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ABSTRACT

Although the size of the informal economy is relatively large across Latin America and the Caribbean, it is not completely understood how deficiencies in the institutional environment may be related either to the propensity for entrepreneurship or the performance of entrepreneurs in the informal economy. Focusing on institutional heterogeneity, this paper characterizes external finance (i.e. local family-based equity, remittances, bank credit, business angel finance and venture capital) in terms of (1) the mix of finance, business consulting and contacts, (2) governance mechanisms (i.e. reputational capital versus formal contracts) and (3) *fungibility* (i.e. discretion to use funds borrowed or received for alternative purposes); and develop a number of propositions. The outcome is a finance-performance nexus that provides a basis for a theoretically grounded empirical investigation of the relationship between the financial aspects of the institutional environment and both the propensity for entrepreneurship and the performance of entrepreneurs in the informal economy.

Key words: Bank Credit; Entrepreneurship; Family-based Equity; Informal Economy; Latin America and the Caribbean; Remittances.

JEL classification: G21; L26; M13; O17; O43

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INTRODUCTION

In recent years, there has been a growing interest in entrepreneurship in the informal economy. In Latin America and the Caribbean (LAC), the informal economy, as defined by a variety of economic activities that are undertaken outside formal institutions, accounts for almost 40 percent of the gross national product (GNP) in the case of Brazil, and above 60 of the GNP of less developed LAC countries (Schneider, 2002). Among the variety of economic problems that are associated with the informal economy are its potentially adverse effects on labor productivity growth and the material well-being of society.

Concerns about the relative size of the informal economy along this line seem to be warranted in the context of LAC, where uniformly negative labor productivity growth has been observed in the manufacturing sector (Francis, Saliola and Seker, 2013). This dismal productivity performance places LAC well behind other regions at a similar stage of economic development (i.e. Sub-Saharan Africa, Eastern Europe, Central Asia, East Asia and the Pacific region). Yet, effective policy intervention is hampered by a limited understanding of either the determinants of the propensity for entrepreneurship in the informal economy, or the factors that account for performance differences across entrepreneurs in the informal economy.

The primary objective of this paper is to conceptualize how qualitative differences in the external finance accessed by entrepreneurs may not only be related to the propensity for entrepreneurship in the informal economy, but may also explain performance differences across entrepreneurs in the informal economy. At this embryonic stage in the literature on entrepreneurship in the informal economy, scholars are just beginning to develop the theoretical framework that is required to motivate and support empirical work. By focusing on the potential link between finance and performance in the informal economy, this paper not only seeks to place the emerging entrepreneurship research agenda on a firm theoretical foundation, but to also enhance its policy relevance.

In general terms, the theoretical framework that is developed in this paper is broadly informed by institutional theory (North, 1986, 1990, 1994). According to this theoretical perspective, individuals ("players") are assumed to be responsive to incentives, and the latter are shaped by both formal and informal institutions ("rules of the game") in the economic, political and social spheres of life. Thus, both behavior and performance differences may be explained in terms of existing institutions and institutional differences in one form or another.

More specifically, this paper is most related to the work of Webb, Bruton, Tihanyi and Ireland (2013). Institutional theory has a similarly central place in the relatively broad theoretical framework that they develop to support the emerging research agenda on entrepreneurship in the informal economy. Specifically, they articulate several propositions that link the propensity for entrepreneurship in the informal economy to a variety of institutional factors including the stringency of policies, the degree to which policy changes are radical, bureaucracy, conflicting interests within decentralized institutions, social capital or trust, and regulatory costs, among others.

The view that institutional factors may encourage enterprising individuals to favor the informal economy over the formal one is consistent with other accounts that recognize the distortive effects of burdensome regulations (Djankov, McLeish, Ramalho, La Porta, Lopez De Silanes and Shleifer, 2002; Klapper, Laeven and Rajan, 2006; Loayza, Oviedo and Serven, 2006;

Van Stel, Storey and Thurik, 2007), weak governance (i.e. burdensome bureaucracy and corruption) (Johnson, Kaufmann, Zoido-Lobaton, 1998, 1999; Friedman, Johnson, Kauffmann and Zoido- Lobaton, 2000) and relatively high marginal income tax rates among the top earners in progressive tax systems with weak tax auditing capabilities (Cebulla, 1997).

