
INFORMAL ENTREPRENEURIAL FORMALIZATION FOR MIGRANTS: DETERMINANTS AND EFFECTS ON JOBS CREATION IN CÔTE D'IVOIRE.

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ABSTRACT: *This paper analyses the determinants behind the formalization of immigrants' informal entrepreneurship in Cote d'Ivoire and its effects on jobs creation. The data cover 400 informal business from the CAPEC/IDRC enterprises survey. The estimation of an instrumental variable model highlights, on the one hand, the barriers to formalisation and, on the other hand, the levers of formalisation. It emerges that taxes, the cost of registration, the ignorance of declaration procedures, family workforce and the narrowness of the market are the constraints to the formalization of immigrants' entrepreneurship. On the other side, membership of a professional association, simplification of procedures and access to formal credit boost formalisation. In the same token procedures popularization and costs reduction are factors of formalization propulsion. However, the problem of access to the market is exclusively relevant for immigrants. Furthermore, the results show that the provision of formalisation increases jobs creation.*

KEY WORDS: Informal entrepreneurial, formalization, migrants, determinants, jobs creation

RESUME : Ce papier analyse les facteurs de la formalisation de l'entrepreneuriat informel des immigrants en Côte d'Ivoire et son effet sur les prévisions d'emplois. Les données portent sur 400 entreprises informelles issues de l'enquête entreprises CAPEC/CRDI . L'estimation d'un modèle à variable instrumentale, met en évidence d'une part les barrières de la formalisation et d'autre part, les leviers de la formalisation. Il ressort que les taxes, le coût d'enregistrement, l'ignorance des procédures de déclaration, la main d'œuvre familiale et l'étroitesse du marché sont des contraintes à la formalisation chez les immigrants. Par contre, l'affiliation à une association professionnelle, la simplification des procédures, l'accès au crédit formel boostent la formalisation. De même, la vulgarisation des procédures et la réduction des coûts de la légalité sont gages de la formalisation. Mais, le problème d'accès au marché est exclusivement pertinent chez les immigrants. Par ailleurs, les résultats montrent que la disposition de formalisation accroît la création d'emplois.

MOTS CLES : Entrepreneuriat, immigrants, Formalisation, Création d'emplois, Côte d'Ivoire

INTRODUCTION

The massive presence of foreign populations¹ in Côte d'Ivoire is mainly due to economic reasons. The country holds one of the highest immigration rates (9.6%) in West Africa in 2015 (OECD/ILO, 2018). This high immigration was the result of a policy intended and maintained by the colonial government and local political and economic leaders of the time for the development of the plantation economy. This economy was essentially owned by immigrants, but due to the land crisis, there has been a gradual transfer of immigrants from the plantation

¹ Their share in the active population rose successively from 8% in 1965 to 18% in 1980 and to 24% in 1992 (RGPH, 1998) and is 24.2% in 2014 (RGPH, 2014) .

economy to urban activities, leading to the development of informal entrepreneurship (Soko, 2011).

Today, the informal sector is the best way for immigrants to integrate society, live and survive in urban areas (Déblé and Hugon, 1982). As Soko indicated, non-Ivorian informal entrepreneurs would represent 60% in 2010 (Soko, 2011). According to an INS in 2002, the gross activity rate among immigrants is 60%, which indicates that immigrants move primarily for work reasons, in search of better living conditions.

According to the conclusions of the OECD/ILO report (2018), immigrants have a higher labour force participation rate and a lower unemployment rate, and their labour income is on average fairly comparable to that of natives. They also generate more value added than their percentage of the population and their presence seems to increase the productivity of informal enterprises. In spite of this excellent position, these immigrants work in the informal sector for which very often no tax declarations are made (INS, 2005). Moreover, the net direct tax contribution of immigrants is comparatively lower than that of natives. In other words, people born outside Côte d'Ivoire (immigrants) pay relatively less tax (OECD/ILO, 2018).

That low tax effort contrasts with the profits that those immigrants could make from entrepreneurial activity compared to natives. That is why this article seeks to determine the levers that could help these "stowaways" declare their businesses in order to contribute more to the tax revenue of the State budget. This is a central concern for the government, since among many reasons, the fiscal objective is at the heart of the motivations of formalization programs and policies, followed by the creation of decent jobs.

Faced with growing unemployment, the entrepreneurial solution remains the option chosen by public authorities a way out. However, there is a predominance of informal entrepreneurship, which is only just developing in Côte d'Ivoire. Therefore, the need to analyse the effects of immigrant entrepreneurship formalization on employment forecasts becomes significant.

