On the Causal Relationship Between Stock Markets Valuation and Foreign Direct Investment: A Conceptual Case of India

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ABSTRACT
International business research has predominantly focused on how foreign direct investment relates to the asset-side of non-financial firm’s balance sheet, the finance-specific factors have been ignored to a great extent while studying the foreign direct investment decision. But since these factors are not merely a by-product of a firm’s competitive strength or weakness, they deserve attention when investment patterns are to be interpreted. Financial specific strategies are important to all firms but are particularly important to MNEs in emerging capital markets where the assumption that MNEs have no problems raising capital to engage in international investments where the statement doesn’t hold true.

The major objective of this paper is to provide a review of the literature regarding the financial aspects of foreign direct investment. This review allows us to distinguish between two streams of studies. The first stream deals with the stock markets valuation effect on firms’ international investment decision while the other addresses the stock market reactions to foreign direct investment announcements. The latter is important to form a complete picture about the relationship between stock markets and foreign direct investment. Using a qualitative analytical method with an exploratory nature, and building on the case of India which has recently joined the top ten developing and transition economies as a source of foreign direct investment, this paper intends to suggest a conceptual framework where a causal relationship between stock market valuation and foreign direct investment announcements can be drawn.

Keywords: outward foreign direct investment, finance-specific factors, stock market valuation
INTRODUCTION
Dunning’s eclectic paradigm may not be eclectic enough, after all. This paradigm and most of the early research on FDI were observed to be focused on firms making their investment decisions under hypothesis of efficient and integrated capital markets. These large MNEs were not expected to face difficulties raising capital or to go abroad to exploit stock markets mispricing. As a consequence, financial strength advantage has been overlooked as an ownership advantage. These financial advantages would be specifically important to MNEs in emerging capital markets where the assumption that these firms have no problems raising capital to engage in international investments doesn’t hold true. Accumulated evidences run against the integrated and informationally efficient capital markets theory.

Apart from foreign direct investment, the correlation between stock market valuation and corporate investment has been fairly researched. While the theoretical studies support the positive correlation, the empirical ones are inconclusive. FDI offers a rich laboratory in which to study the broader economic effects of securities market mispricing. According to (Baker, Stein, & Wurgler, 2003), FDI gives the researcher a chance to separately study the impact of host and source country valuations which can’t be done using within-country Investment-Q equations. This is of great help because host country valuations provide information about investor’s perceptions of the marginal profitability of FDI, while source country valuations say more about a foreign investor’s cost of capital.

Though the researchers are still in the early stages of exploring the interaction between FDI and stock markets, two streams of literature can be distinguished. The FDI reactions to stock market valuations stream or in broader terms the finance-specific strategies that affect the FDI decision. As (Oxelheim, Randy, & Stonehill, 2001) notice these strategies can be classified in two groups: reactive strategies which resemble MNEs response to inefficient financial markets, and proactive strategies which are under the multinational enterprises’ control.

The second stream explains the stock market reaction to FDI. The traditional assumption is that an MNC should have a price/earnings ratio that is higher of that of another comparable purely domestic company because it allows the investors to diversify their risk internationally (Aggarwal, 1979). The fact that multinationals companies are being rewarded for going
overseas by stock markets can be seen as one of the determinants or factors behind these companies’ decisions to go abroad in the first place.

FDI from developing economies has grown significantly over the last decade and now constitutes over a third of global flows. In 2014, developing Asia became the world’s largest investor region and its share in global FDI reached a record of 35% up from 13% in 2007. Indian economy is a vital part of this movement with a share of 3% of FDI stock from developing countries (UNCTAD, 2015). Considering its well-developed stock market and its increasing outward FDI stock, India provides a proper field to study the interaction between FDI and financial market.

The remaining part of this paper is organized as follows. In section 2 and 3 we build two hypotheses around the assumed interaction between outward FDI and stock market valuations. In section 4 we discuss these hypotheses with help of the conceptual case of India. In section 5 we conclude.

**FDI reaction to stock market valuations**

Firm size has been assumed to be a good proxy for financial strength in earlier FDI research, but recently financial strength has become a matter of financial creativity rather than size. The best expression for such creativity is financial strategies. These financial strategies are recognized within a framework of **proactive and reactive strategies**. Financial reactive strategies are a firm’s response to financial market imperfections while proactive strategies are those strategies aimed at enhancing a firm’s financial strength so the firm is able to minimize its cost of capital.