From the propositions in Webb et al. (2013), scholars have a solid theoretical platform that facilitates a theoretically grounded empirical evaluation of the institutional determinants of the propensity for entrepreneurship in the informal economy. Still, while a sound understanding of such institutional factors is important for policy interventions aimed at containing informality, it may not be sufficient to meet the formidable challenge of pervasive informality coupled with multiple institutional deficiencies in LAC countries. Thus, an entrepreneurship research agenda that primarily generates a list of institutional impediments to entrepreneurship in the formal economy may not sufficiently simplify the analytical challenge faced by scholars and policymakers alike. In addition, it may not go far enough in providing the latter with clear directions on the nature of the most pressing institutional reforms that are required.

Importantly, the issue of informality is a multi-dimensional one that poses a range of difficult, but interesting questions for both scholars and policymakers. Since it is economically and socially desirable to restrict the relative size of the informal economy, it is not surprising that scholars and policymakers want to better understand how institutional factors may encourage enterprising individuals to identify and exploit opportunities in the informal economy. However, it is not only the number of working-age individuals or potential taxpayers in the informal economy that should concern policymakers; also important is the fact that they may be using relatively scarce resources unproductively.

This performance aspect of the informality problem has received virtually no attention in the emerging theoretical framework on entrepreneurship in the informal economy (Webb et al., 2013). Yet, it has the potential to complicate both the conceptualization of entrepreneurship in the informal economy and the formulation of public policy interventions. For instance, there may be similarly institutionally deficient developing countries with not only similar shares of informal economic activities, but also similar rates of new business formation in the informal economy; yet, these countries may differ in terms of the survival rates and productivity of new firms in the informal economy.

An interesting question in this hypothetical case is: *why are some entrepreneurs in the informal economy more productive or more likely to survive than others?* More generally, scholars and policymakers may incompletely understand the institutional factors behind intra- and inter-country or –regional differences in the performance of entrepreneurs in the informal economy. A sound understanding of what accounts for such performance differences requires an explicit characterization of institutional heterogeneity. However, the current theoretical framework neither conceptualizes institutional heterogeneity nor addresses the performance aspect of entrepreneurship in the informal economy. Thus, there are major gaps in the extant theoretical literature.

This paper attempts to fill these gaps in the extant theoretical literature. Specifically, it expands and refines the treatment of the financial aspect of the extant institutional framework in the context of LAC. Although it generally recognizes that LAC countries may differ at the macro level in terms of economic, social and political institutions, it advances the current theoretical literature by explicitly addressing institutional heterogeneity at the micro level.

Specifically, it characterizes external finance (i.e. local family-based equity, remittances, bank credit, business angel finance and venture capital), as opposed to internal finance (i.e. personal income, savings or wealth), in terms of (1) the mix of finance, business consulting and contacts, (2) governance mechanisms (i.e. reputational capital versus formal contracts) and (3) *fungibility* (i.e. discretion to use funds borrowed or received for alternative purposes). Drawing upon qualitative differences in external finance along these lines, this paper also contributes to the extant theoretical literature by developing a number of new propositions that link the financial aspects of the institutional environment to both the propensity for entrepreneurship and the performance of entrepreneurs in the informal economy. The outcome is what may be called a finance-performance nexus.

Importantly, this paper also contributes to the extant theoretical literature by moving beyond the (implicit) assumption that entrepreneurs face a dichotomous decision as it relates to the formal and the informal economy. Specifically, it not only makes the case that entrepreneurs have an incentive to jointly participate in both the formal and informal economy, but also develops new propositions in this context. Importantly, these propositions offer new insights into the potential link between family-finance dependence and the propensity for tax evasion.

More generally, the appeal of this paper is partly attributed to its empirical and policy relevance. Specifically, it provides a new theoretical framework that offers a new set of testable propositions for empirical work within the larger research agenda on entrepreneurship in the informal economy. Meanwhile, its contribution to public policy is demonstrated in terms of the clear directions and insights that it provides to policymakers as it relates to the treatment of informality in LAC.

