

Comments on “Corporate leverage in emerging Asia”

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1. Findings and contributions of the paper

This paper empirically examines the determinants of capital structure of Asian firms and investigates whether those determinants change over time. Understanding the determinants of capital structure is of paramount importance to corporate finance and policymakers. An efficient capital market that provides proper funding to productive firms is critical to economic growth and social welfare. Whether such capital should be equity or debt will depend on the particular macroeconomic and market conditions. Therefore, I applaud the authors for doing this useful research.

Goyal and Packer use a large panel of 77,342 firm-year observations to answer those research questions. The data set covers seven major Asian economies over a 14-year period (1991–2014). It has a rich composition of 7,198 firms from various industries. Hence, the sample is representative and the findings will have broad implications beyond any specific industry, region or time.

This study provides many interesting findings. The main result is that leverage has been stable over the sample period for the examined Asian firms. While this result may not sound alarming at first glance, it has a profound implication that Asian capital markets have not improved during this relatively long period including the Asian financial crisis. Given the emerging market nature of Asia, this is a novel and surprising finding worth further understanding. On the other hand, the authors also find that legal and institutional factors are important determinants of leverage of Asian firms. Furthermore, global liquidity conditions can also matter to the capital structure of Asian firms.

There is a lack of study on Asian firms’ financial policies and this study by Goyal and Packer makes a substantial contribution to the literature. Moreover, their consideration of factors from outside Asia such as global liquidity conditions is novel. I find the results from the paper sensible and useful. For example, they find that legal and institutional factors are important determinants of corporate capital structure in Asia. Given that those factors are persistent and slow-moving, corporate leverage associated with those legal and institutional factors will also be stable.

While it is comforting to see all the sensible results, a little more focus on the main message of the study would be helpful. Moreover, the empirical design mostly follows that of US studies. I wonder if there is any role for an Asia-specific factor. Furthermore, I suggest that the authors discuss the economic significance of the various estimates in a unified framework. I provide detailed comments below.

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2. Understanding the results and potential extensions for the future

2.1. Sample selection

This study uses a comprehensive sample from seven Asian economies: Hong Kong SAR, Indonesia, Korea, Malaysia, the Philippines, Singapore and Thailand. The three biggest economies in the region – China, Japan and India – are not included in the analysis. Given the size of those economies, it would be justifiable to study them in separate projects. However, it is worth discussing whether the findings from this study will be applicable to other Asian economies.

China has experienced fast growth in corporate debt since 2008, when the government implemented the “four trillion” stimulus package. Moreover, the growth is likely to be concentrated on state-owned enterprises (SOEs). Now Chinese firms have much higher leverage than they used to have. Chinese firms also heavily depend on banks for financing. All these features would make it worthwhile to study Chinese firms, probably in a standalone paper with reference to firms from other countries, with an analysis of time variations within firms. A similar point can be made for India as the level of corporate leverage has risen substantially in the last few years.

Another country of interest is Vietnam. Many say that Vietnam is China 30 years ago as it is implementing economic reforms and taking over many manufacturing jobs from China. Moreover, given its French colonial background, Vietnam can enrich the legal and institutional setting of the analysis. Therefore, if possible, extending the sample to include Vietnam would strengthen the paper.

There are also some sizeable economies from the Middle East such as Saudi Arabia and United Arab Emirates (UAE) that could enrich the diversity of the sample as there is much Islamic finance. The UAE is also becoming a more interesting economy during its economic transition. Kazakhstan, among some other central Asian countries, is another example of a transition economy worthy of more attention in the future. Having said that, the sample used for current study is appropriate and the results based on the selected firms are reliable.

2.2. Stable capital structure

One of the paper’s main results is that the capital structure for Asian firms in the sample is stable over the examined period. This finding at first may sound sensible and similar to some of the findings from the United States (eg Lemmon et al (2008)). However, for firms from the developing economies in the sample, such stability in capital structure is somewhat surprising. If Asian firms on average are financially constrained, as many believe, and the capital markets are improving, then we might expect changes over time and possible movement towards a more optimal capital structure for Asian firms. For example, if public bond markets become more liquid, firms might be expected to have higher leverage at the end of the sample than at the beginning as firms gain access to bond financing. Therefore, the stable capital structure may suggest that Asian capital markets have not improved much over the last two decades.

