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Productivity gaps at formal and informal microfirms

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ABSTRACT

Although evidence of a productivity gap between formal and informal firms has been observed, this "formality premium" has been less explored for microfirms. The informality of microfirms is a central concern in low- and middle-income countries, leading to a crucial demand for designing economic policies addressing this issue. We fill this void by estimating a productivity premium for the case of Colombia, considering two margins of formality for microfirms: extensive, referring to business registration, and intensive, which includes labor regulations. We use a unique longitudinal dataset from the Microenterprise Survey by the Colombian Statistics Department, which follows approximately 39,000 micro-establishments with up to nine employees during 2012–2016. We utilize the transition into and out of formality to estimate the productivity premium (yearly sales per worker) between informal and formal firms, thereby exploring differences concerning initial productivity. We use a fixed-effects quantile regression to explore differential effects along the productivity distribution. We find evidence of a premium for both the extensive (18%) and intensive margins (7%), a gap that decreases with a firm's productivity when considering a strict definition of formality. The evidence of these premiums is related to two growth strategies of firms: an increase in capital investments for the extensive margin and an increase in human capital quality for the intensive margin. Further, we find the premium is notably wider for young firms (less than three years in the business) relative to the older; and for the least productive 'necessity' driven businesses in comparison with the business-driven businesses. We do not find systematic differences according to the gender of the owners. These results are new evidence to support the existence of a premium and the transition into and out of formality for microfirms in middle-income countries. Moreover, they suggest that microfirms' formalization and growth policies should be oriented toward promoting and enhancing formality's benefits.

1. Introduction

Microfirms are a ubiquitous form of business organization that contributes substantially to GDP and employment. In most developing countries, microfirms represent the majority of firms (La Porta & Shleifer, 2008; Perry et al., 2009; Ulyssea, 2018). For instance, in Colombia in 2017, 96.5 % of all registered firms in the country were microfirms (Ortiz et al., 2021). In these countries, both formal and informal firms produce goods and services in the same industries regardless of their size. While a common argument for this fact was that these firms are essentially different (dualistic view), this theory was rebuffed by the coexistence of formal and informal microfirms of similar size and productivity (Ulyssea, 2020a). Moreover, formality is a continuous concept (Perry et al., 2009; Trebilcock, 2004; Ulyssea, 2018).

We consider formality as a ladder of three steps: (i) extensive margin of informality (no social security and no registration with tax and/or business authorities); (ii) intensive margin of informality (some firms pay the costs of being registered at tax and/or business authorities, but avoid paying their employees' social security benefits and compliance with other labor regulations); (iii) fully formal firms (pay social security and registered with the tax authority).[1] In this article, we study the productivity gains from transitioning from one level to the other for the case of

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[1] Formality categories based on the *two* margins suggested by Ulyssea (2018) have been increasingly used in the informality literature (Cisneros-Acevedo, 2022; Ponczek & Ulyssea, 2022; Samaniego de la Parra & Fernández, 2020; and Ulyssea, 2020b).

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