FINANCIAL INSTITUTIONS AND ENTREPRENEURSHIP IN THE INFORMAL ECONOMY

While there is disagreement over what defines entrepreneurship, this paper recognizes the organization of new firms as an important component. In addition, small and medium-sized enterprises (SMEs) have a potentially important role to play. One of the salient features of the emerging private sector in developing countries in general, and LAC in particular, is the proliferation of SMEs that coexist with a few large firms (Hallberg, 2001). The ability of new firms and SMEs in LAC to significantly contribute to economic growth and job creation is tied in part to their capacity to successfully create and sell new products and services at home and abroad. However, financing constraints alone may preclude them from doing so (Beck and Demirgüç-Kunt, 2006).

Much of the financial limitations that LAC entrepreneurs face may be generally attributed to financial underdevelopment in one form or another. At the macro level, for instance, it is understood that financial underdevelopment, as manifested in the inability of the financial system to mobile and efficiently allocate national savings to profitable investment opportunities, may constrain economic growth and prosperity (Demirgüç-Kunt, Beck and Maksimovic, 2004; Demirgüç-Kunt and Maksimovic, 1998; King and Levine, 1993; Jayarantne and Strahan, 1996; McKinnon, 1973; Rajan and Zingales, 1998).

In LAC countries characterized by underdeveloped private and public equity markets, the extent to which the financial system is underperforming is partly tied to the ability of banks to finance new and small firms at a relatively low cost. The general view is that banks have a comparative advantage in small business lending; that is, they may at least partly resolve the informational and incentive problems normally associated with new and small firms through screening, contracting and monitoring over the course of the relationships that they maintain with these firms (Bester, 1985; Campbell and Kracaw, 1980; Chan and Kanatas, 1985; Diamond, 1984, 1991; Fama, 1985; Haubrich, 1989; Leland and Pyle, 1977; Petersen and Rajan, 1994; Stiglitz and Weiss, 1981, 1983). However, large banks with centralized loan processing systems are likely to systematically under-serve the SME sector in LAC countries (Berger, Miller, Petersen, Rajan and Stein 2005; Stein, 2002). In addition, banks may generally ration credit to the most innovative young firms that tend to invest in largely intangible assets with uncertain future cash flow streams and liquidation values (Canepa and Stoneman, 2002; Freel, 2007; Piga and Atzeni, 2007).

Equity financing is generally considered to be more ideal for new business ventures than debt financing. This is so because the latter may be associated with fixed payment schedules, restrictive covenants and collateral requirements that are not only burdensome for new business owners, but elevates the risk of financial distress. This partly explains why even large corporations may forego lucrative investments if new equity issues are underpriced in the market and sufficient internal finance (i.e. retained earnings) is not available to finance these investments (Fazzari, Hubbard and Petersen, 1988; Froot, Scharfstein and Stein, 1993). Equity financing may be qualitatively different in terms of whether it is combined with business consulting and access to business networks. In fact, the success of business angel- or venture capital-backed new ventures is partly tied to the mix of finance, business consulting and access to social and business networks or contacts (Fenn, Liang and Prowse, 1997). Thus, the finance-consulting-contacts mix of equity financing in one form or another should be considered when explaining the performance of entrepreneurs.

Financial underdevelopment implies that LAC entrepreneurs may be systematically disadvantaged in both private debt and equity markets. This in turn implies that their ability to generally transform new ideas into new products and services may be tied to the availability of the *internal finance* (i.e. personal income, savings or wealth) and *external informal finance* (i.e. relationship- or social network-based finance), given the limited supply of what may be strictly characterized as *external formal-informal finance* in the form of bank credit, business angel finance and venture capital.