Among the first researchers who refer to the financial advantage MNCs have over the domestic firms were (Agmon & Lessard, 1977), they explain how this financial advantage—results of financial market imperfections—compliments the advantages MNCs derive from imperfections in real goods and factor markets and represents an additional motive for multinational expansion.

The effect of stock markets on direct investment has been fairly researched. Though the results were inconclusive, the more recent studies are in favor of the correlation between the two whether it is positive or negative. Using a simple model of corporate investment (Baker,
Stein, & Wurgler, 2003), prove that investment decision is sensitive to non-fundamental movements in stock prices especially in the case of firms that are “equity dependent”. (Shleifer & Vishny, 2003) present a model of mergers and acquisitions based on stock market misvaluations of the combining firms. The model explains who acquire whom, the choice of the medium of payment, the valuation consequences of mergers, and merger waves. (Chirinko & Huntley, 2004) apply a cross-sectional variation on a sample of U.S. growth and value portfolios. Their results support the hypothesis that misevaluation raises investment.

In a related vein, the interaction between stock markets and foreign direct investment has been recently addressed by scholars. (Oxelheim, Randy, & Stonehill, 2001) major proposition is that a firm’s financial strength affects its ability to engage in foreign direct investment. They focus on proactive financial strategies as leading indicators of FDI. Such strategies range from nursing globally recognized accounting and disclosure, listing and selling the firm’s equity on prestigious foreign equity exchanges, to the implementation of cross border debt/equity swaps. Having a superior proactive financial strategy will enable a firm to minimize its cost of capital and maximize its availability of capital relative to its competitors, both domestic and worldwide. Their main suggestion is that the financial advantage should be implanted in the OLI framework in order for the model to be more comprehensive and realistic. Building on case studies of Nordic MNCs during the 1990s, (Randy, Oxelheim, & Stonehill, 2001) and (Oxelheim & Randy, 2011) emphasize that companies from small and/or emerging economies must follow specific financial strategies including cross-listing, strategic alliance and recruiting a foreign board member to reflect a harsher governance regime. using data on Canadian firms cross-listed on U.S. stock exchange, (King, Segal, & Dan, 2009) find cross-listing to be value increasing proactive strategy.

Aforementioned reactive strategies which are MNCs response to the financial constraints in segmented or partially efficient capital market. These constraints include exchange rate risk or the relative wealth hypothesis as described by Froot and Stein (1991), troubled banking system or the relative access to credit hypothesis and asymmetric information which leads to temporary mispricing of company fundamentals. All these an explanation for “excessive” stock market effect on investment (both capital expenditure and acquisitions) domestically and internationally.
According to (Jay Cho, 1989) financial variables like the real exchange risk affect corporate international investment in a significant way, exchange risk is defined in terms of its economic effect on cash flows in the suggested model. The results show that, in a stochastic world, the variability of exchange rates vis-à-vis prices and costs can be an additional factors inducing aggressive foreign investments. (Froot & Stein, 1991) suggest a theory of relative wealth where market imperfections cause the external financing to be more expensive than internal financing. In this context, the depreciation of domestic currency can explain the wave of foreign acquisitions of certain domestic assets.

Though FDI theory largely builds on assumptions of market imperfections, these assumptions have rarely been extended to explicitly include financial markets, or -when they have- focus has been on explaining the effect of exchange rates rather than firm-level financial characteristics on FDI (Oxelheim & Frossback, 2008). In the case of (De Santis, Anderton, & Hijzen, 2004), stock market valuations (measured by Tobin’s q) are tested as a determinant of Euro area aggregate FDI to the United States 1980-2001 but using Tobin’s q won’t capture the real financial effect on FDI which is the valuation effect that would remain after controlling for “fundamental” (real) factors inherent in the valuation.

The only few researchers who considered the stock market mispricing distinguish between two hypotheses: the cheap capital hypothesis where overvalued firms go abroad to exploit the temporary low cost of capital, and the fire sale hypothesis where undervalued firms lure other firms as lower cost targets for mergers and acquisitions.

