* = \theta_1 DISE_i + \theta_2 DEFE_i + \alpha_1 SEX_i + \alpha_2 AGE_i + \alpha_3 EDU_i + \alpha_4 EXP_i + \alpha_5 NMOT_i + \alpha_6 EPMC_i + \alpha_7 DAC_i + \alpha_8 TRIT_i + \varepsilon_3 \geq 0 \\ 0 & \text{si } INSA^* = \theta_1 DISE_i + \theta_2 DEFE_i + \alpha_1 SEX_i + \alpha_2 AGE_i + \alpha_3 EDU_i + \alpha_4 EXP_i + \alpha_5 NMOT_i + \alpha_6 EPTC_i + \alpha_7 DAC_i + \alpha_8 TRIT_i + \varepsilon_3 \leq 0 \end{cases} \tag{11}$$

Where $DISE^*$ and $INSA^*$ are respectively the continuous latent variables associated with the variables $DISE$ and $INSA$.

DISE is the qualitative variable that makes it possible to assess the entrepreneurial discontinuity or the risk of the firm’s disappearance. It is a dichotomous variable (0 = the firm is likely to disappear; 1 = otherwise). This variable has a limit since it does not measure, strictly speaking, the entrepreneurial disappearance but rather the risk of disappearance. In the EESI 2 survey question, the IPU promoter is asked about his or her impression of the survival of their enterprise. **INSA** is the qualitative variable that measures entrepreneurial dissatisfaction. It is a dichotomous variable: 0= the entrepreneur is satisfied and 1= if he is dissatisfied. **DEFE** is the qualitative variable that captures the economic efficiency of the company. It is a variable that admits 2 modalities: 0= the firm has made profits; 1= otherwise.

SEX is the qualitative variable that captures the respondent’s sex. It has 2 modalities (0 = female; 1= male). Carree & Verheul (2011) use a similar indicator. Déprez (2010) finds that women-led firms are more likely to experience entrepreneurial failure than those led by men. Several factors may explain this difference, including financial investment, professional experience, degree and the compatibility between family and professional life.

EDU is a qualitative variable that captures the level of education of the entrepreneur. It admits 2 modalities: 0 if the entrepreneur has at most primary education and 1 if he has secondary or higher education. To capture the educational level of the entrepreneur, Carree & Verheul (2011) employ a similar qualitative variable although it is decomposed into 7 modalities. Woywode & Lessat (2001), meanwhile, use a dichotomous qualitative variable to capture the entrepreneur's education level, taking the value 1 when he has a university degree and 0 otherwise.

EPMC is the variable that captures the difficulty of selling the production due to the lack of customers. It has two modalities: 0 indicates no difficulties in finding outlets, while 1 indicate outlet difficulties. The problems of marketing are linked to (i) the difficulties experienced by the entrepreneur in targeting the clientele and insufficient diversification of the clientele (Sammut, 2001) and (ii) weaknesses in understanding the market (Filion & Borges, 2010).

DAC is a qualitative variable that captures the difficulty of accessing credit in formal finance at the time of the creation of the enterprise. It has two modalities: 0 (no difficulties encountered) et 1 (difficulties experienced). According to Déprez (2010), in France, whatever the sector of activity, the more initial capital is invested, the higher the chances of success for the enterprise: "Thus, enterprises created with at least 80,000 euros of investment are, all other things being equal, 1.7 times more likely to be active than those created with less than 2,000 euros. Access to financing allows entrepreneurs to increase their investments (installation in premises, purchase of equipment, constitution of stocks, etc.).

DOG is a qualitative variable that captures the organizational and management difficulties faced by the entrepreneur. It is dichotomous, with the following modalities: 0 (the entrepreneur does not experience management difficulties) and 1 (the entrepreneur has management difficulties). According to Hamrouni and Akkari (2012), among the five factors likely to increase the risk of entrepreneurial failure is the lack of management skills.

