Contents lists available at ScienceDirect

## Research in International Business and Finance

journal homepage: www.elsevier.com/locate/ribaf

## 

### Denis Davydov\*

Department of Accounting and Finance, University of Vaasa, Finland

#### ARTICLE INFO

Article history: Received 2 February 2016 Accepted 18 April 2016 Available online 27 April 2016

JEL classification: G15 G30 G32

*Keywords:* Debt financing Bank debt Firm performance Emerging markets

#### 1. Introduction

#### ABSTRACT

This paper examines the effects of public and bank debt financing on firm performance in emerging markets. Using data on 700 publicly traded firms from the BRIC countries, it is documented that bank debt may have a positive effect on firm profitability. While overall market assessment of bank debt financing is negative, it is found that fully bank-financed firms lose less of their market value. Main findings remain unchanged after addressing potential endogeneity issues by introducing a novel instrumental variable. Overall, the results suggest that higher levels of bank financing may have positive effects on firm profitability and market valuation.

© 2016 Elsevier B.V. All rights reserved.

Corporate debt is commonly treated as a unified value in the empirical research on capital structure. As the result, large strand of literature focuses on the association between the level of financial leverage and firm performance without accounting for differences in debt sources (see e.g. Margaritis and Psillaki, 2010; Vithessonthi and Tongurai, 2015). Overlooked debt structure, in fact, may lead to biased conclusions on the link between leverage and firm performance as different debt sources may exert different effects on firm valuation and profitability. Rauh and Sufi (2010), for instance, argue that many firms obtain debt from multiple sources, each of which may have different implications for the effects of financing on investment opportunities and consequently, for firm performance. This heterogeneity in debt composition is particularly important for understanding differences in firm performance with similar leverage ratios. Hence, the purpose of this paper is to empirically investigate whether different sources of debt in the firm's capital structure affect its financial and market performance. Using data on publicly traded firms from the largest emerging economies – Brazil, Russia, India, and China (BRIC) – over the period 2003–2012, this paper aims to contribute to the prior literature by examining the association of different levels of public and bank debt with the firm's profitability and market valuation.

http://dx.doi.org/10.1016/j.ribaf.2016.04.005 0275-5319/© 2016 Elsevier B.V. All rights reserved.







<sup>\*</sup> I would like to thank the anonymous referee, Michael Bowe, Karen Ann Craig, Mary Funck, Laura Solanko, Sami Vähämaa, and the participants at the 2015 Eastern Finance Conference, the 2014 Southern Finance Association Conference, the 2014 Bank of Finland (BOFIT) research seminar and the A&F research seminar at the University of Vaasa for valuable comments on the previous versions of this paper.

<sup>\*</sup> Correspondence to: Department of Accounting and Finance, University of Vaasa, P.O. Box 700, FI-65101 Vaasa, Finland. Tel.: +358 29 449 8468. *E-mail address:* denis.davydov@uva.fi

Despite the vast body of event studies on the effects of particular debt financing source on the stock market movements, there is only scarce evidence on the differences in firm performance between bank dependent firms and firms relying on other sources of debt and this evidence is quite specific. Kang and Stulz (2000), for instance, examine this issue around the banking crisis in Japan in the 1990s. They document that bank dependent firms underperform their peers with other sources of debt. On the other hand, Chava and Purnanandam (2011) find that firms that mostly rely on bank debt suffer larger valuation losses than firms with access to public debt but this relationship is documented during the episode of bank lending contraction in the U.S. in 1998. Finally, Davydov and Vähämaa (2013) document strong positive relation between reliance on bank debt and stock returns of Russian firms during the financial crisis of 2008.