(Baker, Foley, & Wurgler, 2004) Use data on cross-border mergers and acquisitions involving U.S. firms from 1974 to 2001 to test both cheap assets and cheap capital hypotheses. The latter is found to be not important, while the cheap capital hypothesis appears to be quite important as a general determinant of FDI. (Aguiar & Gopinath, 2005) provide an empirical evidence on the fire-sale hypothesis where undervaluation on equities in emerging markets during the East Asian crisis led to inflow of FDI in the form of merger and acquisitions.

(Baker, Foley, & Wurgler, 2008) find that FDI flows increase sharply with source-country stock market valuations- particularly the component of valuations that is predicted to revert the next year, and particularly in the presence of capital account restrictions that limit other
mechanisms of cross-country arbitrage. Their results suggest the existence of a cheap financial capital channel in which FDI flows reflect the use of relatively low-cost capital available to overvalued parents in the source country. In a similar context, (Oxelheim & Frossback, 2008) use a binary-response regression on a sample of European non-financial firms and their foreign acquisitions. They find a strong evidence in favour of an independent equity-valuation effect on FDI. Key equity-related financial variables turned out to be equally important as, or more important than, several more traditional firm level determinants of foreign investment. Their results show that firms with more highly valued equity, and firms which have directly cross-listed their equity on a large and liquid stock exchange, are more likely to make foreign acquisitions.

The part of international capital movements which neither can be explained by the relative wealth hypothesis nor by the stock market mispricing, may be better addressed by the relative access to credit hypothesis proposed by (Klein, Peek, & Rosengren, 2000). They utilize a unique data set that links Japanese MNCs to their main banks to prove empirically that differences across MNCs in the degree of their access to credit can affect their FDI decision process, the data were aggregated at the bank level. (Alba, Wang, & Ho, 2007) use data on FDI outflows by 317 Japanese firms to the United States- their data are aggregated at the firm as well as the bank level- to find that multiple rating significantly affected the Japanese firm’s rate of FDI in the United States.

The previous discussion allows us to formulate four testable hypotheses, which still need to be tested in the developing-economy context:

1- H0: Foreign exchange risk drives outward foreign direct investment.
2- H0: Cheap capital works as an outward foreign direct investment pushing factor.
3- H0: fire-sale assets work as an outward foreign direct investment pulling factor.
4- H0: Relative access to credit determines outward FDI flows

Stock markets reaction to FDI
Along with the stream of studies which address the stock markets evaluation effect on firms’ international investment decision, another stream explains the stock markets reaction to FDI announcements. The main question to be answered: Is international diversification at the corporate level relevant or not? According to (Agmon & Lessard, 1977) it is relevant under two conditions: first, the presence of barriers to portfolio capital flows, and second: the
investor recognition of the diversification opportunities provided by MNCs, firms would expand internationally only if they are rewarded by investors. An earlier study by (Adler & Dumas, 1975) demonstrates that if for some reason the international market is segmented i.e. investors do not diversify fully due to transfer taxes, or a lack of information, then the firm should do it for them.

There is at least some degree of agreement in the literature that international diversification strategy has a positive effect on corporate performance. Having said that, there are some studies, albeit fewer, which find either no significant differences in the performance of domestic and multinational firms, or even a negative effect (Aleson & Escuer, 2001). Specific features of the investment such as whether the firm is expanding internationally for the first time or not, whether it has already established itself in the targeted country or not. International diversification may be around the core on non-core activities, or it may take different modes. These features may cause divergent value creation effects or may not; studies on the subject are inconclusive.