TRIT is a qualitative variable that makes it possible to assess the difficulties associated with the high levels of regulation and taxation of activities in the market. This variable has two modalities: 0 = the entrepreneur does not experience difficulties and 1 = the entrepreneur encounters difficulties. Government regulations appear to be one of the major obstacles to entrepreneurial success (Kitching et al, 2015). In macroeconomic studies, there are databases that provide indicators to measure market regulations, such as Doing Business and The Heritage Foundation.

EXP is a qualitative variable that captures the professional experience of the entrepreneur. Specifically, it captures the length of time the entrepreneur has been at the head of the company. It admits two modalities: 0 if the entrepreneur has more than 3 years' experience at the head of the company and 1 if he has at most 3 years' experience. To capture the entrepreneur's work experience, Carree and Verheul (2011) employed a dichotomous qualitative variable that simply asked whether the entrepreneur had run another business in the past. The entrepreneur lacking work experience is likely to experience entrepreneurial failure since relevant past experiences increase the chances of business survival (Cooper et al, 1994; Bruderl and Preisendorfer, 1998). Nevertheless, some studies, notably that of Van Praag (2003), indicate that work experience does not significantly influence entrepreneurial failure.

Moreover, the explanatory variables used in this study are almost all dichotomous in nature, with the exception of the variable capturing age in the EESI 2 questionnaire. This variable, which captures the age and professional experience of the entrepreneur is quantitative in the EESI 2 questionnaire, but for reasons of convenience, we have transformed it into dichotomous qualitative variable in this study.

The data for this study come from Phase 2 of the second Employment and Informal Sector Survey (EESI 2), a two-phase statistical survey. The first phase aims to capture employment (Employment Survey), while the second phase aims to assess the economic activities of the non-agricultural informal sector (Informal Sector Survey). This operation had a geographical scope of the entire national territory, which was divided into 12 survey regions: the cities of Douala and Yaoundé, Adamaoua, the Center excluding Yaoundé, the East, the Far North, the Littoral excluding Douala, the North, the North-West, the West, the South and the South-West. The primary sampling frame was made up of all the enumeration areas (EAs) delineated during the mapping work carried out in 2003 as part of the 3rd general census of the human population. A total of 756 DZs out of nearly 17,000 were drawn and visited. The sample design was stratified at two levels. At the first stage, DZs were drawn for inclusion in the sample. At the second stage, 8,160 households were drawn from the 756 DZs selected. Strata were formed by combining the 12 survey regions and the stratum of residence (urban, semi-urban, rural); a total of 32 strata were defined and 4,538 informal non-farm production units were surveyed. In this study, 4,432 IPU were selected due to the availability of data; these are similar to microenterprises, 96.10% of which are one-person businesses. There is therefore a virtual absence of salaried workers in this sample.

A production unit is considered an elementary unit, mobilizing factors of production (labor, capital) to generate output and value added in the sense of national accounting. The production unit is confused with the establishment when the activity is carried out in a physical location specifically designed for the purpose (store, workshop, stall). It is considered a "pseudo-establishment" when there is no such place (home-based activity, itinerant activity). An IPU is a production unit that has a self-employed person (owner, own-account worker) as its head/promoter, carrying out as its main or secondary activity an activity for which the production unit does not keep formal accounts (in the sense of the accounting plan: OHADA, etc.) and/or does not have a taxpayer number in the non-agricultural sector.

4. RESULTS

Table 1 shows that the entrepreneurial dissatisfaction rate is 86.15%. The proportion of IPU's in a situation of economic failure is 82.11%. The entrepreneurial discontinuity rate is 83.06%.

