DOES INFORMAL COMPETITION HARM FORMAL ENTERPRISES' PERFORMANCE? EVIDENCE FROM A DEVELOPING ECONOMY

Brunilda Kosta

Management Department, Faculty of Economy, University of Tirana, Albania

Brunildakosta@feut.edu.al

Abstract

There is a wide dominant belief that informal competition deteriorates the performance of formal enterprises. The purpose of this paper is to test if this is the case in a developing economy. To do that, data is reported from a national survey conducted during 2019, with 200 formal enterprises, operating in all sectors of the economy. The descriptive analysis found out that 7 in 10 enterprises, consider informal competition an obstacle. While, deploying the linear regression analysis, the results confirm that formal enterprises who consider informal competition as an obstacle, do suffer from lower levels of annual sales growth, compared with those who do not view informal competition as an obstacle. At the end, this paper discusses on its theoretical and policy implications.

Keywords: Informal competition; Firm performance; Undeclared work; Informal economy; Albania

INTRODUCTION

Informal entrepreneurship has been increasingly studied conceptually and empirically. Informal sector includes those enterprises who are not registered, and/or do not declare a part or all of their sales to the state or the labor authorities so to avoid taxes (Williams et al., 2013, 2015). Statistics underscore a high level of informal entrepreneurship on a global basis. The latest report of the ILO (2018) uncovers that more than 60 percent of the world's population works on undeclared basis and the biggest share remains in emerging and developing countries. Besides informal employment, this phenomenon continues to be as bigger and concerning even in the

private sector. More than half of global enterprises are not registered while a bigger share uses to under-report their sales (Williams, 2017). Counting all of these statistics, the key question is how this informal competition impacts the performance of formal enterprises? Reviewing the extant literature, a widespread belief is that informal sector enterprises do have a harmful effect on formal enterprise performance (Leal Ordóñez, 2014; Lewis, 2004; Webb et al., 2009, 2013). However, there are scholars that view the positive aspects of the informal sector. This paper aims to empirically evaluate the dominant negative belief. More specifically, this paper intends to investigate whether enterprises considering informal entrepreneurship as an obstacle, do suffer from lower levels of performance compared with those who do not consider informal entrepreneurship as an obstacle. To do that, data are reported from a 200 face-to-face interviews, developed in Albania in 2019.

This paper has the following structure. The first section displays the literature review on informal sector entrepreneurship and jumps into hypothesis development. This section particularly underlines the harmful impact informal completion have on formal enterprise performance. The second section explains the methodology deployed namely data, variables and econometric model. Then, the results are laid out and analyzed. The last section discusses on theoretical and policy implications, along with limitations of this study.

LITERATURE REVIEW

Drawing on the existing extensive conceptual and empirical evidence on informal sector entrepreneurship, this section lays out that the prevailing belief is that informal sector entrepreneurship negatively impact performance of those enterprises who operate on a fully formal basis. Specifically, those firms who view informal competition as an obstacle do suffer from lower levels of sales growth, compared with those who do not view informal competition as an obstacle.

There are different theoretical frameworks which describe the impact of informal entrepreneurship. According to the conventional modernization theory (La Porta and Shleifer, 2008, 2014), the informal sector is mostly dominated by small low-productive enterprises which produce low-quality products which are marketable mostly to consumers with low-income budgets (La Porta and Shleifer, 2014). On the other side, theorists of political economy explain informal entrepreneurship to stem as a result of a deregulated open world economy (Castells and Portes, 1989; Meagher, 2010). Said that, entrepreneurs operating in the informal sector are characterized of low-productivity. So, they operate informally because of necessity. However, a cost analysis shows that the low-productivity of these necessities-driven enterprises, is counterbalanced with the cost advantages of tax evasion (Palmer, 2007). So, these informal

enterprises have a cost advantage towards formal enterprises. In sum, both theories focus on the negative side of informal entrepreneurship impact.

