

Formalization and institutional trust: the role of institutional trust in formalizing Morocco's informal economy

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Abstract: The informal economy represents a major component of economic activities in many developing countries, including Morocco. Formalizing this economy is important for improving social protection, broadening the tax base, and increasing productivity. However, this transition is often hindered by distrust towards formal institutions. This study examines the impact of trust in institutions on the intention to formalize informal economic activities, based on a sample of 389 informal economic actors from the Morocco. Relying on transaction theory, the study proposes that trust in institutions, perception of their quality, favorable regulations, and social norms positively influence the intention to formalize. Data were collected through interviews and analyzed using an Ordered Probit Model. The results show that trust in institutions and a positive perception of their quality significantly increase the intention to formalize. Favorable regulations also have a positive impact, although to a lesser extent. In contrast, social norms have no significant effect. Education and age also play a role, with younger and more educated individuals showing a greater inclination to formalize. These findings suggest that policies aimed at strengthening trust in institutions, improving the quality of regulations, and investing in education can encourage the formalization of informal economic activities, thereby contributing to sustainable and inclusive economic development.

Keywords: Formalization; Institutional Trust; Informal Economy; Favorable Regulations; Economic Development.

JEL Classification: O17; L26; D73; M13; P37

1. Introduction

The informal economy represents a significant portion of economic activities in many developing countries. This sector encompasses a wide range of activities that are not regulated by the state, including street vending, unregistered small businesses, informal employment in agriculture, and various forms of unreported labor. These activities often operate outside the purview of official economic policies and regulations, resulting in a lack of legal protections and social benefits for workers. Morocco is no exception, with a substantial number of economic actors conducting their activities outside the formal framework. This segment of the economy is important for many households, providing essential income and employment opportunities in a context where formal job markets may be limited or inaccessible. However, the informal nature of these activities also poses challenges, such as reduced tax revenues for

the government, limited access to credit and financial services for informal entrepreneurs, and vulnerability of workers to exploitation and poor working conditions. The prevalence of the informal economy in Morocco reflects broader socio-economic issues, including high unemployment rates, insufficient regulatory frameworks, and the need for comprehensive economic reforms to integrate these activities into the formal economy.

The transition from informal to formal is a critical issue for economic and social development. However, this transition faces several obstacles, among which distrust towards formal institutions is predominant. Trust in institutions plays an important role in the decision of informal entrepreneurs to formalize their activities. Indeed, high trust in institutions such as the government, the judicial system, and regulatory bodies can encourage economic actors to engage in formalization. Similarly, the perception of institutional quality, the clarity and accessibility of regulations, and social norms favorable to formalization are factors likely to influence this decision. This research aims to examine the impact of trust in institutions on the intention to formalize informal economic activities. Using a sample of informal economic actors from Morocco, we analyze how institutional perceptions influence their intention to formalize. This study is structured into several sections. A literature review will detail the theories and previous empirical work related to institutional trust and the formalization of informal activities. Next, we formulate the research hypotheses before presenting the methodology used, including the sample description, the econometric model adopted, and the variables studied. Finally, we will discuss the results obtained and their implications for public policies aimed at encouraging the formalization of informal economic activities in Morocco.

2. Literature review

The formalization of businesses offers significant advantages in terms of market and credit access. McKenzie and Sakho (2010) corroborated these findings by showing that formalized businesses in Bolivia enjoy higher profits due to improved access to credit and markets, allowing them to grow more rapidly and steadily. Similarly, Demenet, Razafindrakoto, and Roubaud (2016) observed that formalization allows businesses to access larger markets and financing for their growth and competitiveness. These conclusions are supported by observations from McKenzie and Sakho (2008) in Senegal, where formalized businesses also benefit from higher profits and better access to credit. Rand and Torm (2012) found similar results in Vietnam, where formalization improves economic performance and access to financing. The simplification of regulations plays an important role in promoting formalization and enhancing economic performance. Fajnzylber, Maloney, and Montes-Rojas (2011) observed a trend in Brazil where regulatory simplification led to better legal compliance by businesses, increasing revenues, profits, and employment. This regulatory simplification encourages more businesses to formalize. Monteiro and Assunção (2012) reinforced this conclusion by showing that bureaucratic simplification and tax reductions in Brazil promote the formalization of micro-enterprises, thereby improving their performance.