As a prelude to this analysis, the article focuses on the analysis of the immigrant entrepreneurship formalization determinants. Most studies focused on analysing formalization factors globally, but the current work disaggregates the involved population by distinguishing immigrant entrepreneurs from non-immigrant entrepreneurs. In addition, no study to our knowledge, particularly in Côte d'Ivoire, has analysed the effects of formalization on employment forecasts, let alone from a comparative perspective. That is why the comparative approach of the determinants, the investigation of the link between formalization and job creation, constitute an essential added value of this work.

To analyze the factors of formalization, the study uses an instrumental variable Probit model, whose estimation is based on 400 informal enterprises. Likewise, the modelling allows to determine the correlation and highlight the effects of formalization on employment forecasts, under the assumptions that (i) ignorance of procedures and the level of taxes are the barriers to formalization of immigrants' businesses, (ii) formalization has a reducing effect on employment forecasts among immigrants.

The first hypothesis is based on the analysis of the structuralist school, which postulates that non-registration appears to be independent of the operators' will and is largely the result of administrative, economic, fiscal, social and geographical constraints (Feige, 1990). As for the second hypothesis, it is based on the legalistic view which perceives formalization as a counter-

performance factor (De Soto, 1994). The study is in three parts. After the introduction, the first part deals with understanding migrant entrepreneurship in the informal economy. The second part indicates the methodological approach. As for the third part, it is devoted to results presentation and interpretation. Finally, a conclusion and economic policy implications are indicated at the end of the paper.

1. From constraints to formalization and job creation factors

Reasons for non-registration

Information asymmetry is one of the important reasons for the non-registration of companies. According to Ouédraogo and al (2011), uncertainty is one of the important drivers of entrepreneurial development in the future. Similarly, information asymmetry will have a decisive influence on the future of human activities more generally. These two concepts will take on a more pronounced character in the world of the informal sector. These two concepts are often associated with those of risk and hope (LeRoy and Singell, 1987).

For them, just as uncertainty about the future can generate risk-averse or risk-averse behaviour, information asymmetry will contribute to influencing the degree of expectation of entrepreneurs. In the same sense, information asymmetry was identified in the Congo by foreign entrepreneurs located in the towns as an obstacle to formalization. They claim to lack relevant information on business regulations. The analysis of certain variables of information governance validates this assertion. The culture of accountability for the responsibilities assumed is also unknown to the Congolese tax administration (Mouko, 2015).

Thus, the insufficiency or the lack of information on business regulations and the ignorance of the use of taxes confine migrant entrepreneurs to the informal sector. For Mouko, the lack of information on regulations is linked to the location of SMEs and the nationality of microentrepreneurs. Compared to natives, migrant micro-entrepreneurs will mention the lack of information on business regulations as an obstacle to formalization. In addition, the larger the MSME is, in terms of capital, and uses strong ties to sell and buy in remote and structured markets, the more microentrepreneurs mention the lack of knowledge about the use of taxes.

Some authors, focusing on firm features highlight the importance of size in explaining formalization. For Levenson and al (1998), the decision to formalize the firm depends on its size. He obtained this result in the case of a study of Mexican microenterprises. In the same sense, McKenzie and Woodruff (2006) argue that the formalization of microenterprises is not relevant. This argument is reinforced by Rakotomanana (2009), who shows in the case of Madagascar that the heads of more "visible" establishments are much more likely to want to regularize entries in administrative registers. As far as gender is concerned, Fomba (2013) shows in the case of Cameroon that being a female entrepreneur increases by 2.8% the probability of a business being partially formal. In the same vein, results obtained by Rakotomanana (2009) in Madagascar show that male operators have a greater propensity to want to regulate themselves than women. Regarding the level of education, Tegoum (2012) shows that the probability of integrating the informal sector decreases with the level of education.

On this question of institutional constraints, Farrell (2004) attributes the informality of the firm to administrative burdens. Furthermore, Fajnzylber and al (2006) and Johnson et al, (2000) show that exacerbated corruption can discourage the registration of informal activities. They

note that in countries with high levels of corruption, entrepreneurs may choose to operate outside of regulation. However, with respect to corruption, Lavallée and Roubaud (2012) show that, overall, few informal businesses are affected by corruption in West Africa. Furthermore, Branstetter et al (2010) and Bruhn (2011) show that lighter regulation on market penetration leads to an increase in the number of business registrations.

Regarding the business environment, Ingram and al. (2007), tested a Probit model from which they show that the perception of constraints in the business environment determines the choice of firms to evolve in the formal or informal sector. In the same vein, Gelb et al. (2009) also find that firms opt for formality when access to public services and credit is favourable and when regulations on tax payment and firm registration are rigorously enforced.

