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Working Paper

To what extent can foreign direct investment help achieve international development goals?

Kiel Working Paper, No. 1128

Provided in Cooperation with:
Kiel Institute for the World Economy (IfW)

Suggested Citation: Nunnenkamp, Peter (2002) : To what extent can foreign direct investment help achieve international development goals?, Kiel Working Paper, No. 1128, Kiel Institute for the World Economy (IfW), Kiel

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To What Extent Can Foreign Direct Investment Help Achieve International Development Goals?

by

Peter Nunnenkamp

October 2002
To What Extent Can Foreign Direct Investment Help Achieve International Development Goals?

Abstract:

For FDI to help achieve the international development goal of halving absolute poverty, two conditions have to be met. First, poor developing countries need to be attractive to foreign investors. Second, the host-country environment in which foreign investors operate must be conducive to favourable FDI effects with regard to overall investment, economic spillovers and income growth. This paper argues that it is much more difficult to benefit from FDI than to attract FDI. Weak markets and institutions typically prevailing in poor countries tend to seriously constrain the growth-enhancing and poverty-alleviating effects of FDI. The crux is that creating an environment in which FDI may deliver social returns will take considerable time exactly where development needs are most pressing.

Keywords: Development financing, domestic investment, economic growth, poverty reduction

JEL classification: F30

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# Table of Contents

1. Introduction ................................................................................................... 1
2. Why FDI Figures High on the Agenda ......................................................... 4
3. Growing Importance of FDI in External Financing...................................... 7
4. Minor Role of FDI in Relation to Domestic Resources.............................. 13
5. Is FDI Flowing Where It Is Needed Most? .................................................. 17
6. Where the Benefits of FDI Go: Major Issues ............................................. 21
7. Volatility of FDI .......................................................................................... 23
8. FDI and Domestic Investment .................................................................... 26
9. Spillovers of FDI and Growth .................................................................... 30
10. Distributional Effects of FDI in Recipient Countries .............................. 35
11. Conclusions ................................................................................................. 38
References ........................................................................................................... 43
List of Figures and Tables

Figure 1 — Composition of Net Resource Flows to Developing Countries, 1990–2001 ................................................................. 9

Figure 2 — Contribution of FDI to Gross Fixed Capital Formation in all Developing Countries, 1989–1999 ..................................................... 14

Figure 2 — Contribution of FDI to Gross Fixed Capital Formation in Developing Countries according to Per-capita Income, 1997–1999 ..... 15

Figure 4 — Per-capita FDI Inflows, 1997–2000: Large versus Small and Rich versus Poor Developing Countries ............................................. 19

Figure 5 — Correlation between FDI Inflows and Per-capita Income of Developing Countries .............................................................. 20

Figure 6 — Correlation between FDI Inflows and Incidence of Absolute Poverty in Developing Countries ................................................. 21

Figure 7 — Volatile and Stable Capital Flow Items (coefficient of variation for net inflows to all developing countries in 1980–2001) .............. 24

Figure 8 — Correlation between FDI Inflows and Overall Investment in Developing Countries ................................................................. 28

Table 1 — Composition of Net Resource Flows to Selected Country Groups, 1998–2001 (percent) ................................................................. 10

Box — The Superiority of FDI: Challenging the Conventional Wisdom.......... 8
I. INTRODUCTION

Unprecedented economic development since World War II notwithstanding, about half of the world’s population is still living on less than 2 US$ per day. The international community is increasingly taking notice of this dismal reality. In September 2000, the UN General Assembly adopted the so-called Millennium Declaration; among the agreed international development goals for 2015, the commitment of governments to halve the incidence of absolute poverty figures prominently.

The mobilisation of financial resources is widely considered an essential means to achieve this goal. The UN Secretary General appointed a high-level panel, chaired by the former Mexican President, Ernesto Zedillo, to recommend strategies for financing economic development of countries plagued by pervasive poverty. The panel’s report (UN 2001) provided a major input to the UN Conference on Financing for Development in Monterrey, Mexico, in March 2002.

This conference not only resulted in the pledge to developing countries to increase official development assistance. At the same time, it was acknowledged that private financing, notably foreign direct investment (FDI), can provide an important source of finance for development.
According to UN (2002a: 5), "private international capital flows, particularly foreign direct investment,…are vital complements to national and international development efforts. Foreign direct investment contributes toward financing sustained economic growth over the long term. It is especially important for its potential to transfer knowledge and technology, create jobs, boost overall productivity, enhance competitiveness and entrepreneurship, and ultimately eradicate poverty through economic growth and development." In a similar vein, the OECD (2002a: 11) reckons that "increasingly, FDI has been recognised as a powerful engine and a major catalyst for achieving development, poverty-reducing growth and global integration process."

The favourable perception of FDI contrasts remarkably with the formerly sceptical, if not hostile attitude, which prevailed also in UN organisations, towards the activities of multinational corporations in developing countries. However, it would not be for the first time if a backlash occurred and multinational corporations were again, as in the 1970s, "denounced as big, irresponsible, monopolistic monsters" (The Economist 2000). As a matter of fact, some hostility has returned already. ¹ Globalisation critics consider multinational corporations to be more powerful than nation states, and

¹ The JBIC Institute (2002: 2) refers to the series of “globalisation backlash” demonstrations from Seattle to Genoa in this context.
blame the former for causing still wider income disparities within and between countries. The public perception of FDI may well take another turn for the worse, if proponents of FDI create unreasonably high expectations in developing countries, by ignoring possible flaws and limitations of FDI and taking its benefits for granted.

Against this backdrop, this paper attempts to provide a balanced assessment of the role FDI can play in stimulating economic growth and reducing poverty in developing countries and transition economies. The questions raised are the following:

• What explains the striking change in developing countries’ attitudes towards FDI?