Table 1. Descriptive statistics

Variables	Mean	Standard deviation	Minimum	Maximum
SEX	0,468	0,499	0	1
EPMC	0,494	0,500	0	1
DAC	0,250	0,433	0	1
TRIT	0,130	0,337	0	1
DEFE	0,821	0,383	0	1
DISE	0,830	0,375	0	1
INSA	0,861	0,345	0	1
EDU	0,489	0,499	0	1
EXP	0,333	0,471	0	1

Table 2 reveals that 78.44% of IPU's are at risk of total failure in the event of entrepreneurial discontinuity. There is a strong correlation between economic failure, entrepreneurial discontinuity, and entrepreneurial dissatisfaction. Additionally, 69.11% of IPU's in a situation of economic failure are at risk of disappearing, 71.37% of IPU's in a position of economic failure are managed by dissatisfied entrepreneurs, and 78.06% of IPU's at risk of disappearing are managed by dissatisfied entrepreneurs.

The majority of IPU's are run by women (53.18%), young people (57.81%), experienced people (66.66%) and people with primary education or less (51.02%). Women seem to be more affected by entrepreneurial failure, with 44.75% and 46.25% of IPU's managed by women at risk of entrepreneurial discontinuity and entrepreneurial dissatisfaction, respectively. Young people also seem to be more exposed to entrepreneurial failure, with 48.67% of IPU's managed by young people exposed to entrepreneurial discontinuity. The less experienced IPU managers are more susceptible to entrepreneurial failure; we can see that 54.53% and 57.15% of IPU's managed by less experienced individuals incur entrepreneurial discontinuity and entrepreneurial dissatisfaction respectively. Individuals who have not gone beyond the level of primary education appear to be more prone to entrepreneurial failure, with 42% of IPU's run by the least educated individuals subject to entrepreneurial discontinuity.

Managers are less confronted with difficulties in accessing financing (25.05%), organizing or managing the enterprise (8.39%) and high taxation or regulation of activities (13.08%). However, the percentage of IPU's at risk of entrepreneurial discontinuity due to constraints in accessing bank financing is 90.05%. The proportion of IPU's at risk of entrepreneurial discontinuity and entrepreneurial dissatisfaction knowing they are facing difficulties in business organization and management is 86.29% and 91.89% respectively. The share of IPU's at risk of entrepreneurial discontinuity and entrepreneurial dissatisfaction when they experience problems related to the regulation and taxation of their activities is 89.67% and 91.89% respectively.

Table 2. Bivariate statistics (%)

Variables	Terms and conditions	DISE		INSA	
		No	Yes	No	Yes
DEFE	Increase	3,94	13,95	3,11	14,78
	No increase	13	69,11	10,74	71,37
DISE	No			8,87	8,08
	Yes			4,99	78,06
SEX	Woman	08,44	44,75	06,92	46,25
	Male	08,50	38,31	06,92	39,89
EXP	More than 3 years	12,13	54,53	09,52	57,15
	Maximum 3 years	04,80	28,51	04,33	29,00

EDU	Primary education at most	09,02	42,00	07,24	43,77
	Secondary education at least	07,91	41,07	06,61	42,38
EPMC	No	12,72	37,80	11,26	39,26
	Yes	04,21	45,27	02,60	46,88
DAC	No	14,46	60,49	12,26	62,70
	Yes	02,48	22,56	01,60	23,44
DOG	No	15,80	75,81	13,17	78,42
	Yes	01,15	07,24	00,68	07,71
TRIT	Business environment not unfavorable to entrepreneurship	15,60	71,32	12,80	74,12
	Business environment unfavorable to entrepreneurship	01,35	11,73	01,06	12,02

5. DISCUSSIONS

Looking at Table 3, we notice that the risk of the company's disappearance significantly increases entrepreneurial dissatisfaction. A promoter of an IPU often works in an environment that is very conducive to stress. Because of the size of their business, they have to be in control of the situation in all circumstances and face their own anxieties due to the fact that they do not earn enough income to support their often large family. The risk of closure of the IPU can also arouse fear in the latter, especially in a context marked by very low decent employment rates.

