# FOREIGN INVESTMENT IN DEVELOPING COUNTRIES
# Does it Crowd in Domestic Investment?


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# FOREIGN INVESTMENT IN DEVELOPING COUNTRIES
## Does it Crowd in Domestic Investment?

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*This paper assesses the extent to which foreign direct investment in developing countries crowds in or crowds out domestic investment. We develop a theoretical model of investment that includes an FDI variable and we proceed to test it with panel data for the period 1970–1996 and the two subperiods 1976–1985 and 1986–1996. The model is run for three developing regions (Africa, Asia and Latin America). One version of the model allows us to distinguish crowding in and crowding out effects for individual countries within each region. The results indicate that in Asia – but less so in Africa – there has been strong crowding in of domestic investment by FDI; by contrast, strong crowding out has been the norm in Latin America. The conclusion we reach is that the effects of FDI on domestic investment are by no means always favourable and that simplistic policies toward FDI are unlikely to be optimal.*

## Introduction

Foreign direct investment (FDI) is prized by developing countries for the bundle of assets that multinational enterprises (MNEs) deploy with their investments. Most of these assets are intangible in nature and are particularly scarce in developing countries. They include technology, management skills, channels for marketing products internationally, product design, quality characteristics, brand names, etc. In evaluating the impact of FDI on development, however, a key question is whether MNEs crowd in domestic investments (as, for example, when their presence stimulates new downstream or upstream investments that would not have taken place in their absence), or whether they have the opposite effect of displacing domestic producers or pre-empting their investment opportunities.

This is a rather important issue. In recent theoretical and empirical work, investment has been identified as a key variable determining economic growth. Thus, if FDI crowds out domestic investment or fails to contribute to capital formation, there would be good reasons to question its benefits for recipient developing countries. Moreover, given the scarcity of domestic entrepreneurship and the need to nurture existing entrepreneurial talent, a finding that MNEs displace domestic firms would also cast doubts on the favourable development effects of FDI. These are all the more important questions when one considers that FDI is far from being a marginal magnitude. As can be seen in table1, FDI, as a share of total gross fixed capital formation is a significant and growing magnitude in developing countries. In fact, FDI is a much larger proportion of investment in developing than in developed countries.

This paper addresses the question of whether FDI causes crowding in (CI) or crowding out (CO) of domestic investment. Chapter I lays out the issues involved. In chapter II we propose a theoretical model for investment in developing countries that includes an FDI variable. Chapter III presents the results of econometric tests of the model for Africa, Asia and Latin America, using panel data for 1970–1996. The main conclusions of the paper are given in chapter IV.

***Table 1***
***Developed and developing countries:***
***FDI inflows as a percentage of gross fixed capital formation***
*(Percentage)*

| *Region* | *1986–1991* | *1992–1996* |
|---|---|---|
| Developed countries | 3.5 | 3.2 |
| Developing countries | 3.4 | 6.8 |
| Africa | 3.9 | 7.2 |
| Asia | 2.8 | 6.0 |
| Latin America | 5.3 | 9.5 |
| Central and Eastern Europe | 0.1 | 6.2 |

***Source:*** UNCTAD, *World Investment Report*, various issues.

## I. THE ISSUES

Investment by MNEs contributes directly to overall investment, because it is part of it. Indeed, domestic investment ($I_d$) plus investments undertaken by MNEs ($I_f$) ought to add up to total gross investment ($I$).

$$I \equiv I_d + I_f$$

$I_f$ is usually thought of as FDI. This formulation is, of course, an over-simplification, since FDI is not equivalent to new investments by foreign firms. FDI is a financial balance-of-payments concept; on the other hand, investment is a real national accounts variable. Much FDI never becomes investment in the real sense: mergers and acquisitions (M&As) are mere transfers of ownership of existing assets from domestic to foreign firms. In some countries investments by MNEs could exceed FDI. This is the case of investments financed through borrowings on domestic capital markets. This phenomenon is more widespread in developed than in developing countries. In the latter, borrowing costs on domestic financial markets are normally much higher than on international markets, and this usually discourages domestic borrowings by MNEs.

A crucial question as regards the development impact of FDI is the extent to which it affects investment by domestic firms ($I_d$). If it has no effect whatsoever, any increase in FDI ought to be reflected in a dollar-for-dollar increase in total investment. If FDI *crowds out* investment by domestic firms, the increase in $I$ ought to be *smaller* than the increase in FDI. Finally, if there is *crowding in*, $I$ ought to increase by *more* than the increase in FDI.

The assessment of the effects of FDI on domestic and total investment is far from being a trivial matter. Little can be said on an a priori basis. The effects of FDI on investment may well vary from country to country, depending on domestic policy, the kinds of FDI that a country receives, and the strength of domestic enterprises.

It is possible, however, to specify conditions that are favourable to CI. In developing country settings, foreign investments that introduce goods and services that are new to the domestic economy, be they for the export or domestic market, are more likely to have favourable effects on capital formation than foreign investments in areas where there already exist domestic producers. In the former case, the effects on capital formation will be positive because domestic producers do not have the knowledge required to undertake these activities and, therefore, foreign investors do not displace domestic investors.