• How important is FDI as a source of external financing of developing countries?

• To what extent does FDI contribute to overall capital formation?

• Is FDI going where it is needed most?

• Does empirical evidence support the widely held belief that FDI is a superior source of external financing? More specifically, is FDI more stable than other sources of external financing, are the economic growth effects of FDI higher and, if so, under which circumstances?
• What are the distributional consequences of FDI in developing countries?

The discussion of these questions leads to the conclusion that, in struggling against poverty, the international community should not expect too much from FDI. For poor developing countries, in particular, it appears much more difficult to derive social benefits from FDI than to attract FDI.

2. WHY FDI FIGURES HIGH ON THE AGENDA

Various developing countries and transition economies have opened up to FDI inflows since the mid-1980s. UNCTAD (1998: 93 ff.) reports that the liberalisation of national FDI frameworks has become the dominant type of policy change in these countries. Regulatory changes included the relaxation of performance requirements, the liberalisation of other operational conditions, the opening up of previously closed sectors to FDI and incentives granted to foreign investors. At the same time, the number of developing countries that have signed bi- or multilateral agreements, ensuring a liberal treatment of FDI and its protection after entry, increased dramatically in the 1990s.
The motives underlying this wave of liberalisation are manifold. First of all, the boom of FDI flows to developing countries during the last decade suggested to policymakers that the shortage of more traditional forms of capital imports could be made good by drawing on innovative ways of external financing. In particular, foreign aid was in short supply. The volume of net official development assistance (at 1999 prices and exchange rates), granted by DAC member countries,\textsuperscript{2} stagnated in the 1990s; as a share of the donors’ gross national income, official development assistance declined from 0.32 percent in 1989/90 to 0.23 percent in 1999/2000. At the same time, private capital imports, other than FDI, proved to be unreliable and volatile. In various episodes of financial turbulence, starting with the Mexican crisis in 1994/95, emerging markets suffered from overshooting in international loan and bond markets, with sudden reversals from surging capital inflows to massive capital outflows. Many developing countries with large external financing needs were affected by contagion in terms of limited market access and higher interest-rate spreads.

By contrast, FDI was on an upward trend and proved less prone to sudden capital reversals during crises. FDI flows to developing and transition

\textsuperscript{2} The Development Assistance Committee (DAC) is the principal body through which the OECD deals with development cooperation. Data are drawn from: http://www.oecd.org/xls/M00026000/M00026147.xls.
countries increased from 4 percent of these countries’ export revenues in 1990 to more than 11 percent in 2000 (UNCTAD, online database). Furthermore, FDI is expected to offer some unique advantages over other forms of external financing, as capital inflows constitute just one element of the "FDI package". FDI is often thought of as "a composite bundle of capital stocks, know-how, and technology, and hence its impact on growth is expected to be manifold" (De Mello 1997: 1). By surveying the literature, JBIC Institute (2002: 1) comes to the conclusion that “FDI is an important – and probably the dominant – channel of international transfer of technology. Multinational enterprises, the main drivers of FDI, are powerful and effective vehicles for disseminating technology from developed to developing countries and are often the only source of new and innovative technologies, which are usually not available in the arm’s-length market."

Yet, FDI is unlikely to offer a panacea. Its limitations may be particularly serious when it comes to poverty alleviation in developing countries. To begin with, poor developing countries may prove rather unattractive to foreign investors seeking promising markets or favourable production conditions. Moreover, as argued below, the unique advantages of FDI over other forms of external financing may materialise only under supportive
host-country conditions that are often lacking in poor developing countries. A more fundamental assault on the recently emerged mainstream view of FDI, launched by the former chief economist of the Inter-American Development Bank, Ricardo Hausmann, raises still more questions as regards the strengths and weaknesses of FDI (see Box). Sceptics even argue that the growing importance of FDI in the external financing of developing countries, to which we turn next, bodes developing countries no good.

3. GROWING IMPORTANCE OF FDI IN EXTERNAL FINANCING

The structure of long-term external financing of developing countries has changed dramatically since the early 1990s. Figure 1 reveals the dominance of FDI among different sources of external financing in recent years. FDI flows to all developing countries increased steadily in 1990–1999. The subsequent decline (from US$ 184 billion in 1999 to US$ 167 billion in

---

3 We refer to net resource flows in the following. This means that principal repayments are subtracted from gross disbursements of external finance. However, interest payments are included in net flows. Excluding interest payments results in net transfers.
The mainstream view, according to which FDI is superior to other forms of capital imports, has been attacked on several counts by Ricardo Hausmann and some of his former colleagues at the Inter-American Development Bank (for an overview, see the contributions in Braga de Macedo and Iglesias 2001):

**Growth impact of FDI:** An empirical analysis based on a sample of 43 developing countries in the period 1975-1995 leads to the conclusion that a rise in FDI, in combination with dwindling capital imports of other sorts (which is what we observe in Section 3), is not good for growth. This is because the economic growth impact of FDI is found to be weaker than the growth impact of private debt inflows.

**Stability of FDI:** FDI may appear more stable than it is. Instead of repatriating FDI, multinational corporations can use other ways to flee a country at the first sign of trouble (e.g., by repaying loans denominated in foreign currency). Hence, the volatility of FDI-related capital flows tends to be underrated if measurement is restricted to the FDI account and ignores FDI-related outflows showing up elsewhere in the balance of payments.

**High share of FDI in external financing:** Foreign capital tends to flow to countries that are more developed, more open, more stable, financially better developed and equipped with better institutions. At the same time, all these factors are found to reduce the share of FDI in total external financing. This suggests that interpreting a high FDI share as favourable is unwarranted. Rather, a high FDI share indicates that institutions are deficient and firms need to substitute for missing markets.

