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Do multinational and domestic corporations differ in their leverage policies?☆

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ABSTRACT

This paper examines the leverage policies of multinational corporations (MNCs) in comparison to those of domestic corporations (DCs). Prior studies document that MNCs have lower leverage levels. However, our analysis of U.S. firms over the period 1981–2010 reveals that the leverage levels of MNCs are not significantly lower than those of DCs if we control for key firm characteristics related to leverage levels. We also find that MNCs and DCs do not differ significantly in terms of their debt maturity structure, the speed of leverage adjustments, or the propensity to issue debt vs. equity (or vs. not to issue debt). The results suggest that MNCs' financial policies at the corporate level are not significantly influenced by their greater exposures, in comparison to DCs, to market imperfections such as taxes and regulations. Interestingly, however, our additional analysis of MNCs from outside the U.S. reveals that non-U.S. MNCs issue securities more frequently and adjust leverage faster than their domestic peers.

1. Introduction

Multinational corporations (MNCs) are responsible for an increasing proportion of global economic activity. Academic studies propose several reasons for the increasing importance of MNCs in the global economy (e.g., Bartlett et al., 2003). One of the keys to the success of MNCs often cited in the literature is their access to international capital markets and thus their ability to get around capital market imperfections. However, relatively little is known about whether and how these aspects of MNCs are reflected in their leverage policies.

The current study attempts to fill this research gap by answering two questions: (1) Do MNCs have higher or lower leverage than DCs? (2) Do MNCs adjust their leverage or issue securities more or less quickly than DCs to revert to the optimal leverage? Prior studies focus on the first question (e.g., Burgman, 1996; Chen et al., 1997; Doukas and Pantzalis, 2003; Fatemi, 1988; Kwok and Reeb, 2000; Lee and Kwok, 1988; Mansi and Reeb, 2002). We take a closer look at the first question by controlling for key firm

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characteristics and using both book and market leverages in measuring the level of debt. We also extend the existing literature by examining the second question concerning MNCs' leverage adjustment and security issuance decisions.

In hypothesizing about the leverage policy of MNCs, we draw attention to the OLI theory (Buckley and Casson, 1976; Dunning, 1977), although extant research does not consider the implications of this theory on finance. The OLI theory holds that MNCs have valuable intangible assets—such as technology, patents and brand recognition—that allow them to compete in international markets. This characterization leads to a prediction that MNCs have relatively low leverage because intangible assets give rise to high profitability, low asset tangibility, and high growth potential. Both theoretical and empirical studies in the capital structure literature suggest that these qualities are associated with low leverage (e.g., Lemmon et al., 2008; Myers, 2003; Rajan and Zingales, 1995). Thus, the OLI theory implies that MNCs will appear to have low leverage if we do not control for the firm characteristics associated with intangible assets.

Prior studies, such as Burgman (1996), Lee and Kwok (1988), and Mansi and Reeb (2002), report that MNCs have lower leverage than DCs. However, these studies do not control for important explanatory variables like profitability, asset tangibility or market-to-book (a proxy for growth potential). Doukas and Pantzalis (2003) control for these firm characteristics, but they consider only market leverage in measuring the level of debt. The convention in the capital structure literature is to consider both book- and market-leverages, we follow the convention.

Our primary sample of U.S. firms is composed of MNCs and DCs over the period 1981–2010. In our main analysis, we construct two samples of MNCs—MNC20 and MNC50—that are composed of firm-years in which foreign sales are at least 20% and 50% of consolidated sales, respectively. We also consider other measures, such as foreign sales/consolidated sales and number of foreign subsidiaries, in identifying MNCs, but our conclusions remain unchanged. We construct a matching sample of DCs that have at least $1 billion in book assets (in 1981 dollars) taking into account that our MNCs are typically large.

Our empirical investigation consists of two parts. The first part asks whether MNCs have lower or higher leverage in comparison to DCs. While summary statistics show that, on average, MNCs have lower leverage than DCs do in terms of both book and market leverages, the difference goes away in regression analyses that control for the firm characteristics associated with intangible assets—high profitability, low asset tangibility and high market-to-book—which are known to be associated with low leverage. Additionally, we examine the difference between MNCs' and DCs' debt maturity structure, defined as the proportion of short maturity debt (debt that matures within three years) in total debt. We find that this proportion is not significantly associated with various measures of multinationality; that is, there is little difference in the debt maturity structure between MNCs and DCs.

The second part of our investigation asks whether MNCs adjust their leverage or issue securities more, or less, quickly than DCs. If MNCs are capable of exploiting capital market imperfections and accessing international capital markets more readily than DCs, MNCs will be able to adjust leverage toward the optimal level more quickly than DCs and more frequently issue debts and/or equities. Our leverage adjustment regressions show inconclusive evidence that MNCs adjust their leverage more quickly than DCs. Furthermore, we find that MNCs do not issue securities more often than DCs, nor do they issue debts more quickly than DCs when they are under-levered relative to their industry peers. Overall, our findings lend little support to the hypothesis that MNCs have better ability than DCs to adjust leverage or issue securities.

For a robustness check, we examine the leverage policies of MNCs from six major countries outside the U.S.—Australia, Canada, France, Germany, Japan and the U.K. Previous studies, such as Kwok and Reeb (2000) and Ramirez and Kwok (2010), raise the possibility that non-U.S. MNCs may adopt different leverage policy because their internationalization entails different levels of risks as compared to their U.S. counterparts. However, our investigation of the level of debt for non-U.S. MNCs provides similar results to those for U.S. MNCs: that is, although summary statistics suggest that non-U.S. MNCs have low leverage in comparison to their domestic peers, this difference vanishes if we control for the firm characteristics associated with intangible assets. Interestingly, however, there is some evidence that non-U.S. MNCs change leverage more quickly and issue securities more frequently than their domestic peers. These findings may suggest that, unlike U.S. MNCs, non-U.S. MNCs have a comparative advantage over their domestic peers in accessing financial markets.

Overall, our results suggest that, at the corporate level, the leverage policies of U.S. MNCs do not differ significantly from those of their domestic peers once we control for key firm characteristics associated with their higher level of intangibles: profitability, low asset tangibility, and higher market to book value. Therefore, there is little evidence to suggest that unique international factors, such as geographical diversification or better access to international capital markets, affect the leverage policy of U.S. MNCs at the corporate level. Surely, one of the key advantages for MNCs is their ability to exploit market imperfections through internal capital markets or their networks of international subsidiaries. A host of studies document that MNCs' financial policies at the subsidiary level are influenced by market imperfections such as taxes and regulations (Arena and Roper, 2010; Desai et al., 2004; Foley et al., 2007; Huizinga et al., 2008; Newberry, 1998; Newberry and Dhaliwal, 2001). However, our results provide little indication that these imperfections give rise to a distinct leverage policy at the corporate level for U.S. MNCs.

2. Research background and hypotheses

Our focus in this study is placed on two questions: (1) Do MNCs have lower leverage than DCs do? (2) Do MNCs adjust their leverage or issue securities faster than DCs do? As noted above, extant research addresses only the first question concerning the level of MNCs' leverage. This section begins with a discussion of the implications of the OLI theory, a classic foreign direct investment theory, for MNCs' leverage. After critically reviewing the hypotheses put forth by previous research and also introducing an additional hypothesis concerning the level of MNCs' leverage, we propose hypotheses on the second question concerning the change in MNCs' leverage.