Similar results have been obtained in other studies. For example, Bettcher, Friedl and Marini (2009) showed that the simplification of business licensing procedures in Peru led to a 120% increase in the number of registered companies between 1993 and 1996. Similarly, Klapper et al (2007) find that the simplification of business registration through electronic procedures in Guatemala, Sri Lanka and Jordan increased registrations by more than 20%.

Formalization in relation to job creation

The empirical link between formalization is almost non-existent in literature, although some have addressed it theoretically. According to the OECD (2017), reforms related to firm creation can help increase the number of registered firms, with a good cost-benefit ratio in terms of additional income and job creation. Conversely, using a database of firms in Western and Eastern Europe, Klapper and al. (2006) show that regulatory barriers hinder the creation of new firms, discourage the entry of small firms and slow down the growth of large firms, which grow less rapidly. In addition, an inadequate structure of the labor market that prevents SMEs from developing their potential is an impediment to growth and job creation in SMEs. While it is recognized that there is a close relationship between SME growth and job creation, these two components rhyme with the formalization of informal enterprises.

From this perspective, the "legalistic" school, notably popularized by De Soto (1989), considers that the informal sector is made up of micro-entrepreneurs trying to escape the costs and responsibilities of formal registration. The monetary and temporal costs stifle private enterprise and drive it underground. As long as the costs of formalization outweigh the benefits, economic agents continue to choose informality. For this trend of thought, regulatory reforms, including property rights, and tax costs are the only means of combating informality. Indeed, Tybout (2000) describes how small firms are encouraged to remain small and informal in order to avoid taxes. On the other hand, medium-sized firms have incentives to grow in order to become large enough.

Using firm survey data for Argentina, Bolivia, Colombia, Mexico, Panama, Peru, and Uruguay, Perry et al. (2007) found that labor regulations had a significant impact on their hiring and firing decisions in the previous year. For pooled sample, they find that firms constrained by labor regulations avoid a larger fraction of taxes or social security contributions.

Authors such as De Paula and Scheinkman (2007), Perry and al. (2007), and Jütting et al. (2008) argue that in countries with underdeveloped social safety nets, workers will value formal jobs with benefits less, especially if these jobs involve less flexibility and more taxation. In addition, Perry et al. (2007) indicate that in Latin America in households where one member already has

a job with benefits that typically cover dependents, there may be strong incentives for others to opt for informal employment.

According to Boeri and Garibaldi (2006), the formal sector is supposed to provide with unemployment insurance which is still not yet done. Thus, the application of the law leads to the destruction of jobs (Fugazza and Jacques 2004). Empirical evidence from Loayza and Rigolini (2006), shows also that policy changes aimed at reducing the size of the informal sector, can have negative effects on formal employment, average productivity and wages. For example, increasing redundancy taxes in formal sector leads to more formal employment but lower overall productivity.

METHODOLOGICAL APPROACH

The analysis is exclusively quantitative. It is based on a literature review, descriptive statistics and econometric modeling based on survey data.

Data

The data used in this analysis is based on a sample of 400 informal sector firms from the cities of Abidjan, San Pedro, and Daloa. These towns were selected on a reasoned basis. Indeed, they constitute the first three cities with many more firms at the time of the survey. The study sample was based on information provided by the municipal authorities and the INS (National Institute of Statistics).

Regarding the concentration of economic activities, a list of municipalities/districts with a high concentration of IPU was drawn up. In fact, in Abidjan six districts have been selected. In each districts two Enumeration Zones (EZ) were drawn using the mapping provided by the INS. For the cities of Daloa and San-Pedro, three districts were respectively selected with the help of the municipal authorities. These data were collected from companies in the informal sector from November 07th, 2013 to November 30th, 2014.

The methodology used is based on a logistics-type behavioral model. It is designed to analyze the factors that can influence, all things being equal, the probability that an entrepreneur shows the willingness to register his or her informal business in the various state registers (taxes, CNPS, trade register etc..). In addition, the second step of the regression allows us to highlight the effects of formalization on job creation.

Model

The purpose of modelling is to estimate the effect of formalization on job creation for both immigrants and non-immigrants. This modelling requires pre-estimate tests and the description of variables for model specification.

Chi2 independence test

Chi2 independence test measures the effect of training of informal enterprises on job creation. Before an in-depth analysis on this issue, it is essential to ensure that there is a significant link between these two variables. The chi2 independence test is then necessary.

We formulate the following two hypotheses:

- Null hypothesis H_0 : There is no link between the willingness of firms to formalize and the intentions of job creation (independence);

- Alternative hypothesis H_1 : There is a link between the willingness of companies to formalize and the intentions of job creation (dependency).