All these arguments are heavily disputed. As concerns the growth impact of FDI, the work of other researchers points to the opposite conclusion. For example, Soto (2000) supports the conventional wisdom that FDI inflows have a stronger impact on economic growth in developing countries than debt-related inflows. The point that multinational corporations may flee a country in various ways is valid in principle, but the empirical relevance of round-tripping of this sort is open to question. Finally, the finding of a comparatively small FDI share in the external financing of advanced industrial countries is of little relevance for developing countries. Almost by definition, developing countries have weaker institutions and less sophisticated markets than industrial countries. On the (fairly long) road to reaching the development level of advanced economies, it would amount to putting the cart before the horse, if developing countries strived for an external financing structure prevailing in industrial countries.
2000) notwithstanding, FDI inflows in 2001 were just slightly below the level reported for 1997. By contrast, other private capital flows declined sharply in the aftermath of the Asian crisis. This applies particularly to debt-related financing instruments. Private debt flows (i.e., the sum of net credits from private creditors to public and private borrowers) dwindled from an annual average of US$ 95 billion in 1996-1998 to US$ 7 billion in 1999–2000, and turned even negative in 2001. Official net resource flows

\[\text{Figure 1 — Composition of Net Resource Flows}\] a to Developing Countries, 1990–2001

US$ billion

aExcluding short-term debt.

(the sum of loans from official sources, excluding IMF loans, and grants) were down from more than half of long-term net resource inflows in 1990/91 to 16 percent in 2000/01.

As a result, the share of FDI in total long-term external financing of all developing countries soared from less than 30 percent in the early 1990s to almost two thirds in 1998-2001 (Table 1). However, the structure of external financing differs significantly between regions and income groups. There is only one thing which the country groups listed in Table 1 have in

Table 1 — Composition of Net Resource Flows\textsuperscript{a} to Selected Country Groups, 1998–2001\textsuperscript{b} (percent)

<table>
<thead>
<tr>
<th></th>
<th>FDI</th>
<th>portfolio equity</th>
<th>private debt flows</th>
<th>official flows</th>
<th>memorandum: total net resource flows (US$ billion)</th>
</tr>
</thead>
<tbody>
<tr>
<td>East Asia &amp; Pacific</td>
<td>79.7</td>
<td>27.5</td>
<td>-24.1</td>
<td>16.9</td>
<td>68.9</td>
</tr>
<tr>
<td>South Asia</td>
<td>33.2</td>
<td>11.2</td>
<td>11.2</td>
<td>44.4</td>
<td>10.5</td>
</tr>
<tr>
<td>Latin America</td>
<td>71.2</td>
<td>4.0</td>
<td>19.4</td>
<td>5.4</td>
<td>107.7</td>
</tr>
<tr>
<td>Sub-Saharan Africa</td>
<td>41.3</td>
<td>7.4</td>
<td>-2.9</td>
<td>54.2</td>
<td>20.9</td>
</tr>
<tr>
<td>Low-income countries</td>
<td>32.1</td>
<td>6.4</td>
<td>-14.4</td>
<td>75.9</td>
<td>30.3</td>
</tr>
<tr>
<td>Middle-income countries</td>
<td>64.2</td>
<td>12.2</td>
<td>15.0</td>
<td>8.6</td>
<td>259.6</td>
</tr>
<tr>
<td>All developing countries</td>
<td>65.4</td>
<td>11.2</td>
<td>7.2</td>
<td>16.2</td>
<td>266.5</td>
</tr>
</tbody>
</table>

\textsuperscript{a}Excluding short-term debt. \textsuperscript{b}Period average; 1998–2000 for low-income and middle-income groups (missing data for 2001).

common, namely that private debt flows were either negative or contributed little to capital inflows after the Asian crisis. Differences are most pronounced as regards the role of FDI and official flows. Even though overall aid stagnated, low-income countries, located mainly in Sub-Saharan Africa and South Asia, still depend heavily on official flows; FDI played a minor role in these countries. By contrast, capital inflows of Asian and Latin American countries with higher per-capita income consisted to 70–80 percent of FDI.

The external financing patterns of developing countries have raised two different concerns. On the one hand, some sceptics challenge the conventional wisdom that the high and rising share of FDI in external financing is good news for middle-income countries in Latin America and Asia (Hausmann and Fernández-Arias 2001). The dominance of FDI, accompanied with the scarcity of private debt inflows, can be attributed to weak institutions and deficient markets in developing countries (see also Box). However, it is exactly for this reason that FDI appears to be the most appropriate form of external financing in developing countries, which have less capacity to absorb external shocks. In contrast to debt-related inflows, FDI does not give rise to currency or maturity mismatches, since FDI represents a residual claim of foreign investors that does neither have a
fixed value or currency denomination nor a pre-determined maturity. Due to the risk-sharing properties of FDI, efforts by developing countries to draw on this source may be justified, even though FDI is typically considered a relatively expensive form of financing.4

On the other hand, the pronounced differences in the structure of external financing seem to suggest that FDI can play only a limited role in development financing of poor countries. According to a widely held view, "unfortunately, many low-income countries have not benefited from the international investment surge" (OECD 2002a: 11). The concern that low-income countries are left on the sidelines refers to Sub-Saharan Africa in the first place. Apart from South Asia, this region is plagued by the highest incidence of absolute poverty. Collier and Dollar (2001) show that poverty reduction in Sub-Saharan Africa will fall grossly short of the international development goal for 2015 to halve the incidence of absolute poverty, if current trends continue. Consequently, UN (2002b: 5) reckons that the central challenge is to attract FDI to a much larger number of developing countries.

