Determinants of Stock Market Development- A Brief Survey of Literature

Nadia Doytch*

ABSTRACT

This is a brief survey of the literature on determinants of stock market development and the role, which foreign capital plays in it. The survey focuses on macroeconomic, institutional, cultural, globalization, and microeconomic determinants. It find that stock market development is a product of multiple complex decisions.

INTRODUCTION

Similarly to globalization of trade and capital flows, securities activities worldwide have become a lot more global in the past several decades. The theoretical argument for the effects of foreign capital on stock market depth is that the additional capital would need additional banking system and stock markets financial intermediation. Foreign investors would need to finance their investment with either external capital or by selling equity. Therefore, the liquidity of stock markets will rise.

However, foreign investors have the option to list their companies not only on the local stock exchange, but also on foreign stock exchanges, including the global stock markets in New York, Tokyo etc. This process has been especially beneficial for firms, originating from emerging market economies whose stock market activities can be now moved abroad and cross-listed on the main capital market exchanges, such as New York and London (Claessens et al. 2002). Listing on the global stock market exchanges lowers costs and improves liquidly of traded shares for corporations. At the same time fully-fledged local stock exchanges become less necessary for many economies (Claessens et al. 2002).

This is a brief survey of the literature on determinants of stock market development and the role, which foreign capital plays in it. The survey focuses on macroeconomic, institutional, cultural, globalization, and microeconomic determinants, as follows.

Stock Market Development in a Macroeconomic Context.

Stock markets, as part of the financial system, are a tool for making allocation decisions when information and transaction costs are high. They help providing fund pooling, risk diversification, liquidity management, screening and monitoring (Garcia and Liu, 1999). They also help with the liquidity transformation from short-term savings to long-term investments. More recently, the financial development literature has been heavily influenced by analyses of the World Bank data set on *Financial Development and Structure* (Thorsten Beck, Aslı Demirgüç-Kunt, and Ross Levine, 1999), initially published in 1999. The *Financial Development and Structure* contains measures of the size of the banking sector and the liquidity of the stock markets. It covers a large country sample. Using the new measures of financial development, researchers have confirmed a high correlation and a causal

* City University of New York Brooklyn College, Asian Institute of Management (Non-resident Fellow)

relationship between them and GDP per capita growth (Beck, Demirgüç-Kunt, and Levine, 1999; Beck, Demirgüç-Kunt, and Levine 2009).shows how stock market development might boost long-run economic growth and new studies on determinants of stock market development cast light on the reverse relationship (Demirguc-Kunt and Levine, 1996; Singh, 1997; and Levine and Zervos, 1998).

A number of macroeconomic determinants of stock market development has been studied. Among them are the level of income per capita, both the investment and the saving rates, the level of private credit, stock market liquidity, interest rates and level of inflation (Garcia and Liu, 1999; Huybens and Smith, 1999; Boyd, Levine and Smith, 2001; Do and Levchenko, 2004 and Huang and Temple, 2005). In addition, several studies focus on the effects of openness on stock market capitalization and value traded. Trade openness is found to have a positive effect on stock market development (Do and Levchenko, 2004; Huang and Temple, 2005) and remittances as well (Aggarwal et.al, 2011). And in resource-rich countries, stock market capitalization has been shown to be driven by the oil price (Billmeier and Massa, 2007).

Stock Market Development in an Institutional Context.

A large share of the empirical literature on stock market development has emphasized institutional determinants. Legal systems, property rights and contract enforcement have all been proven important for capital markets in general. The seminal work by La Porta et al. (1997, 1998) shows the impact of contract enforcement in the form of protection of creditor' and shareholder' rights. Further studies show the importance of the regulatory environment in terms of judicial system, accounting standards, enforcement of the law in general, and lack of corruption (Lombardo and Pagano, 2002; Mayer and Sussman, 2001; Pistor, Raiser and Gelfer, 2000).

Stock Market Development in a Microeconomic Context.