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Table 1: Relationship between Formalization Provision and Recruitment Intentions

Formalization provision	Employment forecasts		Total
	Yes		
	Number of jobs	Employees Frequency (%)	
Yes	78	27.76	281
No	12	11.43	105
Total	90	23.32	386

Source: Author using survey data

The conditions of validities of a Chi2 test being verified according to table 1, then the test carried out shows that: Pearson $\chi^2(2) = 10.4208$ and P-value = 0.005. The statistic of the Chi2 test with two (02) degrees of freedom, calculated between the variables willingness to formalize and job creation gives $\chi^2(2) = 10.4208$. The value of the $\chi^2(2)$ of the table at the 95% confidence level is 5.9915.

Moreover P-value = 0.005 < 0.05. Thus we reject the null hypothesis of independence. Thus there is a possible link between the willingness of firms to formalize and job creation. We use anticipated employment as a proxy for job creation.

Variables of interest and choice of instrument

The definition of a migrant worker differs from that of an immigrant. The International Convention on the Protection of the Rights of All Migrant Workers and Members of Their Families defines the term "migrant worker". Article 2, refers to "people who are going to engage, are engaged or have engaged in a remunerated activity in a State of which they are not nationals" (United Nations, 1990). Thus, we refer to "informal immigrant entrepreneurs" as any person engaged in a profit-making activity in the informal sector in Côte d'Ivoire. The informal sector, which is the part of the economy composed of companies essentially characterized by the absence of a Tax Declaration of Existence (DFE), a CNPS number, a trade register and a formal accounting system that complies with OHADA standards. However, the majority of them pay the flat-rate tax due to the municipalities.

Employment forecasts is our dependent variable apprehended by the anticipated volume of jobs, which is the expression of recruitment intentions. It is measured by a binary variable taking the value 1 if the contractor plans to recruit and 0 if not. As for the formalization disposition of firms, it is our independent variable of interest. It is also measured by a binary variable taking the value 1 if the entrepreneur is willing to formalize his business and 0 otherwise. Its endogeneity is controlled using an instrumental variable model that instruments it with a discrete variable showing the entrepreneur's perception of registration procedures. This latter variable takes the value 0 if the procedures are perceived as easy, 1 as moderate, 2 as difficult and 3 as inapplicable.

Finally, we coded this variable as follows: (i) registration procedures are considered simple if they are easy and/or moderate; (ii) registration procedures are considered complicated if they are difficult and/or inapplicable.

Registration Procedures	=0 if the procedures are considered simple
	=1 if the procedures are considered complicated

The rejection of the null hypothesis of the Durbin-Wu-Hausman endogeneity test proves that endogeneity exists and that the use of the instrumental approach is necessary. The exclusive restriction condition suggested by the instrumental approach ensures that the simplicity of the registration procedures has no effect on the volume of employment anticipated by entrepreneurs other than that induced through their effect on the firm's formalization provision. From a statistical point of view, the existing correlations between these three variables show that our instrumental variable meets this condition.

Table 2: Correlation matrix between the three variables

	Intention to create jobs	Provision for formalization	Simplicity of procedures
Intention to create jobs	1.0000		
Formalization provision	-0.0690	1.0000	
Simplicity of procedures	0.0790	0.1039	1.0000

Source: Author using survey data.

From an economic point of view, this instrument depends on the personal judgement of the entrepreneur determined upstream and therefore has no direct effect on the operating process of the company and its readiness to create jobs.

Variables codification

The explained and explanatory variables used in our regressions are binary variables. The coding method is explained in Table 3. These variables related to our variables of interest, the characteristics of the entrepreneur and the firm, and those relating to the business environment.

Table 3: Model variables

VARIABLES		CODING OF VARIABLES
Explained Variables	job creation	=1 if the contractor plans to recruit by the end of the survey year. =0 if he does not intend to recruit
	formalization provision	=1 if the entrepreneur is willing to formalize his business =0 if not
Instrumental variable to control endogeneity	Perceived simplification of procedures	=0 if the contractor perceives the procedures as simple =1 if no
EXPLANATORY VARIABLES	Technical training	=1 if the manager has received a technical formality relating to the sector of activity carried out = 0 if not
	Experience	=1 if the manager had experience before running the company = 0 if not

Membership in a professional association	=1 if the company is affiliated with a professional association = 0 otherwise
Use of family labor	= 1 if the business uses family labour = 0 if not
Ignorance of formalization procedures	=1 if the manager ignores the formalization procedures. = 0 if not
Collection of tax levels	=1 if the manager considers the taxes to be high = 0 if not
Collection of registration fee	=1 if the manager considers the registration costs to be high = 0 if not
Access to basic infrastructure	=1 if the company has access to water and electricity =0 if not
Access to formal credit	=1 if the firm has access to formal credit = 0 otherwise
Perception of corruption	=1 If the manager considers that corruption is amplified = 0 if otherwise (moderate)
Clientele	= 1 if the manager has a customer problem =0 if not

Econometric model specification

Designated by Y_i our dependent study variable (intention to create jobs). This variable is defined for N firms ($i=...N$).

