



Hamburg Institute  
of International  
Economics

# The Characteristics and Determinants of FDI in Ghana

Fabian Barthel, Matthias Busse, Robert Osei

**HWWI Research**

Paper 2-15  
by the

HWWI Research Programme  
World Economy

**Corresponding author:**

**Matthias Busse**  
Hamburg Institute of International Economics (HWWI)  
Research Programme World Economy  
Heimhuder Str. 71 | 20148 Hamburg | Germany  
Tel +49 (0)40 34 05 76 - 660 | Fax +49 (0)40 34 05 76 - 776  
busse@hwwi.org

HWWI Research Paper  
Hamburg Institute of International Economics (HWWI)  
Heimhuder Str. 71 | 20148 Hamburg | Germany  
Tel +49 (0)40 34 05 76 - 0 | Fax +49 (0)40 34 05 76 - 776  
info@hwwi.org | www.hwwi.org  
ISSN 1861-504X

**Editorial Board:**  
**Thomas Straubhaar (Chair)**  
**Matthias Busse**

© Hamburg Institute of International Economics (HWWI)  
December 2008

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means (electronic, mechanical, photocopying, recording or otherwise) without the prior written permission of the publisher.

# The Characteristics and Determinants of FDI in Ghana

Fabian Barthel<sup>a,b</sup>, Matthias Busse<sup>b</sup>, and Robert Osei<sup>c</sup>

## Abstract

Foreign Direct Investment (FDI) can be a valuable tool for development. However, not all forms of FDI are equally beneficial for the host country. The paper analyses the characteristics and determinants of FDI in a typical developing country: Ghana. Moreover, key policy areas are indicated, in order to enable Ghana both to attract more FDI and to increase the benefits from these capital inflows. The analysis combines qualitative and quantitative methods and is partly based on data retrieved from the World Bank's 2007 Enterprise Survey, and partly on our own survey of 54 multinational enterprises operating in Ghana.

JEL Classification: F21, F23, O55

Key Words: Foreign Direct Investment, Multinational Enterprises, Ghana

---

<sup>a</sup>London School of Economics and Political Science (LSE), Department of Geography and Environment, Houghton Street, London WC2A 2AE, United Kingdom. <sup>b</sup>Hamburg Institute of International Economics (HWWI), Research Programme World Economy, Heimhuder Str. 71, 20148 Hamburg, Germany. <sup>c</sup>Institute of Statistical, Social and Economic Research (ISSER), University of Ghana, P. O. Box LG 74, Legon, Ghana. Corresponding author: Matthias Busse, e-mail: busse@hwwi.org; phone: +49-40-340576-440; fax: +49-40-340576-776. The paper is based on a study conducted on behalf of the German Ministry for Economic Cooperation and Development (BMZ) and the German Technical Cooperation (GTZ) and in cooperation with the Association of Ghana Industries (AGI) and the Ghana Investment Promotion Centre (GIPC) and the Ghana Chamber of Mines. The authors would like to thank Cecilia Aryeetey, Deike Borchers, Jenny Plaul, Ezekiel Attuquaye Clottey, Marshall Kala and Carolin Loehr for their excellent research assistance.

## 1. Introduction

Numerous studies have shown that the inflow of foreign direct investment (FDI) can be quite beneficial for the host country. This applies particularly to developing countries. In addition to providing new capital, FDI is generally accepted as a means of incorporating new knowledge from abroad. Multinational enterprise (MNE) theory proposes that MNEs have a technological advantage over local firms that outweighs the cost of doing business in external markets (Markusen 2002). The inflow of new knowledge may benefit domestic firms through imitation and learning, increased competition in local markets, facilitation of human capital mobility among firms, and vertical linkages; thereby increasing the productivity level and sustaining a higher growth rate.<sup>1</sup>

Traditionally, foreign firms locate in developing countries with one or more of these intentions in mind: *resource*, *efficiency* or *market-seeking objectives*. For a mining firm, for example, the availability of natural resources is the key reason to invest in a particular country. Therefore, the resource-seeking objective is paramount for such firms. In terms of the efficiency-seeking objective it goes beyond the natural resource pull of countries. MNEs aim to take advantage of diverging factor resource costs across countries. For example, many MNEs may outsource the production of labour-intensive products (or parts of the production process) to low-wage, developing countries to reduce overall production costs. Finally, MNEs might be interested in supplying a market through local production rather than through exports (market-seeking FDI). Obviously, larger and/or fast-growing markets are more attractive for this type of FDI.