Economic failure does not significantly influence entrepreneurial dissatisfaction; this reveals that increased income is not always the key factor when individuals invest in entrepreneurship. Entrepreneurs may have other aspirations or expectations such as social change or avoiding the boredom and stress induced by idleness. On the other hand, economic failure has a significant impact on the risk of entrepreneurial disappearance. An IPU can be in permanent cessation of activities for financial reasons. When a company is running at a loss or is not making a profit, it can close down in order to avoid debts or at least reduce them. Profit is essential to guarantee the company's durability, as it is the main means to ensure the financing of its development.

The gender and educational level of entrepreneurs do not significantly affect either the risk of entrepreneurial discontinuity or entrepreneurial dissatisfaction. However, those with a high school education are more likely to experience the risk of discontinuity. This result does not match that of Richet (2015), who found that the durability of the business increases with the degree of the creator: "two thirds of the businesses created in 2010 by a creator without a degree were still active three years later. For graduates with a bachelor's degree or higher, 78% were still active".

Entrepreneurs facing management difficulties are more likely to experience entrepreneurial dissatisfaction, which is significant at the 10% threshold. Good quality management seeks to ensure coherence between the company's goals, objectives, coordination and organization mechanisms. However, management difficulties do not significantly influence the economic performance of IPUs. This is due to the informal status of these SMEs, which does not place them under strong constraints of good organization or management, such as the keeping of regular accounts necessary to obtain statistical data to evaluate the activity. Additionally, the individual management of IPUs with the predominant role of the head of the enterprise often leads to a strong centralization of management decisions.

Difficulties in accessing financing are significantly associated with entrepreneurial discontinuity and dissatisfaction. These results are significant at the 1% level. Financial resources are an important factor in entrepreneurial success, challenging the resource primacy approach to entrepreneurial failure (Aspelund, Berg-Utby & Skjevdal, 2005). Richet (2015) shows that in France "businesses created with a strong initial contribution are the most perennial. Among businesses that started with less than 2,000 euros, only 65% are still active three years after their creation. On the other hand, the 7% of companies that had more than 160,000 euros at their launch are still 83% active after three years. Exceeding 40,000 euros of investment significantly increases the chances of sustainability. In Cameroon, only 1% (respectively 11%) of the IPUs requested loans from a bank (respectively microfinance), and only 64% (respectively 57.69%) of them were able to benefit from a credit from the bank (respectively microfinance) (INS, 2010). These SMEs did not apply for a bank loan due to complications in the procedures (23.48%), high interest rates (8.65%),

high collateral requirements (10.76%), unmet needs (6.94%) and a reluctance to borrow (40.46%). To address these issues, in July 2015, the State established the Banque Camerounaise des PME (BCPME) to reduce the constraints of access to credit experienced by SMEs from conventional credit institutions. To be eligible for credit, the SME must be registered in the trade register and pay at least the final tax. This may seem daunting when one considers that 62.14% of IPU promoters are not ready to register their production units with the administration, and 57.90% of them are not ready to pay taxes. The BCPME has a capital of 10 billion CFA francs, which may be insufficient to meet the financing needs of SME promoters.

Difficulties related to strong regulation or taxation of SME activities explain, to a significant extent, entrepreneurial discontinuity, but not necessarily entrepreneurial dissatisfaction. An unfavorable business environment increases the risk of SMEs disappearance. Fabre and Kerjosse (2006) found that SMEs which benefit from public aid from the state (subsidies, tax breaks, etc.) are more likely to survive. Fries et al (2004) studied the relationship between the business environment and firm performance, and found that: (i) obstacles in the business environment explain the increased costs of entrepreneurship, (ii) there is a correlation between firms involved in the detour of state services and those affected by excessive influence on the formulation of laws and regulations, and (iii) a good quality business environment favors entrepreneurial investment. Cameroon ranks 169th out of 190 countries in the 2017 Doing Business ranking and 149th in terms of business creation. It takes a man 15 days to create a business, compared to 8 in the OECD. In June 2016, the president of the National Association of Informal Sector Operators for the Fight against Poverty (ANOSILP) led a hunger strike to denounce the big scams organized by the police administrative authority that were levying FCFA 500, FCFA 1,000 and FCFA 5,000 per merchant at the Mokolo market in Yaoundé. Benjamin and Mbaye (2012) found that in West Africa, harassment of the informal sector by tax authorities is detrimental to entrepreneurial success.