Thus, we want to measure the effect of formalization on job creation intentions. Each company shows a willingness or unwillingness to the idea of formalization. We therefore designate by X_i the independent variable of interest representing the company's formalization provision.

We use a two-step Probit model to control the endogeneity of our explanatory variable of interest X_i which is instrumented by the simplification of company procedures.

We use a variable T which includes the effects of several other explanatory variables concerning the characteristics of the manager, those of the company and the business environment.

The first step is to regress our endogenous variable (X_i).

$$X_i = \alpha_0 + \alpha_1 T_i + \varepsilon_i \text{ où } \text{cov}(T_i, \varepsilon_i) = 0 \quad (1)$$

From this equation, we obtain the estimated variable \hat{X}_i which we then introduce in the second stage of estimation.

$$Y_i = \beta_0 + \beta_1 \hat{X}_i + \beta_2 Z + u_i \quad (2)$$

With Z including all these explanatory variables in this model.

Then, the coefficients β_0 , β_1 and β_2 . The results indicate the effect of the formalization provision on job creation intentions, controlling for the effect of these other explanatory variables.

Then, the resulting coefficients β_0 , β_1 and β_2 indicate the effect of the formalization provision on expected employment, controlling for the effect of these other explanatory variables.

RESULTS

Formalization Provision and Employment Forecasts

Table 4: Relationship between Formalization Provision and Employment Expectations

FORMALIZATION AND JOB FORECASTS	FREQUENCES
Proportion of companies in favour of formalization and willing to create jobs	27%
Proportion of companies willing to become formalized	72%
Proportion of immigrant-run businesses in favour of formalization	63%
Proportion of non-immigrant businesses that support formalization	73%
Anticipated employment volume for the following year	495
Proportion of anticipated employment of companies willing to formalize	72,27%
Proportion of employment in companies reluctant to formalize	27,27%

Source: Author based on survey data

Generally speaking, 27.76% of the firms in favour of formalization are willing to create jobs, compared with less than half (11.43%) of those firms reluctant to training that are in favour of formalization. It appears that firms in the study sample expect to create 495 jobs. The volume of employment anticipated by companies willing to formalize is estimated at 360 jobs the following year, or 72.27%. On the other hand, those that do not show any willingness to formalize anticipate 135 jobs. This represents 27.27% of the expected jobs. The results also indicate that 63% of the companies run by immigrants are willing to formalize while this rate represents 73% among non-immigrants.

Barriers to barriers to immigrants' businesses formalization

Table 5. Barriers to Formalizing Immigrant Businesses

Barriers to formalization	Immigrant	Non-immigrant
Complicated procedures	16,49	22,77
High cost of formalization	13,40	21,78
In the process of formalization	9,28	8,58
Do not find interest in formalizing	16,49	19,14
High taxes	13,40	12,54
Ignorance of registration procedures	46,39	34,32
Emerging Business Case	6,19	9,90
Weakness of the clientele	28,87	30,03
Lack of experience	4,12	9,24
Already pays for the patent at the town hall.	21,65	15,51
Room problem	12,37	8,91
Other reasons	6,19	4,95

Ignorance of procedures is the barrier which is more common to immigrant than to non-migrant, but more important among immigrants (46.39%) than among non-immigrants (34.32%). This barrier is followed by the low level of clientele in both populations. Contrary to ignorance of procedures, the weakness of the clientele is more frequent as a barrier to formalization among immigrants (30%) compared to 28.87% among non-immigrants. In addition, More non-immigrant companies (22.87%) complain about the procedures of creation while 16.49% of immigrant companies find these procedures complicated. It also appears that 16.49% of immigrants do not perceive the interest of formalization, this rate is higher among non-immigrants and is 19.14%.

Regarding taxes, 21.65% of the immigrants consider that they already pay the patent, therefore they do not feel concerned by the formalization of businesses, this rate represents only 15.51% among non-migrants. Immigrants have more problems with local (12.37%) compared to only 8.91%. Conversely, a higher proportion of non-immigrants (21.78%) consider the cost of registration as an obstacle to formalization. This rate is only 13.40% among immigrants.

