

**Discussion of
“How to Investigate the Impact of Foreign Direct Investment on Development, and Use the
Results to Guide Policy”
by Ted Moran**

Beata Smarzynska Javorcik*

There are several aspects of Ted Moran’s approach to research which I really admire, and this paper is no exception. First of all, I admire his courage to ask broad and important questions that are very difficult to tackle. He manages to resist the temptation to look at narrow and insignificant issues just because they can be answered rigorously. Second, I really like the fact that Ted Moran acknowledges that the perfect may be the enemy of the good, and that even anecdotal case studies and imperfect econometric studies can tell us something interesting and useful about the world. Finally, I really appreciate the reality check, as each of his papers asks: do the conclusions of econometric studies make sense? are they consistent with what people on the ground tell us?

In this brief discussion, I would like to touch upon three issues. I will start by giving my interpretation of the message conveyed in Ted’s paper. Then, I will talk about services, a topic that is missing in Ted’s paper but ought to receive some attention. Finally, I will close with some comments on policy implications.

Reinterpretation of Ted Moran’s findings

The starting point of Ted Moran’s paper is a puzzle presented by the empirical literature on spillovers from foreign direct investment (FDI). The puzzle is that studies that are very similar in terms of the data and the methodology often find seemingly contradictory results. Rather than summarizing the large body of research on this subject, I will illustrate this point by focusing on three papers which, in my view, are representative of the patterns found in the literature. All three studies are careful about their methodology, present a number of robustness checks and have been frequently cited in the literature.

* The World Bank and CEPR, MSN MC3-303, 1818 H St, NW, Washington DC, 20433. Email: bjavorcik@worldbank.org. The views expressed in this note are those of the author and should not be attributed to the World Bank, its Executive Directors or the countries they represent.

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The first study, published by Aitken and Harrison (1999), caused a stir in the literature by suggesting that FDI inflows may not only fail to produce positive productivity externalities but may also result in negative spillover effects. Using a panel of more than 4,000 Venezuelan plants between 1976 and 1989, the authors identified two effects of FDI on domestic enterprises. First, they found that increases in foreign equity participation were correlated with increases in total factor productivity in recipient plants with fewer than 50 employees but not in other plants. Second, they showed that increases in FDI presence negatively affected the total factor productivity of domestic firms in the same industry. Their interpretation of the latter finding was that the expansion of foreign affiliates reduced the market share of local producers, forcing them to spread their fixed cost over a smaller volume of production, which resulted in a lower observed total factor productivity.ⁱ

In contrast, Haskel, Pereira and Slaughter (2002) produced evidence consistent with positive intra-industry FDI spillovers in the U.K. Using a plant-level panel covering the manufacturing sector from 1973 through 1992, they found that a 10 percentage-point increase in foreign presence in a U.K. industry raised the total factor productivity of that industry's domestic plants by about 0.5 percent. They also showed that these effects tended to be more important for plants at the lower end of the performance distribution.ⁱⁱ

More recently, Javorcik (2004) found evidence suggesting that spillovers are more likely to benefit the supplying industries rather than the industries in which multinationals operate. She argued that while multinationals have an incentive to prevent knowledge from leaking to their local competitors they may have an incentive to provide assistance to their local suppliers in upstream sectors. Using firm-level panel data from Lithuania covering the period from 1996 to 2000, she found that the total factor productivity of Lithuanian firms was positively correlated with the extent of potential contacts with multinational customers in downstream sectors but not with the presence of multinationals in the same industry. A one-standard-deviation increase in foreign presence in the sourcing sectors was associated with a 15 percent rise in productivity of Lithuanian firms in the supplying industry. The productivity effect was found to originate from investments with joint foreign and domestic ownership but not from fully-owned foreign affiliates, which was consistent with the evidence of a larger amount of local sourcing undertaken by jointly owned projects.ⁱⁱⁱ

How should we interpret these seemingly conflicting results? One could dismiss the whole literature on the grounds of the total factor productivity being a poor measure of performance. One could attribute the inconsistency in the findings to the poor quality of the data. If the data from developing countries tend to be of lower quality than data from industrialized economies, then maybe the results based on the former should not be trusted? One could also question the identification strategies employed in the literature pointing out potential endogeneity problems. However, doing so would not bring us any closer to understanding the effects of FDI on host economies.

