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Big businesses and economic growth: Identifying a binding constraint for growth with country panel analysis

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ABSTRACT

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A large body of qualitative studies on the positive role played by big businesses in promoting economic growth is widely available. However, any rigorous attempt to measure this impact has yet to be made. In this paper, we attempt to fill this gap by utilizing new and internationally comparable databases such as those of the Global Fortune 500, the Business Week 1000, and the Forbes 2000 publications, and by using rigorous quantitative methods. We measure big businesses by both the number of these firms and by their sales volumes in each country. The empirical results of all models consistently show four major patterns. First, big businesses have a significant and positive effect on economic growth. Second, such businesses in each nation are positively associated with stability in economic growth. Third, the significant and positive effect of big businesses on economic growth remains even with the inclusion in the estimations of the share of SME employment and the control for possible endogeneity in big businesses and SMEs. Fourth, in considering both the absolute and the relative presence of big businesses within each country, their absolute presence is positively linked to economic growth, whereas the relative presence of big businesses within the national economy is negatively linked to economic growth. *Journal of Comparative Economics* **41** (2) (2013) 561–582. Seoul National University, Seoul 151-746, Republic of Korea.

1. Introduction

Big businesses are not only producers of popular products but also important players in the economy. The emergence of big businesses originated in the United States (US) by the end of the 19th century, spreading later to some European countries such as Germany and France as well as to Japan. More recently, a number of newly industrialized countries such as South Korea, Taiwan, China, and Brazil have also become locations for the headquarters of big businesses. As Chandler (1959, 1977, 1990) and his contemporaries (Chandler et al., 1997) argued, industrial take-off and rapid economic growth in all these industrialized nations have been accompanied by the appearance and flourishing of big businesses. Is this scenario a coincidence? If not, what is the logical nexus? The purpose of this paper is to investigate the role and significance of big businesses in economic development. The importance of this question is confirmed by the ample attention that economists and other social scientists have been giving to the role of big businesses in national economies (Schumpeter, 1934,

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1942; Kozul-Wright and Rowthorn, 1998; Pagano and Schivardi, 2003; Blackford, 1998; Cassis, 1997; Wardley, 1991; Fogel et al., 2008).

The literature on the determinants of economic growth and development is massive, and many factors or variables have been suggested theoretically and empirically. For example, Acemoglu et al. (2001, 2002), Rodrik et al. (2004), Rodrik (1999), and Glaeser et al. (2004) analyzed factors such as the economic role of institutions, policies, domestic social conflicts, or geography. The purpose of the present study is not to enumerate and review the literature but to highlight some new directions. In response to the World Bank's (2005) review of the economic growth experience around the globe in the 1990s, Rodrik (2006) emphasized the importance of identifying the "binding constraints" on growth. According to Rodrik, the most urgent task for economists is to undertake a diagnostic analysis to detect where the most significant constraints on economic growth are (and hence where the greatest return is).

We follow Rodrik's emphasis on "finding the binding constraints" as we examine the role of big businesses in economic growth.[1] We claim that having or not having a certain number of big businesses is one of the important binding constraints that various nations are facing in their recent economic development, especially in countries that are presently in the so-called middle-income trap (World Bank, 2010; Yusuf and Nabeshima, 2009).[2] Whereas Hausmann et al. (2008) diagnosed specific binding constraints for each specific country, we think that such constraints can also be identified for groups of countries. One of the crucial differences between high- and middle-income countries might be that the latter lack the big businesses that can compete globally. We investigate the specific role of big businesses after controlling for usual variables in growth modeling such as capital, education, technology and small and medium enterprises (SMEs). In other words, we hypothesize that ignoring the significant role of big businesses in economic growth is similar to ignoring other "economic distortions whose removal would make the largest contribution to alleviating the constraints on growth ..." (Hausmann et al., 2008, p. 331). This approach is also aligned with that by Lee and Kim (2009), who claimed that some factors are more important or more binding, depending on the stage of economic development.

In the next section, we present the theoretical case for analyzing the contribution of big businesses to economic growth and contrast their role with that played by SMEs. We then gather systematic, empirical evidence on the roles that big businesses play for a large group of middle- and high-income countries. To the best of our knowledge, this approach to gathering and applying empirical evidence has not been carried out before in a rigorous and systematic way. Our empirical investigation uses internationally comparable data on big businesses for a range of relevant countries. The three main databases this paper draws on are the Fortune 500, Business Week 1000, and the Forbes 2000 surveys of the largest companies in the world. We apply panel data econometric techniques such as fixed effects (FE) and generalized method of moments (GMM). These techniques are necessary to control for endogeneity or two-way causality, because *a priori*, we cannot be certain whether big businesses cause national growth, or whether national growth causes big businesses to expand.

We test a set of related hypotheses, which are as follows: (i) big businesses (represented by either their numbers or by their sales volumes) significantly contribute to a country's *per capita* GDP growth; (ii) big businesses contribute to GDP stability; (iii) big businesses contribute to economic growth in a more robust and definite way than SMEs; and (iv) excessive reliance on big businesses hinders economic growth. In other words, we can verify that increases in the relative predominance of big businesses in a nation's economy have negative implications for growth despite the positive link of expansion in the absolute size and number of big businesses to national growth and GDP stability. Such verification can be achieved by examining the effect of both the absolute and the relative presence of big businesses in each country. All the hypotheses are discussed in our theoretical considerations in the next section.

This paper is organized as follows. Section 2 discusses several theoretical issues on the role of big businesses in economic growth. Section 3 explains the methodology of our analysis. Section 4 presents the data and variables. Section 5 discusses the main findings from the empirical investigation. Section 6 checks the robustness of our results with the use of additional control variables and deals with the issues of sample selection bias. This section also looks at the effect of SMEs compared with that of big businesses. Section 7 extends our discussion by focusing on the contribution of big businesses in stabilizing growth, and on the issues surrounding the absolute and relative presence of big businesses in a national economy. In Section 8, we present our conclusions and final remarks.

2. Theoretical considerations

This section discusses why big businesses might be one of the most important factors in economic growth, at least for the group of middle-, and high-income countries. Numerous studies have recognized that the role of big businesses in national economies is outstanding. We look at four of the main arguments for why this is so.

First, economic history has provided evidence that when economies take off, the number of big businesses also increases to exploit economies of scale and scope. The monumental contributions of Schumpeter (1934, 1942) and Chandler (1959, 1977, 1990) are the theoretical bases that led us to examine big businesses in this respect. Chandler (1959, 1977, 1990) specifically emphasized the important role of large companies in the US and in Germany during the 19th and early 20th centuries. Large businesses increased their production to unprecedented levels to utilize fully their huge volume of

[1] Our intention is to extend Rodrik's concept of "binding constraint" to include more cases where it is applicable.

[2] World Bank (2010) and Yusuf and Nabeshima (2009) defined this trap as a situation in which middle-income countries struggle to remain competitive, as low-cost and high-volume production ultimately hinders their transition to a high-income status.