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4 Expected returns on foreign equity are normally higher than interest rates on bank loans.
4. MINOR ROLE OF FDI IN RELATION TO DOMESTIC RESOURCES

The boom of FDI in developing countries did not only affect the structure of external financing. Another consequence was that the contribution of FDI to overall capital formation in developing countries increased considerably. The share of FDI in gross fixed capital formation amounted to about 13 percent in 1998/99, compared to slightly more than 5 percent in 1989–1994 (Figure 2). This rising share notwithstanding, the evidence is a clear reminder to policymakers not to expect too much from FDI. For most developing countries, the mobilisation of domestic resources remains by far more important than attracting FDI for financing investment and, thereby, stimulating economic growth. It is thus worth recalling from the report of the High-level Panel on Financing for Development (UN 2001: 3 ff.): "The primary responsibility for achieving growth and equitable development lies with the developing countries themselves….The bulk of the saving available for a country’s investment will always come from domestic sources, whether the country is large or small, rich or poor."
This crucial message is not invalidated by the fact that the contribution of FDI to gross fixed capital formation varied tremendously across developing countries in recent years, as shown in Figure 3. It is hardly possible to establish a clear link between the share of FDI in gross fixed capital formation and the attractiveness of an investment location. Favourable investment conditions should not only induce higher FDI, but should
Figure 3 — Contribution of FDI to Gross Fixed Capital Formation in Developing Countries according to Per-capita Income\(^a\), 1997-1999\(^b\)

\[ y = 0.0001x + 14.9 \]
\[ R^2 = 0.002 \]

\(^a\)Gross national income per capita, according to purchasing power parity, in 1999. –
\(^b\)Annual average.


stimulate domestic investment at the same time.\(^5\) As a matter of fact, FDI inflows in 1997–1999 and gross fixed capital formation (both in percent of GDP) are correlated positively in a highly significant way across our

\(^5\) This is why Hiemenz et al. (1991: 5) regard FDI inflows and the overall investment ratio as two complementary proxies for measuring international competitiveness. These authors argue that the former proxy reflects the international dimension of capital mobility, while the latter proxy reflects the intertemporal dimension of capital mobility.
sample countries, even though the relation between foreign and domestic investment may be blurred by various factors (see Section 8 below). It follows that it is not necessarily a sign of favourable investment conditions, if FDI accounts for a high share in overall investment. For example, exceptionally high FDI shares in countries such as Angola, Azerbaijan, Bolivia and Georgia frequently tend to result from some large FDI projects, motivated by the availability of natural resources (e.g., oil), in combination with a rather poor general investment climate.

Likewise, there is no clear link between a high share of FDI in gross fixed capital formation and a shortage of domestic resources. True, the four countries just mentioned tend to be constrained in domestic financing of large projects in resource extraction, whereas oil-producing countries with higher per-capita income such as Kuwait and the United Arab Emirates are less dependent on foreign financing so that FDI may contribute less to overall capital formation (Figure 3). For the sample as a whole, however, the FDI share in gross fixed capital formation is not correlated with the per-capita income of recipient countries. On the one hand, this finding underlines that even poor developing countries must not consider FDI to be an alternative to domestic resource mobilisation. On the other hand, the chances of poor developing countries to supplement domestic resources by
attracting FDI may be better than widely suspected. The latter issue is further discussed in the subsequent section.

5. **IS FDI FLOWING WHERE IT IS NEEDED MOST?**

While it is hardly disputed in the relevant literature that FDI can at best complement domestic investment resources, it is more contentious whether all developing countries can actually draw on FDI as a complementary source of financing investment. Widespread scepticism in this regard is mainly because of the strong concentration of FDI in a fairly small number of developing countries. For instance, more than 80 percent of inward FDI stocks in all developing and transition economies were located in just 20 countries in 2000 (UNCTAD online data base). This group mainly consisted of either very large economies (e.g., China, Brazil, Indonesia) or fairly advanced economies (e.g., Hong Kong, Singapore, Korea, Czech Rep.).

However, concentration measures based on absolute FDI data may be seriously misleading (Nunnenkamp 2001). This is revealed once FDI inflows are related either to the host countries’ population or to their GDP. If a large-country bias is avoided by considering FDI in per-capita terms, FDI inflows in 1997–2000 were, on average, higher in small countries than
in larger countries (Figure 4). At the same time, per-capita FDI flows to rich developing countries (i.e., countries whose per-capita income in 1999 was above the median of the overall sample) by far exceeded per-capita FDI flows to poor countries. This supports the sceptical view that it is typically more difficult for poor countries to attract FDI.

The picture turns out to be more favourable for poor developing countries, if FDI inflows are related to the recipient countries’ GDP (Figures 5 and 6). The FDI/GDP ratio is neither correlated with per-capita income, nor with the incidence of absolute poverty. The coefficients of determination ($R^2$) are practically zero, and the regression coefficients remain insignificant. This finding is fairly robust to the treatment of outliers. The correlation of FDI with per-capita income in Figure 5 changes only marginally, if three outliers with an FDI/GDP ratio of more than 15 percent are removed from the sample.\(^6\) The same applies when the calculation is restricted to countries with a per-capita income of less than 20000 US$. The correlation shown in Figure 6 becomes somewhat stronger, if outliers are excluded. Nevertheless, the FDI/GDP ratio would drop by just 0.24 percentage points, if the incidence of absolute poverty increased by 10 percentage points.

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\(^6\) The coefficient of determination ($R^2$) increases to 0.02, and the regression coefficient, though somewhat higher, remains insignificant at the 10 percent level.
Figure 4 — Per-capita FDI Inflows, 1997–2000\textsuperscript{a}: Large versus Small and Rich versus Poor Developing Countries\textsuperscript{b}

![Graph showing per-capita FDI inflows for large, small, rich, and poor countries, with values: 52.9, 65.1, 108.1, and 17.1 USD.]