Rather than dismissing the spillover literature, Ted Moran's answer is to search for clues by looking at host country conditions. He points out that Aitken and Harrison's finding that only some plants benefited directly from an increase in foreign ownership share indicates that FDI in Venezuela presented limited potential for productivity spillovers. He argues that this situation was due to heavy restrictions imposed by the government on foreign investors, which included strict joint venture and local content requirements. Moreover, foreign investors were forbidden from exercising confidentiality and exclusive use of trade secrets in their mandatory joint ventures, which no doubt dampened their incentives for technology transfer. Further, during the time period considered in the study, Venezuela was pursuing an import substitution strategy, thus indigenous producers were not exposed to significant competition from abroad. This can explain why FDI inflows could have had a large negative effect on market shares of indigenous producers.

Following this line of thinking, it is worth noting that in contrast to Venezuela, foreign affiliates operating in the U.K. tended to exhibit higher value added per worker relative to British firms in the same industry. They were also responsible for a large share of R&D effort undertaken in the U.K.^{iv} These observations indicate that foreign affiliates in the U.K. were a potential source of knowledge spillovers. Moreover, the sophistication of the British firms and the openness of the country to international trade also suggest that the negative 'market stealing' effected described by Aitken and Harrison was unlikely to be large in the U.K. The fact that lesser performers seemed to benefit more from spillovers is also not surprising given the sophistication of the British manufacturing sector and thus the limited room for learning.

The same type of interpretation can be applied to Lithuania, the country considered by Javorcik. There, one would expect both the ‘market stealing’ effect as well as opportunities for learning from multinationals. Only five years before the beginning of the period under study, Lithuania started its transition from central planning to a free market economy and opened its doors to FDI. This meant that indigenous manufacturers were going to be strongly affected by competition from FDI inflows, which did not bode well for intra-industry spillovers. On the other hand, this situation also meant that indigenous producers had had limited exposure to foreign clients in the past and thus new supply relationships with foreign investors in Lithuania had the potential to lead to significant knowledge transfer.

Thus one can rephrase Ted’s conclusion as suggesting that researchers should not be asking *whether* spillovers from FDI exist but rather *under what condition* this is the case. Policy makers should not assume that positive externalities from FDI are automatic. More research is certainly needed to understand how to facilitate FDI spillovers.

FDI inflows into services

Ted Moran’s paper is almost entirely devoted to the effects of FDI inflows into manufacturing industries, yet FDI inflows into services sectors have gained in importance during the past decade and may constitute another channel through which presence of multinationals benefits the host economy. One distinctive feature of services is that they serve as an essential input into an exceptionally wide range of activities, including manufacturing. Given the limited scope for cross-border trade in services inputs, one would expect the performance of downstream sectors to be tied more directly to the quality and availability of services supplied by providers operating domestically than is the case for physical intermediate inputs. And indeed recent empirical work by Arnold, Javorcik and Mattoo (2006) confirms the existence of such a link.^v

This view is also reflected in the results of a recent firm survey: A majority of the 350 Czech enterprises interviewed on behalf of the World Bank in 2004 believed that liberalization of services industries, including opening the sectors to foreign entry, contributed to improvements in the quality, range and availability of services inputs in their country. The share of positive perceptions ranged from 55% of the respondents when asked about the quality of accounting and auditing services to 82% for telecommunications. With regards to the variety of products offered, the positive views of liberalization varied between 56% of respondents

evaluating accounting and auditing services to 87% of respondents asked about telecommunications. The corresponding figures for the effect on services availability ranged from 47% in accounting and auditing to 80% in telecommunications.^{vi}

FDI inflows into services may facilitate FDI spillovers. A theoretical model and a calibration exercise undertaken by Alfaro, Chanda, Kalemli-Ozcan and Sayek (2006) suggests that without access to financing local entrepreneurs are unable to become suppliers to multinationals and benefit from productivity spillovers associated with such relationships.^{vii} In a cross-country growth regression, the same authors find that FDI inflows contribute to a faster economic growth only in the presence of well-developed financial markets.^{viii} In another cross-country study, Harrison, Love and McMillan (2004) show that FDI inflows are associated with a reduction in financing constraints of indigenous firms.^{ix}

Improvements in services infrastructure in sectors other than banking, resulting from opening the sector to FDI, may have similar effects. It is a certainly question worth exploring in the future.