Aggarwal (1979) discusses the overseas involvement of U.S. based multinational companies as measured by the percentage of foreign sales, foreign income, and foreign assets and its relation to the company’s cost of equity capital, systematic risk, P/E ratio. It provides empirical evidence on the positive correlation between FDI and U.S. international companies performance. The results show that an increasing proportion of multinationality in a company’s operations is on the average rewarded in U.S. capital market by a proportional reduction in the systematic risk beta) associated with such companies and also a proportional increase in the P/E ratio associated with such companies. In consistent with Aggarwal results, (Doukas & Travlos, 1988) present direct evidence on the effect of international acquisitions on stock prices of U.S. bidding firms. Shareholders of MNCs, which are not operating in the target firm’s country, experience significant positive abnormal returns at the announcement of international acquisitions. Shareholders of U.S. firms expanding internationally for the first time experience insignificant negative abnormal returns, while shareholders of MNCs operating already in in the target’s country experience insignificant negative abnormal returns. The abnormal returns are larger when firms expand into new industry and geographic markets- especially those less developed than the U.S. economy.
(Doukas & Lang, 2003) examine whether the synergy gains arising from the internalization of markets are more pronounced when firms engaged in geographic diversification around the core or the non-core business. This study differs from previous studies in the sense that it relies on the market’s assessment of unrelated and related FDI activities, and the long-term performance of the firm to draw inference about the value of diversification. If international diversification is a value-added activity because of synergy gains, as the internalization theory predicts, it is important to know whether such synergies arise from related or unrelated international investments. This paper analyzes for the first time the effects of US foreign direct (greenfield) investments. The results suggest that the synergy gains stemming from the internalization of markets are rooted in the core business of the firm. They document significant positive abnormal returns and post-investment profit margin gains in the performance of firms that expand their core business across national markets. Foreign investments outside the core business of the firm are found to be associated with significant negative announcement effects and profit margin losses in years following the investment.

Focusing on the stock market reaction to FDIs of listed Spanish firms, (Lopez-Duarte & Garcia-Canal, 2007) test whether the stock market reaction to FDI is dependent not only on the entry mode that the investing firm may have chosen, but also on the interaction between the entry mode and the other FDIs; attributes. Their results show that stock market reaction to FDIs depends upon the interaction between the entry mode and the location of the investment, the identity of the investor and the latter’s international experience.

On the other hand, earlier studies like (Aleson & Escuer, 2001) and (Kallunki, Larimo, & Pynnonin, 2001) find variables like the nature of the investment, the nature of the investing firm or the nature of the targeted country of no effect on the value generated by a foreign investment.

Again, based on the previous review of literature we can develop more testable hypotheses to be tested in the context of outward foreign direct investment from developing economies:

- **H0**: Outward foreign direct investment is rewarded by stock markets.
- **H0**: Value creation by OFDI is dependent on whether the diversification is around core on non-core activities.
- **H0**: Value creation by OFDI is dependent on the entry mode.
A Conceptual Framework of the Interaction Between OFDI and Capital Markets: The Case of India

Conventional financial theory suggests that in perfect capital markets corporate international investment is unnecessary because shareholders can gain the benefits of international diversification directly through their own international portfolio investments (Jay Cho, 1989). But since the modern theory of finance has proved the market efficiency hypothesis to be wrong in many cases, the researchers should look at the geographical diversification from this angel, and the financial advantage_ the result of financial market imperfections_ could be seen as a supplementary to the advantages MNCs derive from imperfections in real goods and factor markets. It is an additional motive for multinational expansion (Agmon & Lessard, 1977).

By the end of 2015, nine of the 20 largest investor countries were from developing or transition economies. These MNEs continued to acquire developed-country foreign affiliates in the developing world. For the first time, MNEs from developing Asia became the world’s largest investing group, accounting for almost one third of the total. 432 billion in 2014. In South Asia, FDI outflows from India reversed the slide of 2013, increasing fivefold to $10 billion in 2014, as large Indian MNEs resumed their international expansion. (UNCTAD, 2015).

Indian direct investment has evolved in two phases: the first phase started in 1978 when the precise guidelines for IJVs and WOSs abroad were formulated and remain in place until 1992. The 1978 OFDI guidelines allows registered Indian companies under the Companies Act, 1956 to undertake overseas direct investment in accordance with the rules and regulations of the host country. The essence of OFDI policy before 1992 was inspired by the desire of using Indian direct investment abroad as tool of promoting Indian exports but without offering any scope for local capital to shift trans-border through cash remittances. (Pradhan, 2005)