De Mel, McKenzie, and Woodruff (2013) noted that, despite an initially limited response to registration, fast-growing businesses in Sri Lanka significantly benefit from formalization. This underscores that although formalization may seem costly or complicated initially, the long-term benefits, especially for expanding businesses, are worthwhile. Demenet, Razafindrakoto, and Roubaud (2016) observed that formalization allows businesses to access larger markets and financing. Their study shows that formalized businesses benefit from official recognition, enabling them to establish stronger business relationships and secure external financing, thereby facilitating their growth and development. Rand and Torm (2012) found that formalization in Vietnam improved economic performance and access to financing. They noted that formalized businesses are better positioned to access financial services,

allowing them to invest in their activities and improve their competitiveness in the market. McCann and Bahl (2017) studied the impact of informal businesses on the innovation of formal businesses and found that informal businesses can limit innovation by increasing competition for resources. Their analysis indicates that the presence of a significant informal sector can reduce incentives for formal businesses to innovate due to increased competition for limited resources such as capital and skilled labor.

Trust in public institutions has a positive impact on business formalization. Assenova and Sorenson (2017) found that business formalization increased sales and employment, with amplified effects in countries where trust in public institutions is high. This implies that the perception and reality of reliable institutions play an important role in the impact of formalization on economic performance. Williams, Martinez-Perez, and Kadir (2017) also found that formalization leads to better economic performance and increased access to resources. Assenova and Sorenson (2017) additionally noted that formalized businesses in sub-Saharan Africa benefit from increased sales and employment. Thus, the formalization of informal businesses presents significant advantages for economic performance and resource access. While the specific benefits may vary depending on the institutional and geographical context, simplified regulatory frameworks and increased trust in public institutions are key factors in maximizing the benefits of formalization.

Social norms have a significant impact on participation in the formal economy. Wallace and Latcheva (2006) showed that social norms play a key role in the transition to the formal economy by influencing attitudes towards regulations. Their study in post-communist countries in Central and Eastern Europe reveals that social perceptions and attitudes towards institutions and rules can either encourage or discourage formalization. For example, if social norms value compliance and respect for laws, businesses are more likely to formalize. Charnes (2012) emphasized that informal firms represent a significant share of non-agricultural employment and GDP in emerging economies, impacting formal economic dynamics. He noted that the large size of the informal sector in these economies plays an important role in employment and production, although it can also pose challenges for tax collection and economic regulation. The formal and informal economies are interconnected in a complex manner. Webb, Bruton, Tihanyi, and Ireland (2013) found that informal businesses could compete with formal businesses, limiting their ability to grow and innovate. Their study indicates that the presence of a significant informal sector can create unfair competition for formal businesses, reducing their profit margins and their ability to invest in innovation.

However, Iriyama, Kishore, and Talukdar (2016) found that informal businesses could enhance the capabilities of formal businesses through learning and imitation. They showed that practices and innovations developed in the informal sector can be adopted by formal businesses, thereby increasing their efficiency and competitiveness. McCann and Bahl (2017) studied the impact of informal businesses on the innovation of formal businesses, noting that informal businesses can limit innovation by increasing competition for resources. Their analysis suggests that when informal businesses use limited resources, such as labor and raw materials, it can reduce the availability of these resources for formal businesses, thus hindering their ability to innovate. Therefore, social norms and the interactions between the formal and informal economies play an important role in businesses' decisions to formalize or remain informal. Social perceptions and attitudes towards institutions, as well as the competitive dynamics between the formal and informal sectors, significantly influence economic performance and business innovation strategies.

Regulations and bureaucratic obstacles are key factors in businesses' decisions to formalize. Djankov et al. (2002) found that heavy entry regulations hinder the creation and growth of formal businesses. Their study showed that high entry barriers, such as lengthy administrative procedures and high compliance

costs, discourage entrepreneurs from formalizing their businesses. Consequently, these barriers reduce economic dynamism by limiting the number of businesses that can legally operate and grow. Similarly, Loayza, Oviedo, and Servén (2005) demonstrated that heavy regulations increase informality and reduce economic growth. They observed that complex and costly regulatory frameworks push businesses to remain in the informal sector to avoid compliance costs, which negatively impacts overall economic growth by reducing business efficiency and competitiveness. Thai and Turkina (2014) showed that stricter regulations and less developed economic infrastructure increase the likelihood of informal entrepreneurship. Their study suggests that rigid regulatory frameworks and inadequate infrastructure discourage formalization and encourage entrepreneurs to operate in the informal sector.