From a microeconomic perspective the decision of where to list or cross-list a company is largely guided by shareholder protection considerations (La Porta et al., 2002, 2006; Doidge et al., 2004; Claessens and Schmukler, 2007; Smirnova, 2008). Since there is a link between firm legal origins, return distribution, and growth rate of market capitalization de-listing and cross-listing behavior of foreign firms is also of interest for the legal literature (Buchanan and English, 2007). The most often cited legal reasons are that by cross-listing shares in the U.S. is that foreign firms affiliate with a robust legal system that offers investor protection and improves reputation as well as their visibility and prestige (Coffee, 2002; Abdallah and Goergen, 2008; Fernandez and Ferreira, 2008; Lee and Valero, 2010). However, firms also cross-list to achieve greater liquidity, better capital access, increased transparency, as well as to broaden their shareholder base (Foerster and Karolyi, 1999; Miller, 1999; Doidge et al., 2009, 2004; Gozzi et al., 2008; Lel and Miller, 2008).

Stock Markets and Culture.

There is also a cultural dimension to the decision where to list a company, which resonates with the institutional economics literature. Culture could be a reason for de-listing of foreign firms, since social norms and cultural values impact economic decisions (North, 1990; Williamson, 2000; Daugherty and Georgieva, 2011). Companies have a tendency to list in countries that are culturally similar the theirs (Pagano et al., 2002; Licht, 2003) and cross-listing activities end up being clustered in geographical groupings (Sarkissian and Schill, 2003). The geographical and cultural factors often dominate the financial considerations for cross-listing behavior (Portes and Rey, 2000; Rauch, 2001).

Stock Market Convergence.

And finally, a new stream of literature has tested the hypothesis of Stock Market Convergence (Narayan et al., 2011; Brada et al.; 2005, Eun and Lee, 2010; Su et al., 2010; Fung, 2009; and Mylonidis and Kollias, 2010). Narayan et al., (2011) test specifically for stock market absolute and conditional convergence within various country groups and total data set for 120 countries. The authors find conditional convergence of stock market capitalization and value of traded stocks within the high income group, the low-income group, OECD panel, and the Sub-Saharan African group, where the speed of convergence is between 20% and 30%. Our paper confirms this result.

Stock Market Development and Foreign Capital.

One of the few studies that focus specifically on the effects of foreign capital on stock market development that we were able to find, is Claessens, Klingebiel, and Schmukler (2001). Their paper has been motivated by the migration of stock market activity to international financial centers, which occurs with globalization. First, the study finds that a relatively small number of fundamental factors that affects both domestic stock market capitalization and participation in international markets. Second, the study shows that FDI is positively correlated with stock market capitalization and value traded both at home and abroad. Claessens, Klingebiel, and Schmukler (2001) also predict that with improvement of countries' fundamentals and technology the trend towards integrate with the international financial markets, as well as migration of trading towards the international market centers will increase and domestic stock market activity will become too little to support many local markets.

Several more recent studies, supporting the result of a positive impact of FDI on stock market deepening are Soumaré and Tchana (2011), who find a causal relationship between foreign direct investment (FDI) and financial market development using panel data from emerging markets, Adam and Tweneboah, 2009), who find long-run relationship between FDI and stock market development in Ghana, using impulse responses and Variance Decomposition from Vector Error Correction Model, and Baltagi et.al. (2009), who explore the question of determinants stock market deepening by the use of country panels, comparing the impacts of trade and financial globalization of banking systems and stock markets and find a positive effect of both on stock market capitalization. The willingness to list domestically (or cross-list with domestic exchanges) may depend on the sector of the international investor (Doytch, 2013).

Conclusion

The current survey examines the literature on determinants of stock market development and analyses the role foreign capital plays in it. It analyses the issue from the perspective of macroeconomic, institutional, microeconomic, and globalization determinants. It reveals the complexity of the decisions at the firm and the economy level that lead to stock market development.

ENDNOTE

More recently, the financial development literature has been heavily influenced by analyses of the World Bank data set on *Financial Development and Structure* (Thorsten Beck, Aslı Demirgüç-Kunt, and Ross Levine, 1999), initially published in 1999. The *Financial Development and Structure* contains measures of the size of the banking sector and the liquidity of the stock markets. It covers a large country sample. Using the new measures of financial development, researchers have confirmed a high correlation and a causal relationship between them and GDP per capita growth (Beck, Demirgüç-Kunt, and Levine, 1999; Beck, Demirgüç-Kunt, and Levine 2009).

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