In 1992, the modified guidelines for IJVs and WOSs have been issued, the new guideline provided an automatic approval route for an Indian company to undertake OFDI. Further liberalization of the policy has been witnessed during 2002 and 2003. In 2004, the ceiling on
OFDI has been relaxed to the extent of 100% of the net-worth of the Indian company even if this exceeds the $ 100 million limit, which has been set before. In 2005, this limit further increased to 200% of net worth, then to 300% of net worth in 2007 and finally to 400% of net worth in 2008. Prior approval from the reserve bank of India also was dispensed with, and firms were permitted to remit transfer of funds through any authorized foreign exchange dealer. Indian firms’ access to international financial markets was also progressively liberalized and they were granted permission to use special purpose vehicles in international capital markets to finance acquisitions abroad (Athukorala, 2009) (Saikia, 2012). The effect of these liberalizing policies can be noticed from the data on OFDI, the OFDI stock increased from 6.6$ billion in 2004 to reach 77.3 $ billion in 2009. Latest numbers on OFDI show a stock of 139$ billion at the end of 2015. (Chart (1))

India as a country has seen tremendous development of its financial sector and particularly stock markets in the last two decades specially after the liberalization spree of the early 1990s. Though the Indian stock exchange is one of the oldest in Asia- it started operating since 1875- it remained outside the process of global integration till the late 1980s. As part of a global trend to liberalize financial markets and establish a kind of global integration, reforms of the Indian stock market started with the establishment of Securities and Exchange Board of India in 1988. This has been followed by the establishment of the National Stock Exchange of India Limited (NSE) as the leading stock exchange in India, located in Mumbai in 1992 (Wong, Agarwal, & Du, 2005). Stock market in India is classified as one of the fastest growing market in the global market. The listed capital at NSE has increased from nearly Rs 1.2 trillion in 2004 to almost Rs 10 trillion by the end of 2015 (NSE Historical Data).

(Nayyar, 2008) points out the parallel movement between the spurt in Indian outward FDI on one hand, and the liberalization of the policy regime and the access to the financial markets on the other hand. He called the latter as the enabling factors, which enabled the Indian firms to move across borders. However, it did not drive them to move there.
In the case of emerging economies, literature on FDI has been focused on exploring inward FDI role in boosting the host countries’ capital markets since these economies have always suffered from lack of capital. The relationship between outward FDI and stock markets hasn’t been fairly investigated except in few cases. (Bhagat, Malhotra, & Zhu, 2011) investigated 698 CBAs (Cross-Border Acquisitions) by emerging country firms during the period 1991 to 2008. They find out that emerging country acquirers experience a positive and a significant market response, in other words they are rewarded by the stock market.

The Indian case is no exception, majority of studies are focused on inward FDI to India and how these inflows might affect the stock market and the economy in general. On the basis of data starting from 2001 to 2011, (Sultana, 2012) find that FDI and FII flows are moving in tandem with SENSEX and NIFTY concluding that these flows determine the trends of Indian stock market. Another study by (Dhiman & Sharma, 2013) comes to the same conclusion.

The outward FDI from India has recently started to catch the attention of scholars. The largest share of their studies are mainly about the trends and patterns of Indian OFDI, and the traditional explanators of this phenomenon. Only few systematic studies has dealt with the financial aspects of outward FDI by Indian firms, (Gubbi, Aulakh, Ray, Sarkar, & Chittoor, 2010) find evidence of positive abnormal returns for the acquiring firm shareholders running an event study on 425 CBAs by Indian firm between the year 2000 and 2007.
keeping in mind that Indian capital market is one of the emerging markets which are still far from reaching the efficiency of the well-developed capital markets, it wouldn’t be wrong if we hypothesize an interaction between Indian outward FDI and stock market similar to that which has been found in developed markets. Questions like: Do the Indian stock market imperfections work as a determinant of outward FDI?, and Does the Indian investor recognize the diversification opportunities provided by the Indian MNCs? need further investigation.

CONCLUSION

Does the MNCs financial advantage exist? The substantial evidences provided in the literature allow us to answer with YES! Nevertheless, the literature mostly depends on data from developed markets. We could expect the results to apply to the less developed and emerging markets since the condition of markets inefficiency is easier to be proved there than it is the case in the developed markets. And India, with its fast-growing stock market and impressive OFDI numbers, presents a reach field to examine whether the Indian MNCs have a financial advantage or not, and whether their cross-border investments are appreciated by the stock market or not.
REFERENCES