Businesses' motivations to avoid formalization are often linked to the perception of high costs and constraints, exacerbated by low trust in institutions. De Castro, Khavul, and Bruton (2014) explored these motivations, showing that informal businesses seek to avoid the high costs of formalization and regulatory constraints. Wallace and Latcheva (2006) revealed that in post-communist countries in Central and Eastern Europe, a lack of trust in public institutions and a negative perception of institutional quality encourage participation in the informal economy. When public institutions are perceived as inefficient or corrupt, businesses prefer to operate outside the formal framework to avoid perceived costs and constraints. Dau and Cuervo-Cazurra (2014) showed that stronger pro-market institutions and better regulatory quality increase the intention to formalize. Their study indicates that when businesses perceive institutions as supporting the market and offering a favorable regulatory framework, they are more inclined to enter the formal economy. Harriss-White (2010) highlighted the role of state regulation in formalization, emphasizing that the effectiveness of state regulations heavily depends on the quality of the institutions implementing them. Even well-designed regulations can fail if they are enforced by institutions perceived as corrupt or inefficient. Levi and Sacks (2009) found that higher perceptions of institutional quality increased the intention to formalize businesses. Their research shows that trust in the quality of public institutions encourages businesses to comply with formal requirements, as they expect tangible benefits, such as access to credit and markets.

Mathias et al. (2014) added that enabling institutions like property rights reduce obstacles related to informal activities. They argue that when businesses have strong guarantees regarding their property rights, they are more likely to formalize, as this reduces the risks associated with investment and growth in the formal sector. Reforms and the simplification of procedures play an important role in encouraging formalization. Monteiro and Assunção (2012) found that bureaucratic simplification and tax reductions increased the formalization of Brazilian micro-enterprises, thereby improving their performance. Their research suggests that reforms aimed at simplifying administrative procedures and reducing the tax burden can encourage more micro-enterprises to formalize, enhancing their access to resources and markets. Rauch (1991) proposed that informality can be a rational choice for businesses to avoid bureaucratic costs and corruption. According to him, in environments where the costs of formalization are high and public institutions are perceived as corrupt, businesses may rationally choose to remain informal to minimize costs and associated risks. Thus, trust in institutions and institutional quality play an important role in business formalization. A clear regulatory framework, reliable institutions, and well-defined property rights are essential to encourage businesses to leave the informal economy and fully participate in the formal economy.

3. Methodology

3.1. Model

Trust in institutions is an important factor for encouraging the formalization of businesses operating in the informal economy. When businesses perceive institutions as reliable and efficient, they are more willing to comply with existing regulations. A positive perception of institutional quality creates an environment conducive to formalization by reassuring entrepreneurs about the support and stability offered by government structures. Additionally, regulations perceived as favorable and fair reduce the obstacles to formalization by decreasing the costs and complexity of administrative procedures. Social norms that value compliance with formal rules also play a significant role. When society values adherence to laws and formalization, it encourages businesses to integrate into the formal economy, thereby improving their access to resources and growth opportunities. Consequently, strengthening institutional trust and improving the perception of regulations is essential for promoting the transition to a formal economy. The primary objective of this study is to examine trust in institutions and its impact on the intention to formalize. To this end, we propose the following hypotheses:

- H1: Trust in institutions has a positive impact on the intention to formalize.
- H2: A positive perception of institutional quality enhances the intention to formalize.
- H3: The perception of favorable regulations is positively associated with the intention to formalize.
- H4: Social norms that encourage formalization positively influence the intention to formalize.

The sample consists of 389 economic actors engaged in informal liberal activities in the Marrakech-Safi region. Data was collected through direct interviews conducted and documented by our research team. Snowball sampling was employed in this context as it facilitates access to a population often difficult to reach due to the informal nature of their activities. This method allowed us to identify and recruit additional participants through initial recommendations, ensuring diversity and representativeness within the sample.