We suggest that external informal finance in the form of loans from one family member to another, among others, qualitatively differ from external formal-informal finance along the following three lines: (1) finance-consulting-contacts financing mix; (2) governance mechanisms - the ability of individuals to make credible commitments based on reputational capital (i.e. where failure to honor one's word carries shame) as opposed to formal contracts (i.e. explicitly stated rules and performance requirements that are independently verifiable and enforceable in a court of law) (North, 1993), and (3) *fungibility*, as defined by the extent to which the entrepreneur has discretion over the use of external finance.

If new business financing from relatives is governed by reputational considerations, the transaction cost associated with family-based finance may be considerably lower than that of bank credit, business angel finance and venture capital which may be governed by relatively formal contracts. Thus, if the latter three sources of external finance are available to an entrepreneur, family-based financing may be preferred on the basis of cost considerations. But the appeal of family-based financing is not only limited to its (reputation-based) cost-advantage. Also important is its fungibility feature. For instance, an entrepreneur who receives financing from relatives under a reputation-governed (implicit) contract may face few, if any, binding restrictions on the use of funds. This is especially so if the entrepreneur directly receives funds in the form of cash.

Importantly, the attractiveness of family-based financing is a not a sufficient condition for entrepreneurship in the informal economy. Thus, it may be appropriate to at least analytically isolate the entrepreneur's decision to use family financial resources from the decision to identify and exploit opportunities in the informal economy. In principle, the entrepreneur may initially decide to start a new business in the informal economy because of the prohibitively high regulatory cost of operating in the formal economy. After the decision is made to operate in the informal economy, the entrepreneur may seek family-based financing for the reasons noted above. Alternatively, given the discretion that entrepreneurs have over the use of capital provided by family members, family-based equity is likely to follow entrepreneurs whether they decide to operate in the formal economy or the informal one.

In Webb et al. (2013: 609), the observation that entrepreneurs in the informal economy tend to rely on family resources is apparently reflected in the proposition that "[l]everaging family resources is positively related to opportunity exploitation in the informal economy…" However, according to our conceptual framework, it may be misleading to suggest that the use of family resources has a direct effect on the propensity for entrepreneurship in the informal economy. A positive relationship between the use of family resources and the propensity for entrepreneurship in the informal economy may only capture part of the potential sequence of decisions described above. That is, the existence of burdensome regulations may initially drive the entrepreneur away from the formal economy to the informal economy. Once operating in the latter, access to fungible (i.e. cash-based) and reputation-governed family-financing increases the likelihood of survival.

Thus, taking the entrepreneur's participation in the informal economy as given, we depart from Webb et al. (2013) on the role of family resources as summarized in the following proposition:

P1. Family-based equity is positively related to the survival rate of entrepreneurs in the informal economy, all else equal.

Interestingly, while family-based equity may be favored by LAC entrepreneurs on the grounds of reputation-based transaction cost-savings and fungibility, this type of private equity may be inferior to business angel financing and venture capital in terms of the composition of the finance-consulting-contacts mix. That is, the quality of business advice and influence of business contacts associated family-based equity may not be on par with either business angel financing or venture capital.

While it is conceivable that the likelihood of business success or survival and productivity will increase if family-based equity is received from family members who become more business savvy and better connected, relatives that provide financing to entrepreneurs are less likely to be preoccupied with high-growth performance targets as business angels and venture capitalists. That is, the latter are expected to impose more stringent financing conditions that are related to a range of financial and non-financial performance measures (Fenn et al., 1997; Kaplan and Strömberg, 2001, 2003). Furthermore, business angels and venture capitalists are unlikely to provide financing to entrepreneurs in the informal economy since they are interested in firmly securing cash flow rights, among others. Given the interest of banks in safeguarding the assets that the entrepreneur pledges as collateral, they are also expected to discourage participation in the informal economy. These arguments lead to the following propositions:

P2. The magnitude of the anticipated positive relationship between family-based equity and the likelihood of new business survival in the informal economy will increase as the business experience and the social and business network of relatives who provide financing increase, all else equal.

P3. There is a negative relationship between the share of family-based equity in total external finance and the productivity of new businesses; however, the magnitude of this negative relationship will decline as relatives who provide financing gain more business knowledge and become better connected in social and business networks, all else equal.