The problem of outlets is detrimental to entrepreneurship in IPUs, causing SMEs to be more likely to experience difficulties in selling their production, which can lead to entrepreneurial discontinuity and dissatisfaction. These results are all significant. In Cameroon, IPUs are unable to sell their products on foreign markets, with only 1% of IPUs exporting. On the domestic market, their main clients are households or individuals, accounting for 87.06%. Additionally, 20.46% of informal entrepreneurs report difficulty in accessing suitable places or business premises for their activities. In the city of Yaoundé, for instance, the Urban Community has been evicting IPUs that illegally occupy public space without ensuring their access to a suitable location or premises, often without a smooth process. The contraction of demand or the low purchasing power of Cameroonians can also explain the risk of entrepreneurial failure. Cameroon is an underdeveloped country with a relatively high poverty rate, standing at 39.9% in 2007 and 37.5% in 2014. As part of the structural adjustment programs put in place under the aegis of the Bretton Woods institutions, the Cameroonian government, in 1993, was forced to twice reduce the salaries of its employees by 30 to 65%, while also proceeding with mass layoffs affecting thousands of government employees. It was only in 2014, following the increase in the price of petroleum products, that the salaries of state employees were increased by 5%.

The personal decision to start a business has a positive impact on entrepreneurial continuity. This result is significant at the 1% level. The motivation that often accompanies the decision to personally create a business does not, however, seem to be sufficient to reduce the risk of entrepreneurial discontinuity. Indeed, given the economic situation, many IPU promoters go into business by imitation and not after having conducted market or prospective studies. This result is not consistent with the predictions of the "gap-aspiration-achievement" theory.

Work experience has a significant impact on entrepreneurial discontinuity. SMEs managed by experienced entrepreneurs are more likely to experience entrepreneurial discontinuity. This result is not in line with the Mincerian theory of human capital, which suggests that work experience leads to entrepreneurial success through increased productive capacities, better psychological management, and the acquisition of skills. Additionally, proponents of the Austrian School (Shane, 2000) argue that work experience helps to properly identify of entrepreneurial

opportunities. Lamontagne and Thirion (2000) found that 70% of enterprises survive past their third year of creation when the promoter has more than 10 years of experience in the activity of the enterprise created or taken over. On the other hand, more than 50% of enterprises whose creator has no professional experience fail before their third year of creation. However, Ballot and Piatecki (1996) refuted the idea that professional experience is an indicator of workforce quality. They put forward two arguments: (i) changes in professional activities contribute to the devaluation of experience, and (ii) in a context of technological change, training and experience gradually become obsolete. In this context, new contractors, even those with less experience, gain advantages.

The age of the entrepreneur significantly influences entrepreneurial discontinuity; indeed, SMEs run by non-young people are relatively less likely to disappear. This result is in line with that of Fabre & Kerjose (2006) who found that entrepreneurs between the ages of 30 and 40 are 1.5 times more successful in terms of entrepreneurial survival than those under 30. On the other hand, the age of the entrepreneur does not significantly influence their entrepreneurial dissatisfaction.