The model can be formulated as follows:

$$FORM_i = \beta_0 + \beta_1.TRST_i + \beta_2.INST_i + \beta_3.REGS_i + \beta_4.NORM_i + \overbrace{\gamma_1.EDUC_i + \gamma_2.AGE_i + \gamma_3.GNDR_i + \gamma_4.EXPE_i}^{control\ variables} + \epsilon_i$$

FORM (Intention to Formalize) represents the willingness of entrepreneurs to formalize their activities. This intention is measured using Likert scales ranging from 1 to 5, with the scores indicating the degree of intention to formalize. All the main explanatory variables are measured by items based on Likert scales ranging from 1 to 5. The scores are then obtained by calculating the average of the items for each main variable. TRST (Trust in Institutions) measures entrepreneurs' trust in formal institutions such as the government, the judicial system, and regulatory bodies. The questions include: To what extent do you trust the courts to resolve business disputes fairly? Do you trust the government to support business activities fairly? And do government regulations effectively protect your business?

INST (Perception of Institutional Quality) represents the subjective evaluation of the effectiveness, fairness, and transparency of public services, judicial systems, and regulations. The questions posed include: Are public services effective in their work? Are regulations applied fairly? And Are judicial systems transparent and accessible? REGS (Favorable Regulations) represents entrepreneurs' perception of the clarity, fairness, and accessibility of regulations. This perception is assessed using items based on

Likert scales covering aspects such as the simplicity of administrative processes, the transparency of regulations, and their accessibility. The questions include: Are the regulations easy to understand? Are the procedures for compliance simple and straightforward? And Are the regulations accessible and well-communicated?

NORM (Social Norms) represents the influence of cultural norms and values on entrepreneurial practices and the disposition to comply with formal regulations. The questions include: Do the social norms of your community encourage the formalization of activities? Do the cultural values support formal entrepreneurial activities? And Are informal business practices accepted by the community? In terms of control variables, EDUC (Education Level) represents the highest level of education attained by the entrepreneur, measured by a question indicating the number of years of education. AGE (Age) represents the current age of the entrepreneur. GNDR (Gender) represents the gender of the entrepreneur, with 1 for male and 0 for female. EXPE (Entrepreneurial Experience) represents the number of years of entrepreneurial experience. Table 1 represents the variables, the hypotheses they represent, and the expected direction of correlation.

Table 1: Variables, Assumptions and Expected Direction of Correlation

Variable	Hypothèse	corrélation
TRST (Trust in Institutions)	H1 : La confiance dans les institutions a un impact positif sur l'intention de se formaliser.	Positive
INST (Perception of Institutional Quality)	H2 : Une perception positive de la qualité des institutions améliore l'intention de se formaliser.	Positive
REGS (Favorable Regulations)	H3 : La perception d'une réglementation favorable est positivement associée à l'intention de se formaliser.	Positive
NORM (Social Norms)	H4 : Les normes sociales qui encouragent la formalisation influencent positivement l'intention de se formaliser.	Positive

Source: authors

3.1. Justification for the Methodology Used

The use of the Ordered Probit Model is justified by the ordinal nature of the dependent variable, which represents the intention to formalize measured on a Likert scale from 1 to 5. This ordinal scale necessitates a method of analysis that respects the order of the categories without assuming equal distances between them. The Ordered Probit Model is designed to handle such ordered data, providing a suitable approach for research hypotheses that pose relationships between subjective perceptions and the intention to formalize. The Ordered Probit Model uses the cumulative normal distribution to estimate the probabilities of the different categories of the dependent variable. This approach is appropriate when it is assumed that the underlying latent variables follow a normal distribution, which is often a reasonable assumption in social and economic studies.

The Maximum Likelihood (ML) method allows for efficient and asymptotically normal estimates of the model parameters. This method is particularly suitable for small and medium-sized samples, ensuring robust and accurate estimates. Iterative algorithms, such as Newton-Raphson and Marquardt, are used to maximize the likelihood function. The Newton-Raphson algorithm ensures rapid convergence through the use of second derivatives, while the Marquardt algorithm enhances the stability of the estimates, especially when the model involves complex features or difficult data. Thus, the use of the Ordered Probit Model with the ML method and the Newton-Raphson / Marquardt steps ensures robust estimates, while respecting the distributional properties of the data and controlling for confounding variables.