\textsuperscript{a}Annual average. \textsuperscript{b}Countries are considered large (small), if their population in 1999 was above (below) the median of 8.0 million for the overall sample; countries are considered rich (poor), if their per-capita income (PPP) in 1999 was above (below) the median of 3390 US$. \textsuperscript{c}Excluding Hong Kong and Singapore; if included, average per-capita FDI inflows would increase to 155 US$. \textsuperscript{d}Excluding Hong Kong and Singapore; if included, average per-capita inflows would increase to 209 US$.

Source: UNCTAD, online data base; World Bank, World Development Indicators, CD-ROM.

The notion that FDI is not flowing where it is needed most to help stimulate economic growth and eradicate absolute poverty is, thus, not supported by the evidence presented in Figures 5 and 6. Measured by the FDI/GDP ratio, developing countries with low per-capita income and high absolute poverty, on average, received almost as much FDI as more
advanced developing countries. It must be taken into account, however, that FDI in low-income countries is frequently concentrated in resource-based industries, which may be characterised as foreign-dominated enclaves with weak economic linkages to the local economy of host countries. As argued below, economy-wide effects of FDI on productivity and growth may be extremely limited under such conditions.

Figure 5 — Correlation between FDI Inflows\textsuperscript{a} and Per-Capita Income\textsuperscript{b} of Developing Countries\textsuperscript{c}

\[ y = 0.00004x + 3.27 \]
\[ R^2 = 0.002 \]

\textsuperscript{a}FDI inflows in 1997-1999, in percent of the host countries' GDP; annual average. – \textsuperscript{b}Gross national income per capita, according to purchasing power parity, in 1999. – \textsuperscript{c}Excluding offshore financial centers.

Source: UNCTAD, online database; World Bank, World Development Indicators 2002, CD-ROM.
Figure 6 — Correlation between FDI Inflows\textsuperscript{a} and Incidence of Absolute Poverty\textsuperscript{b} in Developing Countries\textsuperscript{c}

\[ y = -0.0199x + 4.70 \]
\[ R^2 = 0.015 \]

\textsuperscript{a}FDI inflows in 1997-1999, in percent of the host countries' GDP; annual average. – \textsuperscript{b}Percentage of population living on less than US$ 2 per day. – \textsuperscript{c}Excluding offshore financial centers.

Source: UNCTAD, online database; Collier and Dollar (2001: Table 3).

6. WHERE THE BENEFITS OF FDI GO: MAJOR ISSUES

Even though the chances of poor and more advanced developing countries to attract FDI may not differ as much as often feared, it is by no means guaranteed that the benefits of FDI-inflows are essentially the same in poor and advanced countries. The widely perceived advantages of FDI (see
Section 2) may be compromised in several ways in poor developing countries:

- The relative stability of FDI, compared to debt-related capital inflows, may not apply to small countries with low per-capita income, in which FDI is frequently restricted to a few FDI projects related to primary commodities.

- FDI may crowd out, rather than supplement domestic investment, if local enterprises lack competitiveness.

- Technological and managerial spillovers from foreign investors to local enterprises may not develop unless the host country commands over sufficient absorptive capacity.

- The economic growth effects of FDI may remain relatively weak in poor developing countries.

- FDI can be expected to benefit more skilled workers in developing countries, thereby worsening the relative income position of the poor.

In the following, it will be shown that some of these concerns are of minor relevance, whereas others may severely constrain the role of FDI in financing development where it is needed most.
7. VOLATILITY OF FDI

Various countries in Asia and Latin America witnessed the vagaries of private international capital markets during recent financial crises. This experience has highlighted the need to put external financing on a less crisis-prone basis, in order to promote sustainable economic development. FDI is frequently perceived to have the required "bad weather"-quality, even though the stability of FDI may be overstated due to the possibility of round-tripping (see Box above).

Keeping this qualification in mind, Figure 7 shows FDI to be less volatile than other private (non-guaranteed) capital flow items (see also OECD 2002b: 23 f.). Measured by the coefficient of variation (standard deviation divided by mean) in the period 1980-2001, short-term debt as well as private non-guaranteed debt with longer maturities fluctuated much more heavily than FDI. Moreover, the volatility of debt-related flows, both short-term and long-term, increased in the period 1991–2001, compared to the period 1980-1990, whereas the volatility of FDI was similarly low in both sub-periods (results not shown here).

More surprisingly, the empirical evidence does not support the sceptical view that FDI tends to be less stable in poor developing countries. To the
contrary, grouping sample countries into three income classes, according to per-capita income in 1999, and calculating the coefficient of variation on the basis of FDI flows since 1980 for these sub-groups, reveals the following results:

Figure 7 — Volatile and Stable Capital Flow Items (coefficient of variation\(^a\) for net inflows to all developing countries in 1980-2001)

\(^a\)Standard deviation divided by mean.\(^b\)Long-term debt.\(^c\)Long-term; including publicly guaranteed debt from private creditors.\(^d\)Long-term debt owed to official creditors (excluding IMF) plus official grants.

• per-capita income of less than 1700 US$: 0.74;
• per-capita income of 1700-4000 US$: 1.02;
• per-capita income of more than 4000 US$: 1.08.

In contrast to the proposition raised above, the once-and-for-all character of a few large FDI projects, e.g. in the extraction of primary commodities, did not result in more volatile FDI flows to the sub-group of poor developing countries as a whole. It is conceivable that this effect was dominated by volatility-reducing properties of commodity-related FDI. For example, this type of FDI may be less sensitive to changes in economic policy conditions in host countries than market-related or cost-related FDI in services and manufacturing industries. Hence, taken together, poor developing countries need not be concerned that their development prospects are compromised by relatively volatile FDI flows.