This paper, in turn, focuses on the association between different debt sources composition and firm performance, using an unbalanced panel of 700 publicly traded firms from Brazil, Russia, India, and China over the period 2003–2012. In particular, it is examined whether the reliance on public or bank debt or a certain composition of the two affects firm performance. The empirical findings reported in this paper demonstrate that bank debt in the firm's capital structure may have a positive effect on firm profitability. It is also documented that bank debt has a nonlinear relationship with firm market valuations. While in general, bank loans may have a negative effect on market valuations, firms with higher levels of bank debt are able to diminish this effect. Moreover, the results also suggest that the relationship between bank debt levels and firm valuation is different for financially distressed firms. These results indicate that market participants appreciate banks' involvement in debt contracts of financially distressed firms but do not believe in bank's ability to recover the firm's financial situation alone. After controlling for differences in firm- and country-specific characteristics and addressing potential endogeneity problems, there is considerable evidence to suggest that higher levels of bank debt may be particularly valuable for enhancing performance of financially stable firms.

The paper contributes to the existing literature in several ways. First, it utilizes cross-sectional panel regressions to empirically analyze the effect of public and bank debt levels on firm performance. Instead of focusing on the immediate reaction of stock market on debt arrangements, continuous effect of debt source choices on profitability and market valuation is examined. Such approach enables the elimination of potential market over- (under-)reaction on debt placements.

Second, instead of dummy variables, the analysis uses exact ratios of bank debt in the total debt of the firm. These ratios allow to account for potential nonlinearity in the relationship between the levels of the debt source and firm performance.<sup>1</sup> However, using debt ratios to assess the influence of debt source choices on firm performance may lead to faulty conclusions due to endogeneity problems. Therefore, potential reverse causality issues are addressed by instrumental variable techniques. For this purpose, the paper introduces a novel instrument that was not used in the prior literature. It is argued that the level of banking sector concentration positively correlates with firms' reliance on bank debt. At the same time, concentration itself does not directly relate to individual firm performance. The validity of this instrumental variable is further discussed in Section 4.

Third, the paper uses data on firms that have access to both bank debt and bond markets which create more homogeneous determinants of debt source choices. Hence, the results should not be affected by firm-specific characteristics that determine the choice between bank debt and bonds. Fourth, instead of focusing on a specific period (like crisis episodes in 1990s and late 2000s), the estimations are conducted on a larger time span which also includes crisis periods. Therefore, this approach allows to capture any differences in the effect of debt sources composition on firm performance during the normal times and periods of financial distress.

Finally, the paper uses data from the four largest emerging economies: Brazil, Russia, India, and China. Characterized by the prominent growth rates, emerging markets became an important sector for investors. Besides other differences, emerging markets distinctly differ in firm behavior on the debt markets. Traditionally, being more bank-oriented, emerging markets experienced substantial growth of the bond markets during the last decades. In contrast to the U.S., where even relatively small firms can tap the bond market, emerging economies are significantly different in the determinants of debt source choices. One of such differences is frequent change from one source of debt to another. While firms in the developed markets will most likely stick with a particular debt type (Denis and Mihov, 2003), the choice of financing source is rather continuous in the emerging economies. Thus, debt source choices are more likely to have a more pronounced effect on firm performance in emerging rather than in developed markets, making emerging economies an appropriate setting to examine this issue.

The rest of the paper is organized as follows. Section 2 presents related theoretical and empirical literature. Section 3 describes the data. Section 4 presents the empirical methodology, while Section 5 reports the findings on whether different levels of public and bank debt affect firm performance. Finally, Section 6 concludes the paper.

#### 2. Related literature

Removing perfect market assumptions from the classical proposition on the capital structure irrelevance (Modigliani and Miller, 1958), one can hardly argue that the firm's financing choices have no influence on its performance and valuation. Even the simple traditional "tax shield" effect (Modigliani and Miller, 1963) suggests that the level of leverage is positively

<sup>&</sup>lt;sup>1</sup> As suggested by previous literature, the debt-performance relationship may be nonlinear (see e.g. Campello, 2006).

Download English Version:

# https://daneshyari.com/en/article/1003023

Download Persian Version:

https://daneshyari.com/article/1003023

Daneshyari.com