3.2. Robustness Analysis

The model specification test was performed using the LM score test (Table 2). The results show a t-statistic of 0.058 with 379 degrees of freedom and a p-value of 0.954. This p-value, which is significantly higher than the 0.05 threshold, suggests that the model's restrictions are appropriate. The F-test, with a statistic of 0.003 and (1, 379) degrees of freedom, has a p-value of 0.954, confirming the absence of sufficient evidence to reject the null hypothesis. Therefore, the model parameters do not differ significantly from zero. Additionally, the likelihood ratio test indicates a value of 0.003 with 1 degree of freedom and a p-value of 0.953. This demonstrates that the restricted model fits the data as well as the unrestricted model. Thus, these tests confirm that the model is correctly specified and valid.

Table 2: Score test (LM Test)

	Value	df	Probability
t-statistic	0.057763	379	0.9540
F-statistic	0.003337	(1, 379)	0.9540
Likelihood ratio	0.003425	1	0.9533

Source: authors

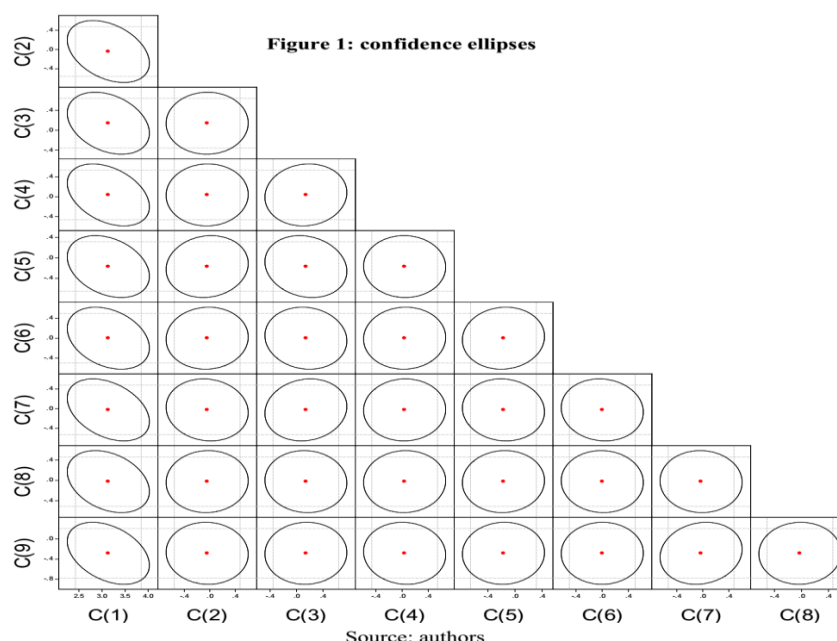
The centered Variance Inflation Factors reveal values very close to 1 for all variables, indicating low multicollinearity in the model (Table 3). For the variable TRST (Trust in Institutions), the centered VIF is 1.021, while for INST (Perception of Institutional Quality), it is 1.051. The variables REGS (Favorable Regulations) and NORM (Social Norms) have centered VIFs of 1.012 and 1.040, respectively. The variables EDUC (Education Level) and AGE (Age) show centered VIFs of 1.018 and 1.043, and for GNDR (Gender), the centered VIF is 1.007. Finally, the variable EXPE (Entrepreneurial Experience) has a centered VIF of 1.023. These values, all well below the critical threshold of 10, suggest that there is no problematic multicollinearity in this model. Thus, the coefficients can be interpreted reliably without significant risk of multicollinearity.

Table 3: Variance Inflation Factors

Variable	Coefficient Variance	Uncentere VIF	Centered VIF
C	0.131178	24.48181	NA
TRST	0.068955	4.160819	1.020624
INST	0.063955	3.850668	1.050599
REGS	0.065375	3.998970	1.011885
NORM	0.060788	3.600486	1.040061
EDUC	0.064863	3.792822	1.017519
AGE	0.065613	4.458151	1.042979
GNDR	0.061234	3.441724	1.006683
EXPE	0.062118	3.898859	1.023226