Table 3. Results of the recursive bivariate probit model

	Model 1			Model 2			Model 3		
	Wald chi2(18) = 1042.88*** Log likelihood = -3129.586			Wald chi2(14) = 1026.16*** Log likelihood = -3130.366			Wald chi2(10) = 1040.77*** Log likelihood = -3137.993		
	Coefficient	Standard deviation	P>z	Coefficient	Standard deviation	P>z	Coefficient	Standard deviation	P>z
Equation of the determinants of entrepreneurial discontinuity									
DEFE	0,149**	0,058	0,011	0,152***	0,058	0,009	0,144**	0,058	0,014
EXP	0,120**	0,050	0,016	0,125**	0,049	0,011	0,119**	0,049	0,015
DCPME	0,298***	0,077	0,000	0,299***	0,077	0,000	0,313***	0,077	0,000
EPMC	0,654***	0,048	0,000	0,658***	0,048	0,000	0,667***	0,048	0,000
DAC	0,390***	0,059	0,000	0,393***	0,059	0,000	0,406***	0,058	0,000
DOG	0,012	0,087	0,889	0,013	0,087	0,882			
TRIT	0,249***	0,077	0,001	0,239***	0,076	0,002			
SEX	-0,048	0,047	0,309						
EDU	0,021	0,047	0,650						
Cons	0,139	0,096	0,148	0,120	0,090	0,183	0,137	0,089	0,127
Equation of the determinants of entrepreneurial dissatisfaction									
DISE	2,259***	0,203	0,000	2,247***	0,208	0,000	2,286***	0,204	0,000
DEFE	-0,006	0,068	0,930	-0,005	0,068	0,935	-0,013	0,067	0,843
DCPME	0,086	0,089	0,331	0,087	0,089	0,329	0,086	0,088	0,328
EPMC	0,456***	0,075	0,000	0,456***	0,076	0,000	0,453***	0,076	0,000
DAC	0,263***	0,075	0,001	0,263***	0,075	0,000	0,278***	0,075	0,000
DOG	0,191*	0,110	0,084	0,193*	0,110	0,081			
TRIT	0,048	0,090	0,594	0,050	0,089	0,569			
SEX	0,020	0,054	0,703						
EDU	-0,037	0,053	0,490						
Cons	-0,960***	0,168	0,000	-0,958***	0,166	0,000	-0,970***	0,165	0,000
athrho	-0,535***	0,171	0,002	-0,525***	0,173	0,002	-0,557	0,176	0,002
rho	-0,489	0,130		-0,481	0,133		-0,506	0,131	
LR test of rho=0	chi2(1) = 5.302**			chi2(1) = 4.918**			chi2(1) = 5.191**		

NB: *, ** and *** represent significance at 10%, 5% and 1% respectively

6. CONCLUSION

The entrepreneurial success of informal production units is of paramount importance for sustainability of jobs, poverty reduction and the reduction of income inequalities in Cameroon. This

study (i) examines the interactions between entrepreneurial discontinuity, economic failure and entrepreneurial dissatisfaction, and (ii) analyzes the explanatory factors of entrepreneurial failure of non-agricultural production units in the informal sector of Cameroon. As a methodology, a recursive bivariate probit model was applied to a sample of 4432 IPU's from the second phase of the Cameroon Employment and Informal Sector Survey (INS, 2010).

The results of the econometric estimations find that entrepreneurial discontinuity and entrepreneurial dissatisfaction interact with each other, thus defeating the integrative approach to entrepreneurial failure proposed by Smida & Khelil (2010). The risk of entrepreneurial demise significantly drives entrepreneurial dissatisfaction. Moreover, economic failure, professional experience, lack of opportunities, strong regulation and taxation of economic activities and difficulties in accessing bank credit, all significantly influence the risk of disappearance of IPU's. Furthermore, promoters of IPU's facing difficulties in the managing their activities, accessing bank credit and selling their products due to a lack of customers are likely to suffer from entrepreneurial dissatisfaction. Finally, non-motivation, professional experience and age of the entrepreneur have mixed effects on entrepreneurial failure.

In view of our empirical observations, it is not necessary to use both dimensions of entrepreneurial failure simultaneously to make a good analysis in the informal sector in order to curb the entrepreneurial failure of IPU's in Cameroon. Furthermore, actions should be taken to improve the access of IPU's to financing and markets.

7. ENDNOTES

[1] The variable to be explained and the explanatory variable.

[2] Read (Lollivier, 2001)

[3] See Brunet & Havet (2009)

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