P4. The growth rate of new firms in the informal economy is negatively related to the share of family-based equity in total external finance; and the magnitude of this negative relationship will not systematically decline as the relatives who provide financing gain business experience and access to larger social and business networks, all else equal.

P5. The propensity for entrepreneurship in the informal economy is negatively related to the share of bank credit, business angel finance and venture capital in total external finance, all else equal.

In LAC countries, local entrepreneurs may access family-based equity from relatives at home and abroad. Remittances constitute an example of the latter. At the end of 2012, the value of remittance flows to LAC stood at US$61.3 billion after reaching a peak of US$64.9 billion in the run-up to the 2008-2009 global financial crisis (Maldonado and Hayem 2013). Remittances are primarily predicated on the needs that the potential recipient articulate to the sender. While the potential recipient may request funds to purchase food, cover housing costs and medical costs, there are times when a request might be made for funds to start a new business venture.

Remittances may be favored over bank credit by enterprising individuals in LAC countries. Similar to the case of family-based equity, remittances are preferred because they may be secured at a low transaction cost; that is, the relative abroad may be willing to send the requested funds to the potential dependent-recipient who is known to be truthful about his or her financial circumstances. Like family-based financing, remittance is also fungible; that is, once the requested funds are received, the recipient has the discretion to use them for purposes other than those initially stated. Thus, remittances may follow the recipient who intends to participate in the informal economy.

For all these reasons, the *remittance-recipient status* of individuals in LAC countries is important when evaluating the propensity for entrepreneurship in the informal economy. Remittance-recipient status, as defined by a binary variable with value one if the individual receives remittance and zero otherwise, and the propensity for entrepreneurship in the informal economy may be summarized as follows:

P6. The propensity for entrepreneurship in the informal economy is positively related to the remittance-recipient status of the individual, all else equal.

Insofar as remittances constitute a more distant form of family-based financing (i.e. distant family-based equity), it may be inferior relative to capital raised from relatives at home in terms of timeliness and the consistency of the business support provided. In addition, since relatives abroad may be less connected with the local business community, they may not be well-placed to connect remittance-recipient entrepreneurs relative to locally based influential family members. Altogether, remittance may constitute finance with limited business advice and contacts relative to family-based financing received at home. This leads to the following propositions:

P7. The survival rate of new firms in the informal economy is negatively related to the remittance-recipient status of their owners, all else equal.

P8. The productivity of new firms in the informal economy is negatively related to the remittance-recipient status of their owners, all else equal.

Extension of the Finance-Performance Nexus Framework

In the foregoing conceptualization of entrepreneurship in the informal economy, we make an implicit assumption that enterprising individuals start new businesses either in the formal economy or the informal economy. In game theoretic language, such a dichotomy is equivalent to the assumption that entrepreneurs adopt a "pure strategy". However, for both theoretical and practical reasons a pure strategy may not serve entrepreneurs well. For instance, prominent entrepreneurs that exclusively operate in the informal economy are unlikely to escape the scrutiny of tax authorities over an extended period. However, the informal operations of such an entrepreneur may largely go unnoticed if he or she simultaneously operates in the formal and the informal economy. In game theoretic language, a "mix strategy" approach to informality may be superior to a pure strategy.

There is a potentially significant group of what may be called *formal-informal entrepreneurs* that straddle the line between the formal and the informal economy (Godrey, 2011; Guha-Khasnobis, Kanbur, Ostrom, 2006). While a complete treatment of these entrepreneurs is beyond the scope of this paper, a basic understanding of the relationship between their allocation decisions and their primary source of external finance may shed light on the vexing issue of tax evasion.

In theory, the share of activities that entrepreneurs allocate to the informal economy may be related to the source of external finance upon which they primarily depend. Specifically, since banks, business angels and venture capitalists are expected to screen and closely monitor the new firms that they finance, the latter's share of activities in the informal economy is likely to be limited, if any. This leads to the following proposition:

P9. The share of revenue generated or costs incurred by entrepreneurs in the informal economy is negatively related to the share of bank credit, business angel finance and venture capital in total external finance, all else equal.