Source: authors

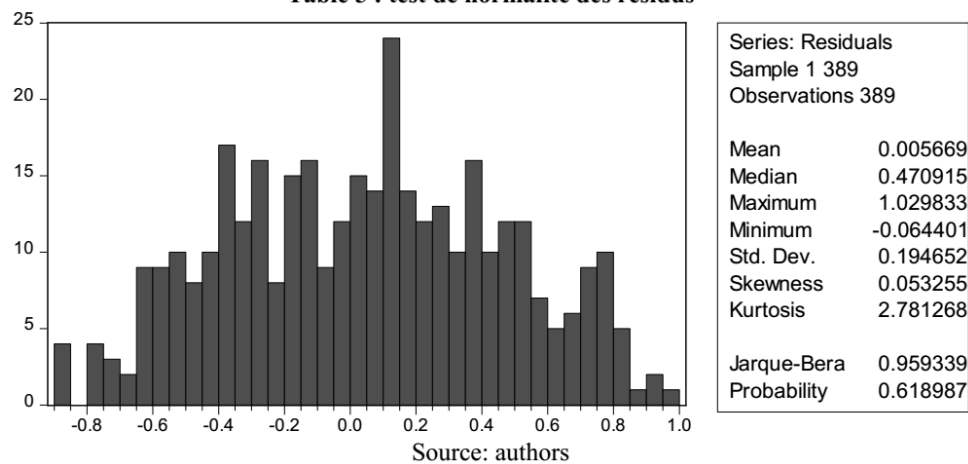
Confidence ellipses represent the region where the estimated coefficients are likely to be found with a 95% confidence level. By observing the ellipses in Figure 1, we can evaluate the uncertainty of the coefficient estimates. Smaller and more circular ellipses indicate lower uncertainty and more precise estimation of the coefficients. Conversely, larger ellipses suggest higher uncertainty.



Overall, the confidence ellipses in Figure 1 are relatively small and close to circular shapes, indicating that the coefficient estimates are precise and the associated uncertainty is low. There are no evident signs of strong collinearity, which would manifest as elongated and diagonally oriented ellipses. Some ellipses show slight elongation, suggesting mild collinearity between certain variables, but this does not appear significant enough to severely affect the robustness of the estimates. Thus, the results are generally satisfactory, indicating good precision of the coefficient estimates and low collinearity among the explanatory variables. These conclusions reinforce confidence in the model's specification and validity. The heteroscedasticity test was performed using White's test, with results summarized in Table 4. The F-statistic has a value of 1.271 with an associated probability of 0.126. Since this p-value is above the conventional threshold of 0.05, we cannot reject the null hypothesis of homoscedasticity. This means that the variance of the errors is constant, and there is no evidence of heteroscedasticity in the model. The Obs*R-squared, another measure from this test, has a value of 54.380 with a probability of 0.136.

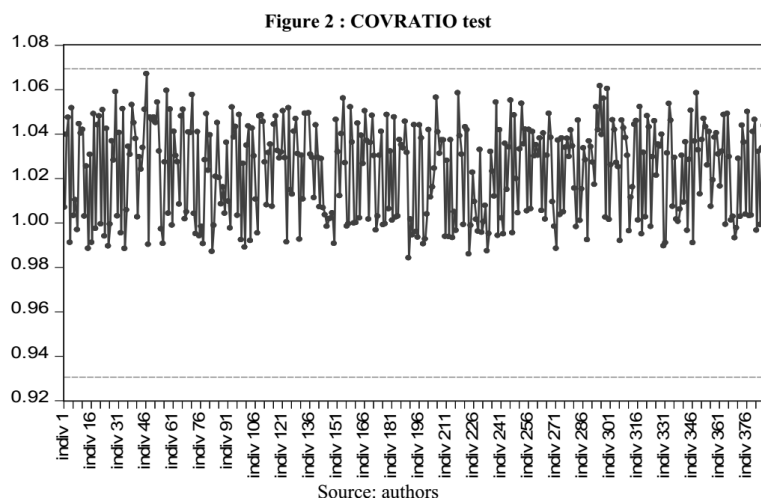
As with the F-statistic, this p-value above 0.05 also indicates the absence of significant heteroscedasticity. Finally, the Scaled explained SS has a value of 17.312 with an extremely high probability of 0.999. This value further confirms the null hypothesis of homoscedasticity. Thus, the results from White's test show no evidence of heteroscedasticity in the model, suggesting that the errors have a constant variance and that the model is well-specified. The normality of the residuals was analyzed using the Jarque-Bera test, as illustrated in Table 5.