Determinants in the formalization of companies

These results from the econometric regression will be interpreted at the 5% and 1% thresholds.

Table 6. Determinants of Formalization among Immigrants

	TOGETHER	IMMIGRANT	NON- IMMIGRANT
Simplification of Registration Procedures	0,514 (2,14)**	507 (2,03)**	0,556 (2,37)** +
Technical training	0,281 (1,38)*	0,314 (1,62)*	0,234 (1,18)* +
Membership in a professional association	0,494 (2,13)**	0,241 (1,56)*	0,508 (2,30)** +
Does not use family labour	0,327 (1,88)**	0,294 (1,68)*	0,342 (1,94)** +
Ignorance of creation procedures	-0,536 (-2,28)**	-0,624 (-2,79)**	-0,558 (-2,46)** -
Perception of High Taxes	-0,446 (-2,16)**	-0,418 (-2,02)**	-0,507 (-2,69)** -
Perception of high registration costs	-0,452 (-2,22)**	-0,424 (-2,08)**	-0,478 (-2,36)** -
Access to basic infrastructure	0,302 (1,60)*	0,245 (1,34)*	0,387 (1,89)** +
Access to formal credit	0,456 (2,23) **	0,398 (1,93)**	0,482 (2,37)** +
Moderate corruption	0,324 (1,87)**	0,232 (1,42)*	0,314 (1,68)*
Customer Problem	- 0,324 (1,64)*	-0,361 (-1,82)**	-0,302 (-1,46)* -
Pseudo R2	0,1184	0,1074	0,1224 +
N	400	97	303

Source: Author based on survey data.

Note that : ***; ** and * reflect significance at 1%; 5% and 10% respectively. The t- students are in brackets.

Interpretation of results of the entire population

Generally these results show that simplified registration procedures, membership in a professional association, access to formal credit, moderate corruption, and the fact that the entrepreneur does not recruit family workforce boosts the willingness to formalize entrepreneurship. However, ignorance of procedures, high taxes, and high registration costs slow down formalization.

Thus, simplifying registration procedures, affiliation with professional associations, access to formal credit, fighting corruption, and enrolling family workforce in professional labour relations would be essential to formalizing informal entrepreneurship. Similarly, disclosure of procedures and reducing the costs of legality would encourage formalization.

Benchmarking

Disaggregating according to migration status, the results show that the membership of firms in a professional association and the recruitment of a workforce other than family workers significantly increase the propensity of non-immigrant firms to formalize by 0.51% and 0.34%, respectively, at the 5% threshold. But these factors are not relevant in explaining formalization among immigrants because immigrants are very attached to social ties. They consider work relationship as a social one that must be consolidated outside of any labor legislation in force. Thus, they will prefer family business networks or networks woven with fellow citizens at the expense of umbrella companies and other groups recognized or instituted by the host country.

Moreover, the use of family workforce through forced solidarity could not only constitute a burden in terms of performance, but also and above all an unfavorable channel for the declaration of workers because of affinities. Indeed, social ties can play both positively (if networks help to compensate for imperfections in the labour and capital markets) or negatively in the case of forced solidarity imposed within the family (Grimm et al., 2012).

Furthermore, the client base is a relevant factor in explaining the formalization of informal immigrant entrepreneurship. Indeed, a low client base has a negative effect on the willingness to formalize exclusively among immigrants. It lowers the propensity of immigrants to formalize their businesses by 0.36% compared to those with a large clientele. In fact, a weak client base is associated with low levels of sales, which could jeopardize the payment of formalization costs due to financial constraints on the business. However, the low client base has a negative effect on the willingness to formalize exclusively among immigrants. Non-immigrants would have the advantage, due to their socialization, of retaining a considerable clientele or using their social capital in public administration to access markets.

Immigrants' specificities

Certainly from an economic rationality point of view, the decision to formalize is the result of a comparison between costs and benefits according to the analysis of La Porta and Schleifer (2008), but historical factors tend to explain the reluctance of immigrants to deal with the tax authorities in the absence of compensatory income.

In fact, the capitation tax and the use of benefits (days of work owed by each indigenous person to the administration) and then forced labor were among the first measures taken by metropolitan France before the dismemberment of the high volta in 1932. The collection of this tax subsequently provoked a real flight of Burkinabè to the Gold Coast (Ghana). They thus hoped to be able to obtain from the British colony, more easily than in Côte d'Ivoire, the monetary income necessary to pay the tax by selling their labour force (Coulibaly, 1986).