However, the volatility of FDI varies greatly across countries. Typically, the lower the annual average of FDI flows to a particular country, the more volatile FDI tends to be. Developing countries in which FDI flows proved highly unstable are concentrated in Africa; five African countries (Somalia, Gabon, Sierra Leone, Dem. Rep. of Congo and Algeria) are among the six

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7 The coefficient of correlation of –0.12 between annual average FDI flows and the coefficient of variation across sample countries with complete data for the period 1980-2000 remains statistically insignificant, however.
sample countries with the highest coefficient of variation. As Lensink and Morrissey (2001) show, the volatility of FDI has a consistently negative impact on growth in developing countries. Consequently, it is mainly in African countries that FDI may have limited effects on economic growth and poverty alleviation.

8. FDI AND DOMESTIC INVESTMENT

As mentioned in Section 4, it does not come as a great surprise that FDI inflows and overall investment in the recipient countries are positively correlated across countries. Foreign and domestic investors alike can be expected to respond to favourable economic fundamentals by investing more. A certain bias of FDI against countries in which low domestic investment renders the need for FDI most urgent follows logically.

However, the correlation between FDI and domestic investment is weakened by several factors. Government regulations often prevent foreign and local investors from reacting to economic fundamentals in a similar way. On the one hand, FDI remains restricted in various instances, either generally or in specific sectors reserved for local investors. For example, the regulatory environment helps explain why the FDI/GDP ratio of Brazil is almost five times the corresponding ratio in India, although the overall
investment ratio hardly differs between these two countries (Figure 8). On the other hand, local investors are sometimes discriminated, e.g., when incentives such as tax concessions are available only to foreign investors. A comparison between China, Malaysia and Korea is telling in this regard. While all three countries report overall investment ratios which clearly exceed the sample average, the FDI/GDP ratios of China and Malaysia were about three times the ratio of Korea. In contrast to Korea, the competition between foreign and private local investors was distorted against the latter in the other two countries; local entrepreneurs in China were politically suppressed until recently, and faced serious credit constraints which worked in favour of FDI (IMF 2002).

Apart from policy-induced distortions, the correlation between foreign and domestic investment depends on whether FDI crowds out local investment. Fears of crowding-out, which were widespread in developing countries in the past, may have diminished since several cross-country studies have found no evidence to this effect (Lipsey 2000). The predominant view now seems to be that "FDI tends to ‘crowd in’ domestic investment, as the creation of complementary activities outweighs the displacement of
Figure 8 — Correlation between FDI Inflows and Overall Investment\textsuperscript{a} in Developing Countries\textsuperscript{b}

\[ y = 0.202x - 0.96 \]
\[ R^2 = 0.19 \]

\textsuperscript{a}Annual average of 1997-1999 for both variables; in percent of GDP.— \textsuperscript{b}Outliers with FDI/GDP share exceeding 10 percent or overall investment ratio exceeding 40 percent not shown, but included in the regression.

Source: UNCTAD, World Investment Report 2001; World Bank, World Development Indicators 2002, CD-ROM:

domestic competitors" (JBIC Institute 2002: viii). However, some warnings may be warranted. First, the frequently quoted study of Borensztein et al. (1998: 128) cautions that the crowding-in effect lacks robustness, and that most of the effect of FDI on economic growth derives from efficiency gains rather than FDI-induced additional investment. Second, in time-series studies, "past FDI inflows are not a significant positive influence on the
current period’s investment ratio” (Lipsey 2000: 76). Third, the effects of FDI on domestic investment differ considerably between regions and countries. Agosin and Mayer (2000) find that only in Asia there is strong evidence of crowding-in, whereas crowding-out has been the norm in Latin America.

For assessing the role of FDI in financing economic development in poor recipient countries, it would be important to know the reasons behind the varying effects of FDI on domestic investment. This is largely unexplored territory, however. Crowding-out may be more likely, if mergers and acquisitions (M&As) are the dominant form of FDI inflows (OECD 2002b: 8). This could help explain crowding-out in Latin America, where M&As figured much more prominently than in Asia (JBIC Institute 2002: 19; Nunnenkamp 2002a). It may also be suspected that positive investment effects of FDI depend on effective screening, i.e., the government’s ability to target FDI projects that do not displace local firms, and on the availability of competitive local businesses to promote forward and backward linkages of FDI (Agosin and Mayer 2000). Crowding-in may then be hampered in poor developing countries lacking administrative capabilities for effective screening of FDI and a competitive business sector.
At present, the bottom line seems to be that a positive impact of FDI on domestic investment is not guaranteed. The issue is complicated further when it is taken into account that "crowding out of domestic investment through FDI may not necessarily be a problem, and can even be a healthy sign" (OECD 2002b: 26). The host economy may benefit if local enterprises lacking international competitiveness are replaced by foreign firms, provided that the released domestic resources are used for more productive purposes.

9. SPILLOVERS OF FDI AND GROWTH

Similar qualifications apply when it comes to the productivity-increasing effects of FDI in developing countries. As noted before, FDI not only involves the transfer of capital, but is also considered a powerful mechanism to transfer technology and know-how to host countries. Yet, it remains open to debate to which extent and under which circumstances FDI-related transfers of technology and know-how result in productivity gains. The significance of spillovers to local firms and workers is crucially important in this regard. Through spillovers FDI could boost the productivity of all firms, not just the productivity of firms in which foreign investors engage.
Spillovers work through several channels, among which the following three figure most prominently in the relevant literature: In the case of vertical linkages, local suppliers of inputs demanded by multinational corporations and local buyers of products offered by multinational corporations can benefit from transfers of technology and know-how. Horizontal linkages between foreign and local firms operating in the same industry may promote technological and managerial imitation, as local firms facing fiercer competition can be expected to make use of demonstration effects in order to improve their productivity. Finally, local firms hiring workers who were previously trained by multinational corporations may benefit from the enhanced skills of these workers.