Table 5 : test de normalité des résidus



The Jarque-Bera test examines whether the residuals follow a normal distribution based on skewness and kurtosis measures. For this series of residuals, the skewness is 0.053 and the kurtosis is 2.781. These values are close to those expected for a normal distribution, where skewness is 0 and kurtosis is 3. The Jarque-Bera statistic is 0.959, with a probability (p-value) of 0.619. A p-value well above the 0.05 threshold means that we cannot reject the null hypothesis of normality of the residuals. In other words, there is no significant evidence that the residuals deviate from a normal distribution.

The stability of the coefficients was tested using the COVRATIO test, as illustrated in Figure 2. The COVRATIO measures the impact of omitting an observation on the variances of the estimated coefficients. Values of COVRATIO close to 1 indicate that the omission of an observation does not significantly affect the precision of the coefficient estimates.



The COVRATIO values oscillate around 1, suggesting that the omission of an individual observation does not have a significant effect on the precision of the coefficient estimates. There are no obvious outliers that stand out, indicating that each observation contributes relatively uniformly to the stability of the model. Thus, the results of the COVRATIO test demonstrate that the coefficient estimates of the model are stable.

4. Results and Discussion

The robustness analysis of the Ordered Probit model was conducted using several tests encompassing specification, coefficient reliability, residuals, and model stability. The results indicate no significant

evidence of specification issues, as shown by the LM score test. Additionally, the Variance Inflation Factors reveal values very close to one for all variables, suggesting low multicollinearity. The confidence ellipses, which are relatively small and close to circular shapes, indicate precise coefficient estimates and low uncertainty. The heteroscedasticity test reveals no evidence of heteroscedasticity, confirming that the error variance is constant. Finally, the analysis of residual normality using the Jarque-Bera test shows that the residuals follow a normal distribution, and the COVRATIO test demonstrates that the coefficient estimates are stable. These results reinforce confidence in the specification and validity of the Ordered Probit model chosen for this study. The results of the Ordered Probit regression on the impact of trust in institutions on the intention to formalize informal economic activities are presented in Table 6.

Table 6: ML regression results - Ordered Probit (Newton-Raphson / Marquardt step)

Dependent Variable: FORM				
Method: ML - Ordered Probit (Newton-Raphson / Marquardt steps)				
Sample: 1 389				
Coefficient covariance computed using observed Hessian				
Variable	Coefficient	Std. Error	z-Statistic	Prob.
C	*-5,343570	3,08394	-1,732709	0,08394
TRST	***5,875220	2,193261	2,67876	0,007703
INST	***8,888246	3,193261	2,783439	0,005641
REGS	*0,312664	0,186831	1,673514	0,09503
NORM	-2,478323	3,180352	-0,779261	0,4363
EDUC	*1,983845	1,187271	1,670929	0,09554
AGE	*-2,035820	1,18838	-1,713105	0,08749
GNDR	** -5,147306	2,08394	-2,469987	0,01394
EXPE	-0,777275	0,58394	-1,331087	0,18394

*** significant at 1%; ** significant at 5%; * significant at 10%.

Source: authors

For the variable TRST (Trust in Institutions), the coefficient is positive with a probability value of 0.0077, indicating significance at the 1% level. This finding validates Hypothesis H1, demonstrating that trust in institutions has a significant positive effect on the intention to formalize informal economic activities. Higher trust in institutions effectively reduces transaction costs by mitigating uncertainty and enhancing the predictability of interactions with formal institutions. Consequently, fostering citizens' trust in institutions can encourage the formalization of informal economic activities by lowering perceived risks and associated costs. To achieve this, it is important to improve transparency, efficiency, and fairness within public institutions. Measures such as simplifying administrative procedures, combating corruption, and clearly communicating the benefits of formalization are essential. By cultivating a climate of trust, these policies can promote broader integration of informal economic actors into the formal sector, thereby contributing to a more structured and resilient economy.

For the variable INST (Perception of Institutional Quality), the coefficient is positive with a probability value of 0.0056, indicating significance at the 1% level. This result confirms Hypothesis H2, suggesting that a positive perception of institutional quality significantly enhances the intention to formalize. A high-quality institutional environment, characterized by efficient, fair, and transparent services, lowers the barriers to formalization. Consequently, public policies in Morocco should aim to improve the perception of institutional quality to encourage the formalization of informal economic activities. Strengthening the efficiency, fairness, and transparency of public services and judicial systems is essential. Implementing reforms that improve these aspects can significantly increase entrepreneurs' trust in institutions. Actions such as modernizing public services, ensuring fair application of regulations,

and improving the accessibility and transparency of judicial systems can substantially promote formalization.

