www.elsevier.com/locate/worlddev

World Development Vol. 70, pp. 43–58, 2015

http://dx.doi.org/10.1016/j.worlddev.2014.12.014

Institutional Voids or Organizational Resilience? Business Groups, Innovation, and Market Development in Latin America

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Summary. — The paper compares the innovativeness of group-affiliated firms (GAFs) and standalone firms (SAFs), and it investigates how country-specific institutional factors affect the group–innovation relationship. The paper analyzes the contrasting predictions of two competing views: the institutional voids and the organizational resilience theses. The empirical analysis focuses on a large sample of firms in Latin America. In line with the organizational resilience thesis, the results point out that the superior innovation performance of GAFs is stronger for national economies with more efficient financial, legal, and labor market institutions.

Key words — business groups, innovation, institutional voids, organizational resilience, market development, Latin America

1. INTRODUCTION

The study of the innovative activities of business groups is particularly important in the context of emerging economies (Carney, Gedajlovic, Heugens, Van Essen, & Van Oosterhout, 2011; Crespi & Zuniga, 2012). What is the role of business groups for technological and economic catch up—do they facilitate the development process by strengthening the innovative capability of emerging economies, or rather hamper it by creating entry barriers and making the domestic market less innovative and less efficient? A few recent studies have raised this question, and provided empirical evidence suggesting that group-affiliated firms (GAFs) are on average more innovative than standalone firms (SAFs). This is due, among other factors, to business groups' greater access to financial and human capital resources, as well as their ability to take advantage of within-group and foreign spillovers (Mahmood, Zhu, & Zajac, 2011).

In the context of emerging economies, a key question to investigate is how the positive relationship between group affiliation and innovation varies across countries. Many developing economies are currently undergoing a process of institutional change and transition that is commonly referred to as *market development* (Cuervo-Cazzura & Dau, 2009; Lee & Kim, 2009). It is important to investigate how this process of institutional change affects the relationship between group affiliation and innovation, and how this varies across emerging economies. Does group affiliation spur innovation relatively more in economies characterized by weaker and inefficient institutions, or rather in countries with a better institutional quality?

This research question motivates the present paper. From a theoretical point of view, there exist two competing views providing different answers to this question. On the one hand, the *institutional voids thesis* argues that business groups, by making up for the lack of well-functioning institutions, tend to perform better and be more innovative in countries with weaker and less efficient institutional set ups (Chang, Chung, & Mahmood, 2006). On the other hand, a different standpoint, which this paper will name the *organizational resilience thesis*, postulates that groups are resilient organizations that, when confronted with a process of institutional transition and market development, will respond by becoming more efficient and more innovative over time. Hence, according to this second view, group affiliation is more beneficial and enhances firm-level innovation relatively more in economies in which national institutions are stronger and more efficient (Chari & David, 2012). This thesis has not been explicitly formulated yet in the innovation literature, and it will be developed in this article.

The objective of this work is precisely to contrast these two theses and carry out an empirical test of their predictions in a broad cross-country sample of emerging economies. The empirical analysis makes use of the most recent wave of the *World Bank Enterprise Surveys* (WBES) database, referring to the period 2010–11. Our study focuses on a sample of around 6500 manufacturing enterprises in 20 countries in Latin America.

The topic of business groups' innovation activities and their relationships to national institutional conditions is highly relevant for emerging economies in Latin America (Khanna & Palepu, 2000; Schneider, 2009). During the last two decades, many Latin American economies have undertaken extensive institutional changes and economic reforms—privatizations, trade liberalization, financial and macroeconomic stabilization—intended to make domestic markets more open, competitive, and efficient. The new competitive environment opens up new challenges and opportunities for domestic firms in the region. It is thus important to study how business groups are responding to the changing economic environment, and the extent to which their strategies and performance differ from those of standalone enterprises.

On the whole, the paper contributes to the literature along two dimensions. First, we provide new evidence and quantitative analysis of business groups' strategies and innovation activities. In line with the few recent studies on this topic, we find that GAFs are more innovative than SAFs, and we estimate the innovation propensity of GAFs to be 10% higher than that of SAFs. Secondly, our results are in line with the predictions of the organizational resilience thesis. Specifically,

* Final revision accepted: December 18, 2014

we find that, across countries in Latin America, the superior innovation performance of GAFs is stronger for national economies with better financial and legal institutions, and for countries with more efficient labor market regulations.

The paper is organized as follows. Section 2 points out the theoretical framework and hypotheses; Section 3 presents the data and indicators; Section 4 describes the econometric methods; Section 5 reports the empirical results; Section 6 concludes and discusses the main implications of the work.