Besides the above mentioned theories, there are some views which underline the positive directions of informal entrepreneurship. As a bulk of scholars argues (Gërxhani, 2004; Williams, 2009; Williams and Gurtoo, 2012), informal entrepreneurship is not always a necessity- driven. The legalist perspective considers informal entrepreneurs as rational actors who decide to stay informal because the cost of becoming formal are higher than the benefits of operating formally (Cross, 2000; De Soto, 1989, 2001). Similarly, the institutional theory (North, 1990) highlights that entrepreneurs stay informal because of the misalignment of entrepreneurs' norms, values and beliefs with the laws and regulations (De Castro et al., 2014; Vu, 2014; Webb et al., 2013, 2014). This causes the so-called institutions asymmetry. The larger the asymmetry, the larger the informal entrepreneurship (Williams and Horodnic, 2015; Williams and Shahid, 2015).

Despite the elaboration, these theories do on the positive and negative effects of informal entrepreneurship, still the negative representations of the informal sector, is dominant. This paper focuses on the negative dominance of the informal sector. There is a wide belief that informal enterprises unfairly compete with formal enterprises. This is because informal enterprises evade taxes and social insurance contributions and do not fully comply with the labor laws. On the other hand, formal enterprises are obliged to pay taxes and comply with all state regulations (La Porta and Shleifer, 2014). Consequently, formal enterprises have a cost disadvantage compared with formal enterprises. Further than this, if formal enterprises do not get back the benefits of paying taxes, such as opportunities to enter new markets, more access to credits, public sector contracts, etc., than the cost of formality exceeds the benefits.

The increasing interest of scholars to study informal entrepreneurship, has been not associated with the same pace on conducting empirical studies that investigate the negative impact informal competition has on formal enterprises' performance. The existing few empirical studies are geographically spread out. The first one is developed in India (Williams and Kedir, 2016). Data reported from 9,281 formal enterprises in India, shows that formal enterprises that start up unregistered, do have higher performance compared with those who are registered from the beginning of their operations. Similarly, another survey conducted with 2,494 formal enterprises, find out that unregistered enterprises do have higher performance compared with those who registered once they opened up their business (Williams and Kedir, 2017). Another survey conducted in transition economies with 1,430 enterprises, revealed that enterprises who admit their competitions operate in the informal sector, do suffer from lower levels of annual sales growth (Williams and Bezeredi, 2018).

This paper intends to fill the gap of few empirical studies conducted in developing economies, such is Albania. So, to investigate whether formal enterprises viewing the informal competition as an obstacle, do witness from lower levels of firm performance compared with those who do not view it as an obstacle, we intend to test the following hypothesis:

H1: Enterprises who consider informal enterprises as an obstacle, experience lower levels of annual sales growth than those who do not.

METHODOLOGY

Research context and data

Informal economy witnessed an increase pace, upon the fall of the communist regime in 1991, when the private sector started to develop. The rapid privatization process during the first years of open market economy, made around 70 percent of the economic transformation into private. With the development of private sector, the informal economy was emerging too. The size of the informal economy has been measured by using various direct and indirect methods. The Albanian Centre for Economic Research (ACER, 1999) in a survey developed with enterprises, revealed that 75 percent of them frequently evade their sales. Using the DYNAMIC approach, the Albanian informal economy counts for 33.4 percent of Gross National Product (GNP) in 1999/2000 (Schneider, 2002). Later on, OECD (2004) estimated the informal economy to be around 26 percent of gross value-added. Muco et al., (2004), used different methods of measurement and (electricity method, monetary method, national accounts method) finds the size of the informal economy to vary between 30 to 60 percent of GDP. Utilizing the MIMIC approach, Medina and Schneider (2018) estimate the average size of the informal economy to be 26.21 percent. Generally, there is a declining trend of the size of informal economy. However, still formal enterprises view informal competition as a severe obstacle of doing business (World Bank, 2020).

The evaluation of the impact informal entrepreneurship has on formal entrepreneurship, is developed based on a survey conducted in 2019 in Albania. The sample consists of 200 enterprises, randomly selected from the entire population of limited liability companies operating in the most important regions of Albania, Tirana and Durres (these two regions encompass 41 percent of all businesses in the country). Table 1 displays the basic sample characteristics. The final sample consisted of 70% of service sector and 30% of manufacturing sector. 62.1% of respondents are micro and small organizations and 37.9% medium and large firms. Around 46% of the sampled firms are less than 10 years old, around 35 are 11-20 years old, while the rest are older than 20 years.