While entrepreneurs who primarily receive formal external finance may be prohibited from participating in the informal economy, the situation may be fundamentally different for those who are dependent on family-based equity. Specifically, the latter are expected to have considerable autonomy as it relates to simultaneous participation in the formal and informal economy. The latter may also have considerable discretion over the reporting of revenue and costs. Insofar as participation in the formal and informal economy is motivated by tax considerations, the relationship between the dependence on family-based equity and the share of activities in the informal economy may be summarized by the following two propositions:

P10. The share of revenues generated by entrepreneurs in the informal economy is positively related to the share of family-based equity in total external finance, all else equal.

P11. The share of costs incurred by entrepreneurs in the informal economy is negatively related to the share of family-based equity in total external finance, all else equal.

According to propositions 9 and 10, family-finance dependent entrepreneurs that jointly operate in the formal and the informal economy may minimize their tax liability by shifting profits to the informal economy while reporting losses in the formal economy.

DISCUSSION

Summary of Key Concepts and Analytical Results

This paper develops a number of new propositions that constitute what may be collectively called the finance-performance nexus of the institutional framework of Webb et al. (2013). This is done in the context of LAC, and is primarily geared toward helping scholars and policymakers better understand the variety of institutional factors that not only foster or discourage entrepreneurship in the informal economy, but also account for performance differences across entrepreneurs in the informal economy.

Given the importance of institutional heterogeneity as a source of cross-sectional differences in performance, the conceptualization of external finance is among the key contributions that this paper makes to the extant theoretical literature. Given limited internal finance, the basic argument is that LAC entrepreneurs may be dependent on external informal finance (i.e. local family-based equity, distant family-based equity or remittances) relative to external formal-informal finance (i.e. business angel finance and venture capital). These sources of external finance differ in terms of: (1) finance-consulting-contacts mix (2) governance mechanisms (i.e. reputational capital versus formal contracts), and (3) fungibility (i.e. discretion to use funds borrowed or received for alternative purposes).

In general, it is argued that the preference for external (relationship-based) informal finance, whether in the form of local or distant family-based equity, is predicated on the relatively low transaction costs that are associated with reputation-based governance mechanisms as opposed to formal contracts. Meanwhile, it is proposed that productivity and the growth or survival rates of new firms in the informal economy may be determined in part by the extent to which business advice and contacts accompany family-based equity. In particular, while financing from more business savvy and well-connected family members may improve the productivity and the likelihood of survival of entrepreneurs in the informal economy, it is unlikely to lead to rapid business expansion.

The relationship between family-based equity and the propensity for entrepreneurship in the informal economy receives special treatment in this paper. Specifically, it treats the decision to enter the informal economy separately from the decision to use family-based finance. It is possible, for instance, that the regulatory costs of operating in the formal economy may encourage entrepreneurs to start new ventures in the informal economy. Once there, the entrepreneur then decides whether to use family-based finance or external finance in the form of bank credit, business angel finance or venture capital. Since family-based equity is likely to be more fungible than these alternative sources external finance, an entrepreneur is likely to favor the former over the latter.

At the same time, it is plausible that the entrepreneur enters the informal economy knowing fully well that it is always possible to raise capital from family members if banks refuse to lend to informal business owners. While this alternative case raises the question of whether family-based finance follows or leads entrepreneurs in the informal economy, it highlights another aspect of the fungibility of external (relationship-based) informal finance. That is, insofar as fungibility confers discretion over the use of funds borrowed or received, the value of this flexibility is enhanced by the relative ease with which family-based equity and remittances in the form of cash may be moved between the formal and the informal economy.

Finally, an implicit assumption behind our theoretical framework is that an entrepreneur must decide whether to start a new business venture either in the formal economy or the informal economy. However, when our theoretical framework is extended to account for a potentially more practical setting where (formal-informal) entrepreneurs operate in both the formal and the informal economy at the same time, a number of insights emerge. On the one hand, the use of relatively formal (contract-governed) finance (i.e. bank credit, business angel finance and venture capital) may reduce informality by limiting the ability of entrepreneurs to operate in the informal economy. On the other hand, entrepreneurs who get most of their external finance from their relatives are not only better placed to simultaneously operate in the formal and the informal economy, but may also have greater latitude to manipulate their financial records and engage in tax evasion.