Given that the sample includes only publicly listed firms, one may wonder about the results for private firms if data are available (eg from Capital IQ). However, if

capital markets for publicly listed firms have not improved, it is hard to imagine that the capital structure for private firms would have improved. Nevertheless, it is worth comparing small firms with large firms and seeing if there is any heterogeneity among their changes in leverage over time.

Observations from the stock market listing suggest that Asian capital markets may have changed substantially during the 1991–2014 sample period and there is much heterogeneity across countries. For example, the number of publicly listed firms for Malaysia increased from 318 to 895, a near threefold growth. Similar increases occurred in other Asian economies. Most notably, Hong Kong SAR had 333 publicly listed firms in 1991, but 1,661 in 2014, driven by the dramatic increase in the number of firms from Mainland China. In contrast, the United States actually experienced a decrease in public listing during the same period, with 6,513 publicly listed firms in 1991 and 4,369 public listed firms in 2014. This listing gap is documented by Doidge, Karolyi and Stulz (2013 and 2016).

Another implication of the stable capital structure can be that the adjustment costs are so high that firms can barely change their leverage. In this case, leverage change will be mostly driven by stock price movements. This can be the case even for US firms, as documented by Welch (2004). Therefore, it will be interesting to estimate the adjustment speed for Asian firms. If one believes that adjustment costs are higher for Asian firms than US firms, then we may observe an even more stable capital structure for Asian firms than for US firms.

Overall, I find the stability in Asian firms' capital structure over a long time period surprising. I would suggest more scrutiny and discussion to better understand this result. It could well be the average result from the large panel. In this case, it will be worthwhile to examine the disaggregated results, as there might be substantial heterogeneity across firms, while keeping the average unchanged. For example, industry is among the most important determinants of corporate leverage. Even for the same constant industry-level leverage, there can be much variation across firms and over time within an industry.

2.3. Leverage and other corporate policies

The paper provides many results beyond corporate capital structure, such as cash flows and investment. However, those corporate policies are examined separately. A series of studies by Bolton et al (2011, 2013 and 2015) argue that we should understand corporate policies in a unified framework. Indeed, corporate executives most likely consider various policies jointly to maximise firm value. One way to enrich the analysis is to use simultaneous equations to jointly analyse leverage, cash holdings and, maybe, investments.

Structural estimation is also suitable for this type of joint analysis. The advantage of structural models is that we can have normative implications such as whether Asian firms have an optimal capital structure. Whited and Zhao (2016) use structural models to measure inefficiencies in the cross-sectional distribution of debt and equity for both US and Chinese firms. They conclude that Chinese firms misallocate capital substantially more than US firms do. However, given the large panel and cross-country setting, structural estimation is probably not a feasible direction for the current study.

2.4. New trends and policy implications

There are some interesting new phenomena for the corporate policies of US firms. One may examine whether the same things are happening for Asian firms. One example is “leveraged repurchase” through which firms issue debt to buy back their stocks (see, for example, Farre-Mensa et al (2015)). It is possible that this is a US-specific phenomenon due to the country’s quantitative easing since the 2008 financial crisis. But, it may also have spillover effects to Asia.

Another interesting point is the reliably important factors for the capital structure of Asian firms, along the lines of Frank and Goyal (2009) and Öztekin (2015). While many of the capital structure theories should be universally applicable, one may expect some different results for Asia firms given the dominance of family firms and SOEs.

Given the many results, some of which are novel and surprising as discussed above, it is useful to discuss the policy implications. If policymakers and regulators in Asia want to improve capital allocative efficiency, they may want an implementable prescription based on the results from this paper. This is especially useful given the influence of the BIS and its research.

3. Summary

Goyal and Packer have done excellent work in analysing the capital structure of Asian firms over a long time period. They have conducted a thorough analysis and provided interesting results. Given that Asian economies now contribute more than half of global economic growth, it is important to understand the financing of Asian firms. I find many of the results sensible, such as the effects of legal and institutional factors on corporate leverage. I am somewhat surprised by the stable leverage of Asian firms over the long time period, especially considering that how much has happened in those developing economies during that period. I would encourage the authors and other researchers to further examine those issues, probably bringing in China and India, as this duo will be the dominant players in the region and the entire world for many years to come.

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