Policy implications

Moving on to policy implications, I agree with Ted Moran that spillovers can serve as a justification for FDI incentives. However, the use of incentives may make sense only if some basic conditions are fulfilled. A country struggling to run a reliable electricity network is unlikely to attract multinationals using fiscal incentives. Moreover, it is crucial to recognize that the cost of incentives may not be worth the benefits, as is clearly shown in the Haskel, Pereira and Slaughter's study mentioned earlier.

Information asymmetry is another frequently used justification for FDI incentives. It is costly to obtain information about business conditions in developing countries, especially since indigenous and foreign firms operating there have no incentive to share this information. Therefore, it may make sense to subsidize the first flagship FDI project. Having a prominent multinational in the country is often the best way of advertising the country as a good place to do business. But it makes less sense to subsidize subsequent investors.

Another way of dealing with information asymmetry is to provide information through activities of investment promotion agencies (IPAs). In the past two decades, the world has witnessed an explosion in the number of IPAs. For instance, the 2005 Census of Investment

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Promotion Agencies revealed that 85 percent of the responding IPAs in developing countries were established in 1980 or later.^x The good news is that investment promotion appears to be effective. According to a recent study by Harding and Javorcik (2007), sectors explicitly targeted by IPAs in developing countries see their FDI inflow double in the post-targeting period relative to the pre-targeting period and to non-targeted sectors.^{xi} A similar conclusion was reached by Davis Charlton and Davis (2006) in the context of OECD countries.^{xii} There is also evidence of FDI diversion due to investment incentives offered by other countries in the same geographic region, which suggests that regional cooperation in this area may be beneficial.^{xiii}

Unfortunately, the advice international economists can give policy makers is still quite limited. We have a limited idea on how to facilitate spillovers from FDI and how the costs of FDI promotion policies and incentives compare to the benefits they bring. One thing is certain, though, unless we follow Ted Moran's advice and use multiple approaches to examine these questions, we are not going to get any closer to answering these questions in a convincing manner.

ⁱ Aitken, Brian and Ann Harrison (1999). Do Domestic Firms Benefit from Direct Foreign Investment? Evidence from Venezuela. *American Economic Review* 89(3): 605-618.

ⁱⁱ Haskel, Jonathan E., Sonia C. Pereira, and Matthew J. Slaughter. (2002). Does Inward Foreign Direct Investment Boost the Productivity of Domestic Firms? NBER Working Paper No. 8724.

ⁱⁱⁱ Javorcik, Beata S. (2004). Does Foreign Direct Investment Increase the Productivity of Domestic Firms? In Search of Spillovers Through Backward Linkages. *American Economic Review* 94(3): 605-627.

^{iv} Griffith, Rachel, Stephen Redding and Helen Simpson (2004). Foreign Ownership and Productivity: New Evidence from the Service Sector and the R&D Lab. *Oxford Review of Economic Policy* 20(3): 440-456.

^v See Arnold, Jens, Beata S. Javorcik and Aaditya Mattoo (2007). Does Services Liberalization Benefit Manufacturing Firms? Evidence from the Czech Republic. World Bank Policy Research Working Paper No. 4109.

^{vi} See Arnold et al. *Op. cit.*

^{vii} Alfaro, Laura, Areendam Chanda, Sebnem Kalemli-Ozcan, and Selin Sayek, 2006. "How Does Foreign Direct Investment Promote Economic Growth?" NBER Working Paper No. 12522 (September).

^{viii} Alfaro, Laura, Areendam Chanda, Sebnem Kalemli-Ozcan, and Selin Sayek, 2005. "FDI and Economic Growth: The Role of Local Financial Markets." *Journal of International Economics* 65(2).

^{ix} Harrison, Ann and Margaret McMillan, 2001. "Does Direct Foreign Investment Affect Domestic Firms' Credit Constraints?" *Journal of International Economics*, 61(1): 73-100.

^x See Harding, Torfinn and Beata Javorcik (2007). “Developing economies and international investors: Do investment promotion agencies bring them together?” World Bank mimeo.

^{xi} See Harding and Javorcik. *Op. cit.*

^{xii} Charlton, Andrew and Nicholas Davis, 2006. “Does Investment Promotion Work?”, London School of Economics, mimeo.

^{xiii} See Harding and Javorcik. *Op. cit.*