Informality and Inefficiency of Formal Credit Markets: A Panel Data Analysis

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Abstract

Informality or the size of the informal sector is a central issue for public finance as by its nature informality implies lower tax revenue generation and lower efficiency in public services. Firms and entrepreneurs opt for informality for many reasons. The costs and benefits of being formal depend on various factors such as tax rates, costs of formalization, wealth of the entrepreneurs as well as the relative advantage of having access to formal credit. The channel in which the inefficiency of formal credit markets, proxied by the interest rate spread (lending minus deposit rate), influences the informality has not been studied. We examine this channel by using panel-data techniques for the time period of 1980-2012 and for 100 countries. Even after controlling for other variables that are expected to influence informality we find significant and positive association between the spread and informal sector size.

1 Introduction

2 Data

Informal sector data is from Basbay et. al. (2016). The main independent variable, *spread*, and other variables are from World Development Indicators.

Table 1: Summary Statistics

Statistic	N	Mean	St. Dev.	Min	Max
spread	3,010	7.629	7.867	−8.854	80.333
shadow	3,010	33.490	13.789	7.965	88.575
Trade	2,677	19.520	16.847	0.179	266.733
inflation	2,821	21.667	207.118	−35.837	7,485.492
unemployment	2,252	9.397	6.789	0.300	39.300
GFCF	2,780	22.418	10.647	−2.424	219.069
GDPperC	2,298	14,845.290	16,911.500	247.437	129,349.900

3 Analysis

Table 2: Multiple Fixed Effects Model

	Dependent variable:
	informal
spread	−0.038***
	(0.009)
log(gdp_cap)	−9.712***
	(0.265)
Observations	2,911
R^2	0.974
Adjusted R^2	0.973
Residual Std. Error	2.286 (df = 2743)
Note:	*p<0.1; **p<0.05; ***p<0.01

4 Discussion and Conclusion

Table 3: GMM Estimation Model

	Dependent variable:
	shadow
lag(shadow, 1)	0.971***
	(0.005)
spread	0.013***
	(0.005)
GFCF	−0.040***
	(0.005)
inflation	0.001***
	(0.0001)
Trade	0.002*
	(0.001)
Observations	134
Note:	*p<0.1; **p<0.05; ***p<0.01