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Macro-level determinants of formal entrepreneurship versus informal entrepreneurship

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ABSTRACT

Based on the eclectic theory of entrepreneurship, this article analyzes macro-level determinants of national rates of formal versus informal entrepreneurship. Our evaluation of the factors identified in this theory reveals a set of empirically-testable, higher-order determinants: economic opportunities, quality of governance, macro-level resources and abilities, performance-based culture and socially-supportive culture. The results of our analysis obtained through the PLS (partial least squares) approach to structural equation modeling contribute to the entrepreneurship literature by providing an empirically-supported model that shows how formal and informal entrepreneurship are driven differently. This model clarifies the conflicting findings in previous research about the effects of socioeconomic, institutional, and cultural factors on entrepreneurship rates across countries. Finally, by showing the effect of each determinant on formal and informal entrepreneurship, this study has important implications for policymakers as well as businesses.

1. Executive summary

Based on the eclectic theory of entrepreneurship, this article analyzes macro-level determinants of national rates of formal versus informal entrepreneurship. Our evaluation of the factors identified in this theory reveals a set of empirically-testable, higher-order determinants: economic opportunities, quality of governance, macro-level resources and abilities, performance-based culture and socially-supportive culture. The results of our analysis obtained through the PLS (partial least squares) approach to structural equation modeling contribute to the entrepreneurship literature by providing an empirically-supported model that shows how formal entrepreneurship and informal entrepreneurship are driven differently.

On the demand-side side, economic opportunities (which include GDP growth, share of the service sector in the economy, innovation and financial development) and the quality of governance (governance index, democracy index and ease of doing business) are found to encourage formal entrepreneurship and discourage informal entrepreneurship. This insight can explain the underlying reasons for discrepancies in previous studies. Specifically, studies with a focus on entrepreneurship in the formal sector find that good institutions and a high level of economic development and technology advancement are positively related to national rates of entrepreneurship. On the other hand, studies focusing on entrepreneurship in countries where informal commercial activities account for a large share of the economy find a negative relationship. Studies with no clear bias on the proportion of countries with a higher percentage of formal or informal entrepreneurship may show no relationship at all. Furthermore, our study can explain the U-shaped relationship between economic development and national rate of entrepreneurship. When the economy is at a low development stage, informal entrepreneurship is common. As it grows and

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exerts pressure on the cost of doing business (higher wages, competition, etc.), informal firms are squeezed out. When the economy reaches an advanced stage, formal entrepreneurship flourishes and thus drives up the national rate of entrepreneurship.

With regard to supply-side factors, our study supports the argument found in population theories that people are the main agents of social and economic changes. It also offers strong support for motivation theories which stress intrinsic motivations and self-determination in human behaviors. As people come to be better educated, enjoy a higher level of social security and earn more income, they are less inclined to engage in the informal economy. Furthermore, it shows that informal entrepreneurship is driven by a socially-supportive culture, while performance-based culture has a strong impact on formal entrepreneurship. The evidence we found with regard to the impact of government intervention and culture supports theories in the behavioral school of thought stressing the role of the human-made, formal (e.g., regulations) or informal (e.g., culture) constraints in shaping human interaction. As individuals and organizations are pushed to comply with rules and norms, institutions determine the setting and legitimacy of entrepreneurship.

Finally, our results with regard to the linkages among governance, economic opportunities and resources and ability variables also contribute to the literature. More precisely, they strongly support the institutional economics literature by confirming that improved regulatory efficiency stimulates economic development. They also validate the development economics literature's argument that economic development increases peoples' resources and abilities. In addition, our study supports theories of culture change by showing that improvement in people's resources and abilities leads societies to a performance-based culture that rewards performance, encourages gender equity and future-oriented activities, and increases uncertainty avoidance while discouraging power distance and in-group collectivism.

These findings reveal that governments can reduce informal entrepreneurship and at the same time boost formal entrepreneurship by (1) nurturing a performance-based culture, (2) creating favorable conditions for economic advancement, (3) increasing quality of governance, and (4) enhancing people's resources and abilities. However, these measures may not be feasible for developing countries whose informal sector accounts for a significant share of the economy. To increase entrepreneurship in these countries, we recommend promoting cooperation and networking to encourage social capital and to encourage informal entrepreneurship before undertaking the necessary governance and economic reforms to motivate entrepreneurs to transfer to the formal sector.

Understanding the determinants of formal and informal entrepreneurship can be beneficial for managers. Both formal firms and informal firms compete in the market. Since informal firms operate outside the regulatory system, their competition dynamics can be different from formal firms and their activities are not easily traceable. Familiarity with a country's contextual factors allows managers to determine whether their competition in that country comes from the formal or informal economy and to develop business strategies accordingly (i.e., whether to enter that country, and if yes, how to compete). Moreover, a company's supply chain may be made up of both formal firms and informal firms. Therefore, our findings about determinants of the national rates of entrepreneurship in the formal and informal sectors can help managers to understand the nature of their companies' supply chain, thereby enabling them to develop appropriate strategies.

2. Introduction

Entrepreneurship is one of the most important forces shaping the changes in the economic landscape (Baumol, 1968) regardless of whether it occurs within the framework of the formal economy or takes place informally outside state regulatory systems (Carree and Thurik, 2010; Thurik et al., 2002; Williams and Nadin, 2010 etc.). Although entrepreneurship in the informal economy receives very little attention in academic literature, there are several reasons why it cannot be ignored. First, informal commercial activities account for a sizeable share (over 30% on average) of economic activity around the world (Schneider et al., 2010a). Second, informal entrepreneurship takes places in all countries regardless of their level of economic development (Thai and Turkina, 2012). Third, informal entrepreneurship is highly prevalent in certain countries. For example, 90% of Ukraine's business start-ups operate partially or wholly in the informal economy (Williams and Round, 2007). Fourth, informal entrepreneurship can be vulnerable to unethical practices (e.g., corruption, worker exploitation, natural environment abuse, etc.). Therefore, it is vitally important to understand what drives entrepreneurs to set up new businesses in the formal sector or in the informal one.

At the macro level, it is useful for policymakers to understand what makes entrepreneurs in their countries engage in the formal or the informal economy when setting up their new business. This knowledge can help them not only understand the current situation of their country in comparison with other countries, but also come up with macro-level measures to direct their countries' entrepreneurship development. In addition, this knowledge can help businesses to develop certain competitive advantages in doing business in a country according to its ratio of formal versus informal entrepreneurship.

Previous research shows that the level of entrepreneurship varies systematically across countries (see Wennekers et al., 2002 for a review). It has been argued that factors such as culture, economic conditions, institutions, technology advancement, and education level are important determinants (Bettignies and Brander, 2007; Gentry and Hubbard, 2000; Harper, 1998; McMillan and Woodruff, 2002; Shane, 1996, etc.). Although entrepreneurship scholars tend to agree on the categories of factors influencing entrepreneurship, their empirical studies have led to different conclusions with regard to the relative importance of each driver and at times to contrasting directions of influence. For example, several studies (e.g., Havrylyshyn, 2001; Kaufmann et al., 2006; Nyström, 2008) show that good institutions and a high level of economic development and technology advancement are positively related to national rates of entrepreneurship. On the other hand, several other studies demonstrate that these same factors have a negative relationship (e.g., Naudé, 2009; Wong et al., 2005), a U-shape relationship (Wennekers et al., 2005) or