Implications for Empirical Work and Public Policy

The finance-performance nexus provides a basis for a theoretically grounded empirical investigation of the relationship between the financial aspects of the institutional environment and both the propensity for entrepreneurship and the performance of entrepreneurs in the informal economy. It also provides a basis for conceptualizing how policymakers may prudently approach the challenge of informality in LAC countries. According to our theoretical framework, the approach to informality may be summarized in the following two steps.

First, policymakers should initially focus on reducing the relative size of the informal economy. At the same time, it should be appreciated that the optimal share of informality in the economy is not zero. For instance, even if business regulations were the sole impediments to entrepreneurship in the formal economy, there is conceivably some point where an incremental relaxation of those regulations may result in an increase in risk (i.e. increase in the share of defective and unsafe products in total sales) and business malpractices (i.e. money laundering or fraud). The expected incremental costs from these outcomes may exceed the expected economic benefits (i.e. new jobs, productivity growth and additional tax revenue) that may be derived from the entry of an additional new firm in the formal economy. In other words, it may not be prudent to eliminate business regulations that originally came into being to prevent unscrupulous business owners from defrauding their customers, investors and the tax authorities.

Still, regulations that are initially introduced to address a particular concern may subsequently take on a life of their own. The outcome may be a complex set of burdensome business regulations that discourage enterprising individuals from formally registering their new businesses. There is almost certainly room in this case to relax business regulations. The institutional impediments that seem to require the most urgent attention in LAC countries include business registration procedures, taxation, bureaucracy and corruption.

Once efforts have been made along these lines to optimally restrict the size of the informal economy, the next step is to examine how best to improve the productivity of the new and incumbent firms that are expected to remain in the informal economy. Specifically, the relatively scarce resources in LAC countries are perhaps best utilized if policymakers concentrate on the institutional factors that are likely to have the most adverse effects on the productivity of new and incumbent businesses in the informal economy. Our theoretical framework suggests that the potentially limited business experience and social network that may be associated with family-based financing may be good enough to keep new businesses afloat in the informal economy; however, they are likely to operate unproductively.

One way to address the inadequacy of family-based equity is to generally provide business training and other related-support services to entrepreneurs with ties to family-run businesses. But as our theoretical framework suggests, it may be necessary to provide a similar range of services to working-age remittance-recipients as well. These services may be designed and appropriately delivered through a private-public partnership.

Finally, there is much to be gained from greater efforts aimed at improving the information architecture that is required by banks to cost-effectively serve the SME sector in LAC countries. As a matter of priority, efforts should be made to develop or expand credit bureaus on a scale that enables them to generate and maintain credit histories on individuals in both rural and urban areas. The availability of this type of financial information may not only lower the cost of small business lending, but also reduce the degree to which new and small businesses are credit rationed in LAC countries (Berger, Frame, Miller, 2005).

Moreover, insofar as financial reforms increase the role of banks in new and small business financing, not only are informality and tax evasion expected to diminish according to our theoretical framework, but firm performance and labor productivity are also expected to improve. Similar benefits are expected as private equity (i.e. business angel finance and venture capital) become a more important source of new and small business financing in LAC. Thus, the development of the debt and equity markets is a critical component of the broader set of financial reforms that are imperative in LAC.

CONCLUSION

Altogether, this paper provides a theoretical basis for scholars and policymakers to think more clearly and logically about both the financial and non-financial aspects of the institutional environment; and how they may be related to the decisions of enterprising individuals to either fully operate in the informal economy, or straddle the line between the informal and the formal economy. In addition, it is now possible to think about performance differences among entrepreneurs in the informal economy in a structured way. When the new insights and propositions in this paper are combined with those in the extant theoretical framework, scholars and policymakers have a solid platform to not only empirically evaluate both the financial and non-financial determinants of the propensity for entrepreneurship and performance in the informal economy, but to also formulate coherent public policies that are effective in both restraining and coping with informality.

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