This is precisely the spirit of Romer's (1993) important paper on the contribution of FDI to development. Romer uses an endogenous growth model, whose driving force is the introduction of new goods to the economy. This is where FDI comes in: as one of the major agents for introducing new goods (together with the technologies and human capital that accompany such goods) into economies that do not have the know-how or human resources to produce them.

If FDI enters the economy in sectors where there are competing domestic firms (or firms already producing for export markets), the very act of foreign investment may take away investment opportunities that were open to domestic entrepreneurs prior to the foreign investments. In other words, such FDI is likely to reduce domestic investments that would have been undertaken, if not immediately at least in the future, by domestic producers.[1] The contribution to total capital formation of such FDI is likely to be less than the FDI flow itself.

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[1] Of course, such foreign investments may be desirable for other reasons, such as introducing competition into stagnant or backward sectors. However, what we are concerned about here is the impact on domestic investment and entrepreneurship. Given the enormous superiority of MNEs over domestic firms in most developing countries, the competition is likely to be one-sided.

This leads to a hypothesis linking the contribution of FDI to capital formation to the sector of the economy to which it goes. When the sectoral distribution of FDI is substantially different from the distribution of the existing capital stock or of production, the contribution of FDI to capital formation will be more positive than when the distribution of FDI follows roughly the existing sectoral distribution of the capital stock. In other words, *the relationship between FDI and domestic investment is likely to be complementary when investment is in an undeveloped sector of the economy* (owing to technological factors or to the lack of knowledge of foreign markets). On the other hand, FDI is more likely to substitute for domestic investment when it takes place in sectors where there exist plenty of domestic firms. The same may occur where domestic firms already have access to the technology that the MNE brings into the country.

One can, of course, argue in favour of exactly the opposite hypothesis. For instance, MNE investments in new activities may pre-empt investments by domestic firms that, with proper government nurturing, could be in a position to enter the sector. This was the rationale for limiting investments in certain high technology sectors in the Republic of Korea and Taiwan Province of China. The bet in these cases was that domestic firms could in fact emerge, and it paid off (see Amsden, 1989; Wade, 1990). However, in most other cases in the developing world the appearance of domestic producers in a new sector is unlikely or might take too long. Policies to foster entrepreneurship in new sectors can be very costly to the economy as a whole, if these sectors have technological requirements that run too far ahead of domestic capabilities. Besides, there are very few countries where governments can be as effective in nurturing technologically advanced domestic firms as were the governments of the Republic of Korea or Taiwan Province of China in the heyday of their industrialization drive. Examples of botched and costly intervention in favour of domestic firms in high-technology sectors abound in the developing world. One of the most disastrous was the Brazilian "informatics policy" of the early 1980s, which involved severe restrictions on FDI in information technology sectors. These restrictions led to very little domestic investment, and the firms that were created were highly inefficient. The policy was abandoned well before the programme was due to expire.

Also, it could be argued that the entry of an MNE into a sector where there exist several domestic firms may lead to investments by incumbent domestic firms in order to become more competitive. However, given the vast technological superiority of MNEs, their investments are more likely to displace domestic firms, and even cause their bankruptcy, than to induce domestic firms to invest.

Even where FDI does not displace domestic investment, foreign investments may not stimulate new downstream or upstream production and, therefore, may fail to exert strong CI effects on domestic investment. *Thus, the existence of backward or forward linkages from the establishment of foreign investors is a key consideration for determining the total impact of FDI on capital formation.* It should be stressed, though, that linkages are a necessary but not sufficient factor for CI. In cases where foreign firms simply displace existing ones, the existence of linkages cannot prevent CO.

One may also hypothesize that the impact on investment is greater when FDI takes the form of a greenfield investment than when it is an M&A. This is ultimately an empirical matter. In a recent study on the impact of FDI on development in Latin America, sample surveys of MNE affiliates in Argentina and Chile revealed that, for the firms interviewed, the purchase of existing assets was a small component of the total investment. Post-purchase investments very often included modernization and rationalization of operations, and, above all, investments in technology (see Agosin, 1996; Riveros et al., 1996; Chudnovsky et al., 1996). These investments were particularly large in the privatizations of telecommunications and public utilities in Argentina in the early 1990s. Most of the acquisitions in Argentina and Chile during this period were made with the intention of running the firms so acquired and bringing them up to date technologically.

But M&As may not lead to any increase in the physical capital of a host country. In some cases, the acquisition of a domestic firm is almost akin to a portfolio investment, with the MNE doing nothing to improve the operation of the domestic company. This was the case of several acquisitions in Latin America in the 1990s, as those economies became desirable destinations of portfolio investments. Very recently, there have been a large number of such cases of FDI, all with doubtful impacts on capital formation. Many of the acquired companies are not in need of modernizing, since they operate with state-of-the-art technology. Nor is it likely that their purchase by a foreign company will be followed up by sequential investment that the acquired firms would not have made themselves. In such cases, the act of FDI is not investment in the national accounts sense, and it does not lead to investments later on.

In fact, large M&As, like large portfolio inflows, may have adverse macroeconomic externalities on the most interesting types of investments. When they are of a size that can no longer be considered marginal, M&As tend to appreciate the exchange rate and discourage investment for export markets (and, indeed, for the production of importables as well). In small countries, these investments constitute the engine of growth of the economy.

It is interesting that M&As are prohibited in some of the most successful newly industrialized countries. Taiwan Province of China restricts foreign ownership of the equity of domestic companies