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The deep-pocket effect of internal capital markets ☆

Xavier Boutin [a], Giacinta Cestone [b,c,d], Chiara Fumagalli [e,f,c,*], Giovanni Pica [g,c,h], Nicolas Serrano-Velarde [i,j]

[a] *European Commission (DG Competition - Chief Economist Team), Brussels, Belgium*
[b] *Cass Business School, City University London, United Kingdom*
[c] *CSEF, Italy*
[d] *ECGI, Brussels, Belgium*
[e] *Università Bocconi, Department of Economics and Paolo Baffi Centre, Italy*
[f] *CEPR, United Kingdom*
[g] *Università di Salerno, Italy*
[h] *Centro Luca D'Agliano, Italy*
[i] *Università Bocconi, Italy*
[j] *Oxford University Centre for Business Taxation, United Kingdom*

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A B S T R A C T

We provide evidence that incumbent and entrant firms' access to business group deep pockets affects the entry patterns in product markets. Relying on a unique French data set on business groups, our paper shows that entry into manufacturing industries is negatively related to the cash hoarded by incumbent affiliated groups and positively related to entrant groups' cash. In line with theoretical predictions, we find that the impact of group cash holdingson entry is more important in environments where financial constraints are pronounced. The cash holdings of incumbent and entrant groups also affect the survival rate of entrants in the three- to five-year post-entry window. Overall, our findings suggest that internal capital markets operate within corporate groups and affect the product market behavior of affiliated firms by mitigating financial constraints.

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* Corresponding author at: Università Bocconi, Department of Economics, Via Roentgen, 1 - 20136, Milano, Italy.
E-mail address: chiara.fumagalli@unibocconi.it (C. Fumagalli).

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1. Introduction

A vast theoretical and empirical literature has emphasized that the availability of internally generated liquidity enhances firms' investment capacity in environments where access to external funds is limited.[1] Research on internal capital markets has shown that, within multi-segment firms and business groups, investment capacity in one sector can be enhanced by cash generated in other sectors.[2] This suggests that firms that enjoy access to internal capital markets can take actions that are not available to their stand-alone rivals due to financial constraints, which would explain why group firms and conglomerates engage more in corporate innovation (Belenzon and Berkovitz, 2010; Belenzon, Berkovitz, and Bolton, 2009) and plant acquisitions (Maksimovic and Phillips, 2008).

In this paper we explore the idea that internal capital markets, by alleviating financial constraints, enhance a firm's actual and perceived competitive strength. We do so by investigating whether entry into manufacturing industries is affected by the cash reserves hoarded by incumbent and entrant business groups. Although business groups are ubiquitous both in advanced and emerging economies, the economic literature on the product market effects of groups is fairly limited.[3] In particular, it is not obvious how internal capital markets operating within groups affect the competitive behavior of affiliated firms. Our analysis then sheds light on one of the channels through which groups shape the economic environment.

To the best of our knowledge, this is the first paper that tries to assess the impact of group cash holdings, as opposed to individual firm liquidity, on product market competition. This gap in the literature is also due to the lack of detailed information on business group structures, which typically take the form of pyramids and are hard to reconstruct. Our analysis relies on unique information on the ownership structure of business groups and firm balance sheets provided by the INSEE (Institut National de la Statistique et des Études Économiques). We thus focus on the French economy, an interesting case study for our purposes. Recent statistics (Skalitz, 2002) estimate that 30% of French manufacturing firms are affiliated with a group and generate 72% of the sales in their sectors. In our data, 89% of the largest incumbents in manufacturing industries belong to corporate groups, suggesting that group affiliated firms in France enjoy strong positions in their markets. One possible explanation for this is that incumbents that are able to draw on a group's deep pockets are better able to fund research and development, advertising, and other capital expenditures that are central to the competitive game. Our paper empirically investigates this idea, focusing on the impact of group liquidity on entry.

Our first finding is that, controlling for a host of factors including incumbents' own cash holdings and efficiency, entry into manufacturing industries is negatively related to the cash hoarded by incumbent affiliated groups. This is per se a novel contribution. While a few papers have investigated the link between competition and business group presence in product markets, little evidence relates product market dynamics to business group characteristics.

The robust negative relation between entry and incumbent group cash holdings that we identify calls for further investigation, as it could be ascribed to both a financial constraint explanation and an efficiency explanation. Internal capital markets operated by cash-rich groups could relax the financial constraints faced by affiliated units, providing them with a competitive edge over potential entrants, who could instead have a harder time raising capital. However, potential entrants could be scared out of markets dominated by cash-rich groups because the latter are perceived as very efficient. Our results suggest that the relaxation of financial constraints plays a non-negligible role in explaining why entry is inversely related to group cash, as the negative correlation survives after controlling for several measures of efficiency. Furthermore, we find that the effect of a group's deep pockets on entry is amplified in markets where group affiliated incumbents are more efficient. This result indicates that the more productive group units are the ones whose financial constraints are alleviated more by the internal capital market. Hence, efficiency and financial constraints interact in determining the competitive strength of affiliated firms.

Our analysis then focuses on group-backed entry. If access to a group's deep pockets enhances affiliated firms' competitive strength by alleviating their financial constraints, then firms backed by cash-rich groups should be better equipped for entering new markets. We find that entry by business groups is facilitated when entrant groups have piled up large cash reserves in their originating markets. Also, while group-backed entry is negatively affected by the incumbent groups' deep pockets, this effect is smaller when the entrant groups are cash-richer. This result suggests that relative financial strength affects group entry. We also find evidence that group entry is negatively correlated with the relative efficiency of the incumbent groups compared with entrant groups. Finally, we find that entry into young industries is more facilitated by entrant groups' cash when the entering groups are established in older sectors, which supports the idea (see Maksimovic and Phillips, 2008) that internal capital markets are used by conglomerates to channel funds from mature sectors that lack investment opportunities toward young growing sectors.

To further explore the financial constraint explanation of our findings, we draw and take to the data additional theoretical predictions that relate the impact of group cash holdings on entry into a given industry to the severity of the financial constraints that characterize that

[1] See Hubbard (1998) and Stein (2003) for detailed surveys of this literature.

[2] See, among others, Hoshi, Kashyap, and Scharfstein (1991), Lamont (1997), and Shin and Stulz (1998).

[3] Recent work by European Corporate Governance Network (1997), La Porta, Lopez de Silanes, and Shleifer (1999), Claessens, Djankov, and Klapper (2000), and Khanna and Yafeh (2007) highlights the role played by diversified business groups in various countries, including continental Europe.