To this economic constraint would be added institutional constraints according to the "legalistic" approach, such as ignorance of reporting procedures, which significantly and negatively affects the probability of formalization. Beyond the ignorance of procedures, registration costs would seem to be more important for immigrants. In fact, non-nationals are required to have a consular card, the acquisition of which requires in terms of procedures, documents to be provided and cost² (Traoré, 2018). All of these requirements contribute to the low propensity of businesses to report. This is understandable in the context of Côte d'Ivoire, where migrants from the south predominate in the informal sector (Soko, 2011). This would push informal entrepreneurs to not declare themselves to escape overly restrictive legislations. As for corruption, it explains the retention of entrepreneurs in the informal sector as shown by Friedman et al (2000) and Johnson et al, (2000). However, this study shows that when corruption becomes moderate, entrepreneurs opt for legality. Strict enforcement of existing legislation would be a deterrent for immigrants, but on the other hand, exacerbated corruption could be a source of informality in immigrant entrepreneurship.

Ultimately, this comparative analysis shows that immigrants and non-immigrants all face three important institutional constraints, namely, information asymmetry, the costs of becoming formal, and the costs of legality. However, the difficulties of immigrants' access to markets remain the exclusively essential challenge to be met to boost the formalization of immigrant entrepreneurship in Côte d'Ivoire.

Formalization and job forecasts

Table 7: Effects of Formalization on Employment Projections

EXPLANATORY VARIABLES	EMPLOYMENT FORECASTS			SIGN
	TOGETHER	IMMIGRANT	NON-IMMIGRANT	
Estimated formalization	0,425 (2,08)**	0,392 (1,79)**	0,524 (2,56)**	+
Membership in a professional association	0,384 (2,02)**	0,292 (1,94)**	0,414 (2,54)**	+
Does not use family labour	0,374 (1,86)**	0,315 (1,64)*	0,352 (1,78)**	+
Perception of High Taxes	-0,232 (-1,42)*	-0,284 (-1,56)*	-0,358 (-1,90)**	-
Access to formal credit	0,483 (2,32) **	0,386 (1,79)**	0,496 (2,62)**	+
Customer Problem	-0,424 (-2,42)**	-0,386 (-2,03)**	-0,480 (-2,54)**	-
Pseudo R2	0,1062	0,1051	0,1075	+
N	400	97	303	

Source: Author from data

The link between formalization provision and employment forecasts

The data in Table 7 indicate a positive effect of formalization provision on employment forecasts. Indeed, when the entrepreneur is willing to formalize his or her business, this has the effect of significantly increasing his or her propensity to recruit by 42.5%. This rate represents 39.2% among immigrants and 52.4% among non-immigrants. This result seems counterintuitive as the study predicted a negative effect on employment forecasts.

² Lists of documents for Mali consular card: (i) Copy of the old national (consular) identity card or NINA card or copy of the Malian passport or Malian birth certificate, (ii) A duly completed form (to be downloaded below), (iii) 2 passport photos, (iv) \$40 (check made out to the Embassy of Mali). <http://www.ambamali.ca/carteconsul.html>

The effect of formalization provision on employment forecasts is greater for non-immigrants than for immigrants. This difference of 13.2% could have at least two explanations: (i) it can be explained by the transfer of money from migrants, which can compromise the reinvestment capacity of the firm, or (ii) by the fact that these immigrants opt for investments in countries other than the host country. In this case, not all the effects of formalization will be felt in the local economy.

Effect of Control Variables on Employment Forecasts

At the end of the analysis, it appears that, in addition to the formalization provision, certain control variables such as membership in a professional association and access to formal credit increase the propensity for job creation for the entire population. However, the market narrowness has a reducing effect on job forecasts. Similarly, the perception of high taxes lowers the probability of job creation. However, this variable would not seem relevant in the case of immigrants for the latter do not generally integrate the formalization of their business creation project into their business creation project, very often because of the transitory nature of their migration project.

Clearly, these immigrants work in this sector for which very often no tax declaration is made (INS, 2005). Their direct net tax contribution is comparatively lower than that of natives (OECD/ILO, 2018). These immigrants behave like "stowaways" until they are forced to declare themselves.

CONCLUSION AND IMPLICATIONS

Informal entrepreneurship presents itself in Côte d'Ivoire as the preferred mode of insertion for workers to self-employ. But, all the opportunities of job are found in the informal sector. Thus, its formalization, which is analyzed in this paper, remains a central concern of public authorities. Using an instrumental variable model, the study shows that the simplification of registration procedures, membership in a professional association, access to formal credit, the fight against corruption, and the registration of family workforce in professional relationships are the guarantees of formalization regardless of the type of entrepreneur considered. However, ignorance of procedures, high taxes, and high registration costs discourage formalization. Thus, the hypothesis that ignorance of procedures and the high level of taxes are barriers to formalization is verified.