2. THEORY AND HYPOTHESES

A few studies have recently extended the business groups' literature to analyze whether group-affiliated firms (GAFs) are more innovative than standalone firms (SAFs) (Belenzon & Berkovitz, 2010; Chang et al., 2006; Mahmood & Lee, 2004; Mahmood & Mitchell, 2004; Mahmood et al., 2011). The empirical results of these works all point to a positive impact of group affiliation on innovation, due to the following channels. First, GAFs can more easily get access to financial capital within the group when external financial markets are inefficient, and hence also reduce the uncertainties related to R&D investments. Secondly, when the country has a low level of human capital and workers' skills, GAFs may provide workers with training and more efficiently allocate labor resources internally within the group. Thirdly, when the home market is not well developed, GAFs may overcome the lack of independent suppliers and advanced users by linking to other firms of the same (vertically integrated) group. [1] Hence, vertical integration may partly substitute for the lack of a good home market. Relatedly, GAFs may have greater access to internal information and advanced knowledge (within-group spillovers). Fourthly, due to their established market position and distribution network, GAFs are in a better position to develop collaborations with foreign firms and MNEs, so possibly exploiting knowledge imitation and foreign spillovers.

In the context of emerging economies, a key question to investigate is how this positive relationship between group affiliation and innovation varies across countries. Many developing economies are currently undergoing a process of institutional change and transition that is commonly referred to as *market development* (Cuervo-Cazzura & Dau, 2009; Kim, Kim, & Hoskisson, 2010). Following (Chakrabarti, Vidal, & Mitchell, 2011, p. 7), this may be defined as "the degree to which market-oriented institutions such as capital markets, legal systems, labor markets, and commercial value chains are present in support of business activity". This process of institutional change and market development, however, differs substantially across countries (Williamson, 1991). From a comparative institutional perspective, it is therefore important to investigate whether group affiliation spurs innovation relatively more in economies characterized by weaker and inefficient institutions, or rather in countries with a better institutional quality.

This question is not only important from a comparative institutional perspective. In more general terms, as observed by Chang et al. (2006), innovation studies have not yet achieved a clear understanding of how firm-level strategies and innovative activities interact with the macro environment in which they operate. While management studies do in general focus on firm-level resources, capabilities, and strategies, the innovation system literature points out that firms' innovation investments are highly dependent upon, and supported by, country-level institutions (Lee & Kim, 2009; Nelson, 1993). In particular, *financial* institutions favor private firms' access to finance, making available resources to invest in R&D; *legal* institutions and an efficient court system favor commercial transactions, contract enforcing and the protection of intellectual property rights (IPRs); and *labor market regulations* affect the pool of human resources that a company can draw from, or determine the flexibility of the labor market and hence the ability of firms to hire new workers. It is therefore crucial to investigate further the process of interaction between the micro- and macro-level in innovation studies, and how this co-evolves with institutional and economic development. [2]

The question of the relationship between group affiliation and innovation, and how this is affected by country-level institutions, does not have a clear cut answer. From a theoretical point of view, there exist two competing arguments. The first is the so-called *institutional voids thesis*, according to which business groups, by making up for the lack of well-functioning institutions, tend to perform better and be more innovative in countries with weaker and less efficient institutional set ups. Most recent studies on this question have adopted this thesis (Chang et al., 2006; Mahmood et al., 2011). By contrast, a different standpoint, which this paper will name the *organizational resilience thesis*, does instead argue that group affiliation may be more beneficial and enhance firm-level innovation in economies in which national institutions are stronger and more efficient. This thesis has not been explicitly formulated yet in the innovation literature, and it will be developed in this article.

The contribution of this work is precisely to contrast these two theses and carry out an empirical test of their validity in a broad sample of emerging economies in Latin America. The motivation for undertaking this type of exercise is well illustrated by Carney et al. (2011), which, in a recent comprehensive overview of the literature, concluded that: "We see a need for future studies offering concurrent tests of multiple theories, as well as studies developing and testing eclectic explanatory frameworks combining variables from multiple-source theories" (Carney et al., 2011, p. 452). Table 1 summarizes the main arguments of these theses.

(a) *The institutional voids thesis*

According to this view, business groups in emerging economies are *paragons*: they play an important function for economic development by making up for missing or inefficient institutions, hence filling institutional voids (Khanna & Palepu, 1997; Leff, 1978). Thus, groups originate and prosper when national institutions are weak and, correspondingly, group performance is relatively good in countries characterized by weaker institutions than in economies with well-functioning institutional set ups (Fisman & Khanna, 2004; Khanna & Yafeh, 2007).

The theoretical arguments that provide a conceptual foundation to this market failure view are primarily rooted in transaction costs economics (Williamson, 1975): taking advantage of their organizational structure and internal network, groups may decrease and partly avoid the high transaction costs that characterize the inefficient market context that is typical of less developed economies. Further, this argument of the superior performance of groups in emerging economies is also related to the resource-based view of the firm (Penrose, 1959; Wernerfelt, 1984). According to this, it is important to distinguish between *resources* and *capabilities*: the former are stocks of production factors that a firm possesses (e.g., physical and human capital), whereas the latter represent its ability to manage these resources in order to create products and