Economic dynamics of informal firms during growth and crisis: Evidence from Madagascar, 1995 to 2004[1]

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Abstract

Little is known about the way informal firms react to overall macroeconomic developments, in particular over long periods. The heterogeneity of informal activities in developing countries has been well established in the literature: low-productive, subsistence activities co-exist with successful entrepreneurs. However, the dynamic implications of this heterogeneity are less acknowledged. We expect these tiers to differ both in their response to cyclical movements of the economy and in their behavior in the growth process. This paper is an attempt to provide some evidence on such changes for the Malagasy economy between 1995 and 2005. In particular, we assess whether (and which) informal firms benefited from the period of sustained growth from 1995 to 2001 and were impacted by the collapse of the economy caused by the 2002 political crisis. We use unique data collected among a representative sample of informal firms in Antananarivo in 1995, 1998, 2001 and 2004. The structure and characteristics of informal firms are described in detail both across years and by levels of capital stock, to explicitly account for heterogeneous dynamics. Figures suggest that the informal sector in Madagascar fulfills a labor absorbing function in times of economic downswing and crisis. Younger firms with a low level of capital seem to not have survived the crisis. A shift in the sectoral distribution is observed, as the share of service activities strongly increases while informal trade and industrial activities shrink in proportion. Building on the recent empirical literature on returns to capital in small-scale activities in developing countries, we estimate a profit function to evaluate capital and labor returns in different segments of the capital distribution. Consistent with findings from West-Africa or Mexico (Grimm, et al., 2011; McKenzie & Woodruff, 2006), we find very high marginal returns at low levels of capital while they are very low at medium and high levels of capital. By adding year interactions we study changes in these returns over the period. In addition, we use a pseudo-panel estimation to estimate productivity within cohorts, based on sector and firm age. We finally analyze the patterns of capital accumulation using non-parametric techniques.

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