The empirical relevance of such spillovers is hard to quantify. The evidence from case studies is mixed. Kokko (2002) summarises as follows: "In brief, it seems clear that host country and host industry characteristics determine the impact of FDI and that systematic differences between countries and industries should be expected. There is strong evidence pointing to the potential for significant spillover benefits from FDI, but also ample evidence indicating that spillovers do not occur

8 See JBIC Institute (2002) for an informative survey.

9 For a detailed review of the evidence, see Blomström et al. (2000).
automatically." In the present context of FDI as a driving force of economic development in poor countries, it is important to note that the capability of local firms to absorb superior technology and knowledge appears to be a decisive determinant of whether or not the potential for spillovers will be realised.

As a consequence, many poor developing countries may find themselves in a trap which is difficult to escape: FDI-induced spillovers would be required most urgently in poor countries to narrow particularly wide productivity gaps. However, it is exactly the technological backwardness which tends to constrain the benefits poor countries may derive from spillovers. Local firms often are too far behind in terms of technological and managerial development for imitating technologies applied by foreign investors or becoming involved as input suppliers. As argued in the remainder of this section, empirical investigations of the economic growth effects of FDI in developing countries add to the concern that the benefits may not go where they are needed most.

The available evidence on the growth impact of FDI remains far from conclusive, even though JBIC Institute (2002: viii) claims that "a vast majority of existing empirical studies indicate that FDI does make a positive contribution to both income growth and factor productivity in host
economies.”\textsuperscript{10} First, in contrast to macroeconomic studies, firm-level studies do not lend much support for the view that FDI accelerates overall economic growth (Carkovic and Levine 2002). Second, various macroeconomic studies may not be reliable, since they do not control fully for reverse causality (i.e., FDI being the result of, rather than the cause for higher growth) and country-specific effects. By applying econometric procedures that eliminate these potential biases, Carkovic and Levine (2002) do not find the exogenous component of FDI to exert a robust, positive influence on economic growth in 72 (developing and industrial) host countries in 1960-1995. It is rather suggested that sound economic policies stimulate growth and, at the same time, provide a favourable climate for FDI.

Third, and most importantly in the present context, even studies drawing a somewhat brighter picture typically reveal that the growth impact of FDI depends on whether or not certain pre-conditions are given in developing countries:

- Balasubramanyam et al. (1996) stress that openness to trade is essential for reaping positive growth effects of FDI.

\textsuperscript{10} For a similar statement, see Lim (2001: 9).
• According to De Mello (1997), the larger the technological gap between the host and the home country of FDI, the smaller the impact FDI will have in the former.

• Alfaro et al. (2001) conclude that, below a threshold level of financial market development in the host country, FDI will not exert beneficial effects on growth.

• Borensztein et al. (1998) show that FDI raises growth only in countries with a sufficiently qualified labour force.

In one way or another, these studies echo an earlier finding of Blomström et al. (1994), namely that the positive impact of FDI on economic growth is confined to higher-income developing countries. As it seems, developing countries must have reached a minimum level of economic development before they can capture the growth-enhancing effects of FDI.11 To put it more bluntly, poverty tends to severely constrain the role FDI can play in eradicating poverty.

11 OECD (2002b: 28) comes to the same conclusion.
10. DISTRIBUTIONAL EFFECTS OF FDI IN RECIPIENT COUNTRIES

Sometimes it is simply assumed that FDI will contribute to achieving the goals of the Millennium Declaration through fostering growth in poor countries – an assumption which largely ignores the findings reported in the previous section.\textsuperscript{12} Few studies have dealt explicitly with the links between FDI and poverty alleviation. The Overseas Development Institute (2002) has summarised the limited evidence on the effects of FDI on income distribution and poverty in recipient countries. It is argued that a direct link between FDI and poverty reduction does not exist, while three indirect links are considered possible: (i) FDI-induced increases in national income offer a potential to benefit the poor; (ii) well-developed linkages between foreign firms and local suppliers may generate employment opportunities for the poor; and (iii) FDI may lead to higher wages.

As argued above, the former two indirect links are rather unlikely to result in poverty reduction where the incidence of absolute poverty is particularly high. The growth effects of FDI and FDI-induced spillovers are hampered under conditions typically prevailing in the poorest countries. With regard to the third link, critics of globalisation, including representatives of trade

\textsuperscript{12} For an example of an overly simplistic view, see Klein et al. (2002).
unions in industrial countries, blame multinational corporations for paying sub-standard wages to workers in developing countries and forcing them to work under "sweatshop conditions". This seems to imply that FDI in developing countries is adding to, rather than reducing poverty.

Bold assertions of this sort are dismissed by Graham (2000); the analytical reasoning and empirical findings of this author rather suggest that FDI improves the welfare of workers in developing countries, by increasing the demand for labour and by paying higher wages than prevail locally. Likewise, the Overseas Development Institute (2002: 2) concludes that "almost all evidence shows that FDI and foreign ownership are associated with higher wages for all types of workers." The wages paid by multinational corporations in developing countries may still be extremely low by the standards of their home countries. By local standards prevailing in the host countries, however, the claim of globalisation critics that workers are exploited by multinational corporations is in serious conflict with empirical evidence.