For the variable REGS (Favorable Regulations), the coefficient is positive with a probability value of 0.0950, indicating significance at the 10% level. This finding supports Hypothesis H3, suggesting that the perception of favorable regulations is positively associated with the intention to formalize. Clear and fair regulations reduce the costs and uncertainties associated with compliance, making it easier and more attractive for entrepreneurs to formalize their activities. Policymakers in Morocco should focus on developing clear, fair, and accessible regulations to encourage formalization. Simplifying administrative processes, ensuring regulatory transparency, and effectively communicating the requirements and benefits of regulatory compliance are essential steps. By making regulations more favorable and comprehensible, authorities can incentivize more entrepreneurs to formalize their activities. In contrast, the variable NORM (Social Norms) presents a negative coefficient with a probability value of 0.4363, which is not significant. This result rejects Hypothesis H4, indicating that social norms do not have a significant impact on the intention to formalize. This suggests that public policies should redirect their efforts towards other more influential factors to encourage formalization.

The variable EDUC (Education Level) has a positive coefficient with a probability of 0.0955, significant at the 10% level. This implies that the level of education has a moderately positive influence on the intention to formalize. The variable AGE (Age) shows a negative coefficient with a probability of 0.0875, significant at the 10% level. This reveals that youth has a positive influence on the intention to formalize. For the variable GNDR (Gender), the coefficient is negative with a probability of 0.0139, significant at the 5% level. This means that gender has a notable influence on the intention to formalize, with women being more inclined to formalize their activities compared to men. Finally, the variable EXPE (Entrepreneurial Experience) presents a negative coefficient with a probability of 0.1839, which is not significant. This suggests that entrepreneurial experience does not have a significant impact on the intention to formalize.

It is essential to recognize the importance of education in the process of formalizing informal economic activities. Initiatives aimed at improving access to education and promoting continuous training can positively affect entrepreneurs' intention to formalize their activities. Additionally, it is important to implement policies targeting young entrepreneurs, as youth positively influences the intention to formalize. Offering specific support programs for young people, such as training, grants, or tax incentives, could encourage formalization among this population. Regarding gender, policies must be sensitive to the significant influence of gender on formalization, with women being more inclined to formalize their activities. Policymakers should develop support programs and initiatives that promote the inclusion of women in the formal sector, such as credit facilities, specific training, and entrepreneurial support networks.

5. Conclusion

The results of this study demonstrate the importance of trust in institutions for encouraging the formalization of informal economic activities. Higher trust in institutions reduces transaction costs by mitigating uncertainties and enhancing the predictability of interactions with formal institutions. It appears that informal entrepreneurs are more inclined to formalize their activities when they perceive these institutions as reliable and effective. Furthermore, a positive perception of institutional quality and favorable regulations, which reduce the perceived costs and risks associated with formalization, strengthens this intention to formalize. These conclusions have significant implications for policymakers and public authorities in Morocco. To encourage formalization, it is imperative to strengthen citizens'

trust in public institutions. This can be achieved by implementing concrete measures such as simplifying administrative procedures, combating corruption, and transparently communicating the benefits of formalization. By fostering a climate of trust, authorities can reduce the perceived risks and costs associated with formalization, encouraging a broader transition of informal activities into the formal sector.

Moreover, improving the quality of institutions and regulations is important. Clear, fair, and accessible regulations can facilitate formalization by reducing administrative barriers and providing appropriate incentives. The perception of regulations as favorable and fair is essential to motivate entrepreneurs to comply with formal requirements. Finally, the study highlights the importance of education and the age of entrepreneurs in the formalization process. Better-educated entrepreneurs may perceive lower transaction costs and risks associated with formalization. Therefore, public policies should include initiatives aimed at improving access to education and promoting continuous training for entrepreneurs. Additionally, specific support programs for young entrepreneurs could encourage more formalization by reducing the perceived costs and risks. In this way, to promote a more structured and resilient economy, it is necessary to adopt a comprehensive approach that strengthens trust in institutions, improves the quality of regulations, and invests in education and support for entrepreneurs. These combined efforts can significantly encourage the transition from informal to formal, thereby contributing to sustainable economic development and inclusive growth.

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