Table 1: Sample characteristics

Sector	Percentage
Manufacturing	29.4%
Services	70.6%
Size	
Micro/Small	62.1%
Medium/Large	37.9%
Age	
Less than 10 years	45.8%
11-20 years	34.8%
Over 20 years	19.4%

Note: The classification is based on European Commission guidelines (European Commission, 2005).

To effectively manage the data gathering process, all selected businesses were preliminary informed about the survey, the instrument, while ensuring them on the confidentiality of shared data. The interviews were conducted by our trained researchers and they were preliminary provided with written guidelines on how to properly develop the interview and address survey items. The dataset was examined for (i) missing data, (ii) suspicious response patterns, and (iii) outliers (Hair, 2010). The dataset's data are missing completely at random. Besides that, there are no unengaged responses. Third, the examination for univariate outliers was developed, following Kline (2011). The analysis shows outliers in two variables: the firm's age and size. There are three cases of companies that started operating during the communist era (one is 59, and the other two are 49 years old). In addition, there are 5 companies comprising more than 400 employees and five with less than 3 employees. We used log-transformation to keep the outlying cases in the analysis.

Variables

Dependent variable

Firm performance is the dependent variable and it is measured through the real annual sales growth. In the survey instrument, formal enterprises were requested to share their sales for 2015 and 2018. All provided values were converted from the Albanian currency to USD, utilizing the currency exchange rate of the two respective years (using the GDP deflator). After that, the value is deflated using the USD deflator. Real annual sales growth is in percentage.

Key independent variable

To investigate the impact of informal competition on the performance of formal enterprises, it is explored whether informal competition is considered an obstacle to operations of formal enterprises. This variable derives from the question: "*To what degree are practices of competitors in the informal sector an obstacle?*". This question was measured by a five Likert scale, where 5 means informal competition represents a severe obstacle, 4 a major obstacle, 3 a moderate obstacle, 2 a minor obstacle and 1 no obstacle. The final variable is a recoded one with value 1 if it represents a severe/major obstacle and 0 if otherwise.

Control Variables

There is a bargaining of literature that evaluates the influence of other variables into firm performance. Hence, we check for other variables which are preliminary confirmed to have a significant impact on firm performance, such as firm size, firm age, export orientation and innovation.

Empirical studies confirm firm size to be a determinant of firm performance (Hsieh and Olken, 2014). In this paper, firm size is a continuous variable, measured by number of employees.

Firms which export their goods and services, perform better than those who do operate only domestically (La Porta and Shleifer, 2008). In this paper export-orientation takes value 1 if at least 1 percent of sales comes from export and 0 if otherwise.

Innovation is proved to effect firm performance (Fagerberg et al., 2004; Gunday et al., 2011). This paper measures innovation as the ability to innovate products and ability to get the most cutting edge technology. Product innovation is a dichotomous variable, taking value 1 if enterprise has introduced product innovation over the span of last three years and value 0 if otherwise. Technology innovation is a dichotomous variable, taking value 1 if enterprise has introduced new technology during the last three years and value 0 if otherwise.

Firm age is a continuous variable which is calculated as the difference of year 2019 and the ear of establishment.

Modelling Framework

In this paper, the dependent variable is a continuous variable. Hence, the linear regression model is used to define whether formal enterprises who perceive informal competition as an obstacle, suffer from lower levels of annual sales growth, compared with those who do not view informal competition as an obstacle. Model 1 represents solely the results of control variables while Model 2 estimates both the control variables and key independent variable.

The econometric model has the following form, where the β0 represents the intercept, Xi represents the vector of independent variable and εi represents the error term.

Annual Sales Growth= $\beta 0 + \beta 1 Xi + \dots \beta_n n + \varepsilon i$

RESULTS

As a general finding, 7 out of 10 formal enterprises assert that informal competition represents an obstacle for their operations. There is an increasing number of studies in Albania which evaluate the determinants of the informal sector and informal entrepreneurship (Kosta and Williams, 2018; Williams and Kosta, 2019). However, studies evaluating the relationship between informal entrepreneurship and formal entrepreneurship performance, are absent.