While all workers benefit from being employed by multinational corporations, relatively skilled workers may benefit significantly more than unskilled workers, who can reasonably be assumed to be poorer than skilled workers. Foreign investors tend to apply more advanced production
technologies than local firms operating in the same sector, and FDI is frequently concentrated in relatively skill-intensive sectors (such as resource extraction and sophisticated manufacturing). OECD (2002b: 99) argues that FDI may turn out to be a more appropriate tool for poverty alleviation when targeted at labour-intensive industries. However, policy interventions by host country governments often encourage foreign firms to apply relatively advanced production technologies. As a consequence, the labour demand of foreign investors is biased towards higher skills. The wage premium paid by multinational corporations in developing countries is larger for skilled workers than for unskilled workers (Overseas Development Institute 2002). Moreover, it is questionable that FDI benefits the poorest segment of the population working in the informal sector. Employment in the informal sector may even increase, if foreign investors acquire local firms and shed unqualified labour as a consequence of labour-saving technological progress.

Hence, significant poverty alleviation through FDI-induced wage increases is unlikely, especially in the case of resource-based developing countries with a large informal sector. Harsh critics of FDI often fail to take into account that FDI may lift at least some workers out of absolute poverty, even if the overall income distribution becomes more uneven. On the other
hand, it appears to be wishful thinking that higher inequality going along with FDI in developing countries is just a short-term phenomenon, whereas "over time, as productivity improvements spread in the recipient country, other people benefit and incomes again become more equal than they would otherwise have been" (Klein et al. 2002: 61). As long as FDI-induced productivity improvements are weak, for the reasons given before, another indirect way of poverty alleviation through drawing on FDI does not offer much relief either: Revenues, which the host country’s government may derive from taxing foreign investors and use for funding assistance to the poor, will remain limited.\(^\text{13}\)

### 11. CONCLUSIONS

For FDI to help achieve the international development goal of halving absolute poverty, two conditions have to be met. First, poor developing countries need to be attractive to foreign investors. Second, the host-country environment in which foreign investors operate must be conducive to favourable FDI effects with regard to overall investment, economic spillovers and income growth.

\(^\text{13}\) In addition, it is not guaranteed that tax revenues would actually be spent to serve poverty-alleviating purposes.
To a certain extent, these two requirements involve similar challenges for developing countries. The literature on the determinants of FDI suggests that the driving forces of FDI include the development of local markets and institutions, an investment-friendly policy and administrative framework, as well as the availability of complementary factors of production.\footnote{The determinants of FDI have not been discussed in any detail in this paper. For an overview, see Nunnenkamp (2002b) and the literature given there.} The discussion in the previous sections provided various indications that these factors would also help ensure favourable effects of FDI in the host countries.

Nonetheless, the two issues should be kept apart. Meeting the first condition, i.e. attracting FDI, is no guarantee for reaping beneficial effects of FDI. Developing countries with low per-capita income and high absolute poverty, on average, received almost as much FDI as more advanced developing countries, if FDI inflows are related to the recipient countries’ GDP. Yet, weak markets and institutions typically prevailing in poor countries may seriously constrain the growth-enhancing effects of FDI. In other words, it appears much more difficult to benefit from FDI than to
attract FDI. Resource-based countries with low per-capita income frequently exemplify this dilemma. Many of these countries reported fairly high FDI inflows, but the enclave character of FDI in commodity-related activities renders it unlikely that FDI contributes significantly to economic growth and poverty alleviation.

This leads to the conclusion that the international community is focussing on the wrong question, when, for example, UN (2002b: 5) argues that the central challenge is to attract FDI to a much larger number of developing countries. Succeeding in this respect would only solve the minor part of the problem. It cannot simply be assumed that FDI, once it has taken place, will contribute to poverty reduction through fostering growth in poor developing countries (Overseas Development Institute 2002: 1). The findings reported above suggest that the current euphoria about FDI may give rise to unreasonably high expectations. More FDI in more developing countries might even turn out to be the harbinger of another backlash against multinational corporations, unless the benefits of FDI are as widely spread across developing countries.

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15 Balasubramanyam (2002: 194) comes to a similar conclusion: “High volumes of FDI alone do not contribute to the social product. Needless to say, the contribution of FDI to growth and development objectives, including dissemination of technology and know-how, promotion of trade, and employment creation, is conditional upon its efficient utilisation.”
Another warning may be warranted in this context: "It would be a folly to expect profit-maximising firms, be they foreign or locally owned, to specifically address the development objectives of host countries. They do contribute to development objectives if – and only if – the business environment is conducive to efficiency of operations." (Balasubramanyam 2002: 199). The crux is that creating an environment in which FDI is not only profitable for multinational corporations, but also delivers social returns by contributing to development objectives, amounts to a daunting task exactly where development needs are most pressing.

Structural weaknesses impeding technological and managerial spillovers of FDI are difficult to overcome. Attempts by various developing countries to compensate for the lack of market-driven linkages between foreign and domestic firms by imposing local-content requirements and technology-sharing requirements on multinational corporations often proved “harmful – actually damaging – to the growth and welfare of the developing countries” (Moran 1999: 45). For multinational corporations to accept such performance requirements, they were frequently offered protection from local and foreign competition as a quid pro quo. Incentives for productivity increases were weakened in this way.

A similar dilemma is involved when foreign investors are granted tax
incentives or outright subsidies. In principle, special incentives may be justified to the extent that FDI results in spillovers, in order to bridge the gap between the private and social returns of FDI (Kokko 2002). However, it is far from obvious that FDI incentives are cost-efficient, once it is taken into account that spillovers do not occur automatically. Moreover, the discrimination of domestic investors resulting from FDI incentives tends to discourage domestic resource mobilisation, which clearly represents the most important source of financing economic development.

In the absence of a quick fix to deriving more benefits from FDI, poor developing countries are well advised not to expect too much from FDI. For various countries, it may take considerable time to reach the minimum level of economic development, which, according to the available evidence, seems to be required for FDI to provide a strong catalyst for growth. The international community should be aware that FDI falls grossly short of providing a panacea for the most pressing development problem, i.e. the disturbingly high incidence of absolute poverty in many developing countries.
REFERENCES