Furthermore, the results indicate a positive effect of the formalization provision on employment forecasts. This result seems counter-intuitive. It thus calls into question the hypothesis of a reducing effect of the formalization provision on job forecasts. Therefore, formalization and job creation would not be antinomic objectives. If, in addition to the formalization provision, certain factors such as membership of a professional association and access to formal credit increase the propensity for job creation for the entire study population, the problem of clientele has, however, a reducing effect on job forecasts. It also appears that the perception of high taxes significantly lowers the probability of job creation to the 5% threshold, exclusively among non-immigrants.

All of the above implies that formalization strategies should focus on simplifying registration procedures, membership in professional associations, and access to formal credit, combating corruption, and the inclusion of family workforce in professional employment relationships. Similarly, popularizing procedures and reducing the costs of legality would boost formalization.

Also, formalization is to be encouraged since it is accompanied by an increase in employment. Since the difficulties of immigrants' access to markets remain the most essential challenge to boost the formalization of their entrepreneurship, it is important to print targeted policies in favor of immigrants in order to make their activities more profitable for the State. This is important for countries such as Côte d'Ivoire, which is a privileged destination for south-south migration where, moreover, migration remains mainly labor migration. This article outlines the paths of possible further research on the profitability of migrant entrepreneurship in Côte d'Ivoire with regard to all investments initiated by the State to promote the private sector.

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APPENDICES

Table 8: Formalization factors of mmigrants and non-immigrants

Explanatory variables	Probit regression: Dependent variable: formalization layout		
	Together	Immigrant	Non-Immigrant
Simplification of registration procedures	0,514 (2,14)**	0,507 (2,03)**	0,556 (2,37)**
Technical training	0,281 (1,38)*	0,314 (1,62)*	0,234 (1,18)*
Experience	0,275 (1,70)*	0,182 (1,31)	0,257 (1,56)*
Membership in a professional association	0,494 (2,13)**	0,241 (1,56)*	0,508 (2,30)**
family workforce	0,327 (1,88)**	0,294 (1,68)*	0,342 (1,94)**
Ignorance of creation procedures	-0,536 (-2,28)**	-0,624 (-2,79)**	-0,558 (-2,46)**
High taxes	-0,446 (-2,16)**	-0,418 (-2,02)**	-0,507 (-2,69)**
High cost of registration	-0,452 (-2,22)**	-0,424 (-2,08)**	-0,478 (-2,36)**
Access to basic infrastructure	0,302 (1,60)*	0,245 (1,34)*	0,387 (1,89)**
Access to formal credit	0,456 (2,23)**	0,398 (1,93)**	0,482 (2,37)**
Moderate corruption	0,324 (1,87)**	0,232 (1,42)*	0,314 (1,68)*
Customer Problem	- 0,324 (1,64)*	-0,361 (-1,82)**	-0,302 (-1,46)*
Pseudo R2	0,1184	0,1074	0,1224
N	400	97	303

Table 9: Effect of Formalization on Job Creation

Explanatory variables	Regression forecasts	2sls:	Employment
	Together	Immigrant	Non-Immigrant
Estimated formalization provision	0,425 (2,08)**	0,392 (1,79)**	0,524 (2,56)**
Technical training	0,382 (1,68)*	0,364 (1,66)*	0,386 (1,70)*
Experience	0,357 (1,62)*	0,372 (1,69)*	0,354 (1,57)*
Membership in a professional association	0,384 (2,02)**	0,292 (1,94)**	0,414 (2,54)**
Labour utilization	0,374 (1,86)**	0,315 (1,64)*	0,352 (1,78)**
Ignorance of creation procedures	-0,124 (-0,98)	-0,214 (-1,12)	-0,089 (-0,57)
High taxes	-0,232 (-1,42)*	-0,284 (-1,56)*	-0,358 (-1,90)**
High cost of registration	-0,189 (-1,12)	-0,248 (-1,28)	-0,098 (-0,88)
Access to basic infrastructure	0,284 (1,51)*	0,266 (1,48)*	0,356 (1,70)*
Access to formal credit	0,483 (2,32)**	0,386 (1,79)**	0,496 (2,62)**
Moderate corruption	-0,224 (-1,06)	-0,262 (-1,38)*	-0,189 (-0,98)
Weakness of the clientele	-0,424 (-2,42)**	-0,386 (-2,03)**	-0,480 (-2,54)**
Pseudo R2	0,1062	0,1051	0,1075
N	400	97	303