To investigate the impact such informal entrepreneurship does have on the performance of formal enterprises, the results are displayed as in Table 4. Before developing the regression analysis, some preliminary checks were developed. All the assumptions of linear regression were preliminary checked. First, a normality test was conducted. The annual growth sales, firm size and firm age were not normally distributed. Hence, the logs of variables were considered. Heteroscedasticity was then checked. The scatter plot displays residuals to be randomly scattered around value zero. So, heteroscedasticity is not a problem. The correlation between independent variables was checked. The Variable Inflated Factor (VIF) were all lower than 3 (far lower than the allow threshold of ten). This implies multi-collinearity is not a problem in our study. Due to some negatives values of annual sales growth (meaning that firms have worse performed during the last three years, logs could not consider them) the number of observations is lower than 200. Furthermore, the R-squared in Table 2 varies from 18.4% (basic model) to 20.5% (full model), meaning that independent variables explains around 20 % of the dependent variable.

Table 2: Model summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
Model 1	.429a	,184	,148	,50826
Model 2	.453[a]	,205	,163	,50391

Table 3: ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
Model 1	Regression	6,645	5	1,329	5,145	.000
	Residual	29,449	114	,258		
	Total	36,094	119			
Model 2	Regression	7,401	6	1,233	4,858	.000
	Residual	28,693	113	,254		
	Total	36,094	119			

Evaluating the determinants of annual sales growth, Model 1 reveals firm age and firm size to be significantly negatively associated with annual sales growth. So, the larger the firm the lower the annual sales growth. Similarly, the older the firm, the lower the annual sales growth. It seems that innovation and export orientation are not determinants of firm performance in neither Model 1 nor in Model 2.

Model 2, confirms the dominant view of the negative impact of informal entrepreneurship into formal entrepreneurship performance. Specifically, those firms who perceive informal sector as an obstacle, do suffer from lower levels of annual sales growth. So, this confirms our hypothesis.

Table 4: Determinants of firm performance in Albania, 2019

	Model 1: Basic model		Model 2: Annual sales growth as a dependent variable	
	B	Std. Error	B	Std. Error
Informal competitors obstacle			-,179	,104*
Product innovation	,168	,133	,161	,131
Technology innovation	,070	,105	,045	,105
Firm age (log)	-,566***	,187	-,606	,187***
Firm size (log)	-,191**	,081	-,201	,081**
Exporter	-,028	,098	-,017	,097
(Constant)	,228	,232	,429	,258*
Observations	120		120	
R-squared	,184		,205	

*Standard errors in parentheses: ***p < 0,01, **p < 0,05, *p < 0,1.*

CONCLUSIONS AND DISCUSSION

Drawing on a national dataset of 200 formal enterprises in Albania, it was uncovered that formal enterprises who do consider informal competitors as an obstacle, do witness lower annual sales growth, compared with those who do not view them as an obstacle. Hence, this evidence-based evaluation, confirms what the dominant view asserts that informal competition is harmful for formal enterprises.

Such a result has both theoretical and policy implications. In terms of theoretical implications, it further develops the assumption of the negative impact informal competitors do have on formal enterprises' performance. It perfectly goes on the same line as the widespread belief in the literature. Therefore, theoretically, this study validates the thesis that informal sector competitors have a negative impact on the performance of formal enterprises.

In terms of policy implications, the results of this paper provide strong support for government to pursue policies and measures with the aim to effectively tackle and eradicate informal sector.

Nevertheless, this study has some limitations. First, it gives the landscape of only one developing country, such as Albania. So, to take general accepted results, such findings need to be tested in other developing economies, too. Second, to have a complete view of the situation, informal enterprises could be included in the analysis. In-depth interviews could be developed with them so to make possible a comparison of formal and informal sector enterprises' performance, and dig deeper on the reasons why they stay informal. This is a good way to analyze the barriers of formalization.

As a summary, this paper uncovered that informal competition harms the performance of formal enterprises. If this paper stimulates scholars to develop similar study in other developing economies, and involve informal enterprise so to have chances to make a comparison, then this paper fulfills its first purpose. If other studies find out the negative dominant perspective of informal entrepreneurship and urges governments to undertake their measures so to tackle this phenomenon, that this paper has fulfilled its fuller purpose.

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