It is important to note that the positive (growth) effects of these different forms of FDI in the host country vary considerably, depending on the particular country and the policy environment (Nunnenkamp and Spatz 2004). From a development perspective, developing countries might be better off if they attract efficiency-seeking FDI in the form of full-scale plants with cutting-edge technology and management practices, strong export orientation and substantial integration in the supply chain of the multinational enterprise. Such investments offer higher developmental benefits than FDI in the form of sub-scale plants that produce for

---

<sup>1</sup> See Markusen (2002), Navaretti and Venables (2004), Helpman (2006), and Caves (2007) for extensive literature surveys.

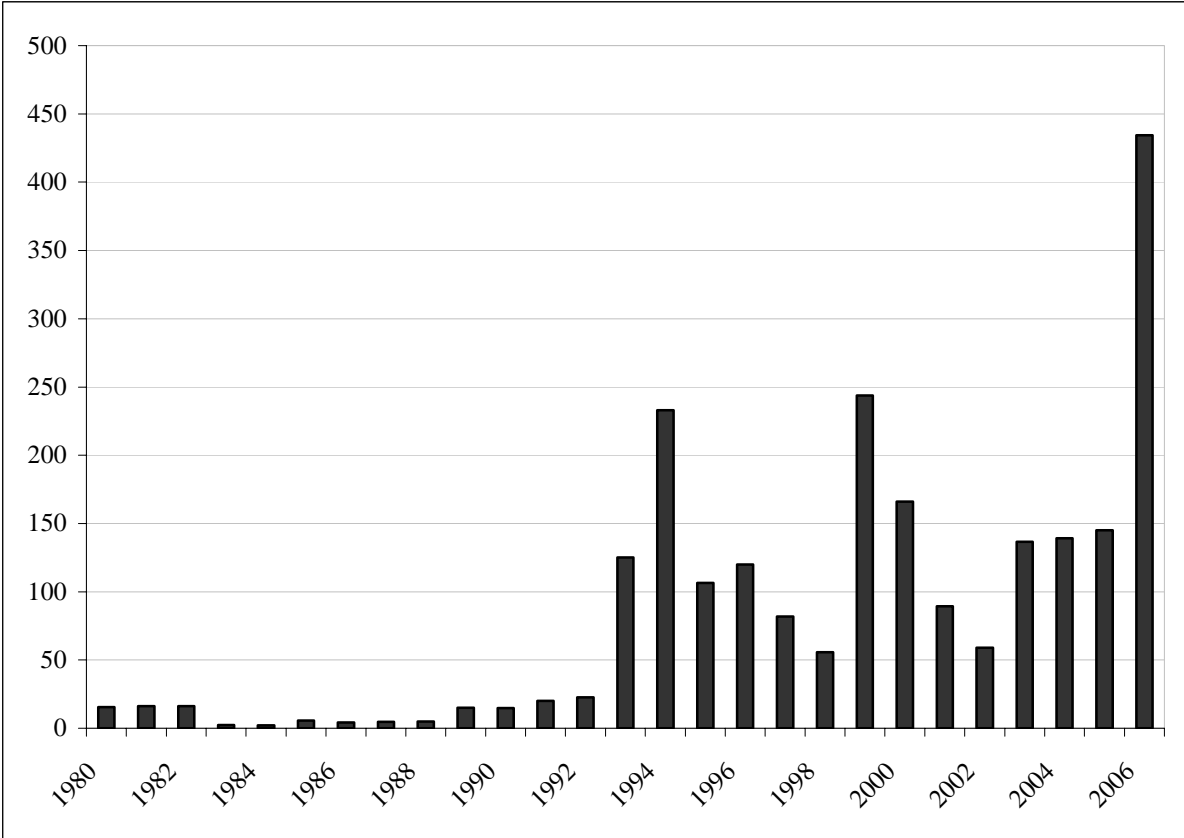
the local market, may not use the latest technology, and are protected from international competition (Moran 2006).

Against this background, this paper aims to examine the characteristics and determinants of FDI for developing countries. Rather than focusing on a large number of host countries, it concentrates on one particular country: Ghana. While large cross-country studies are able to identify the factors that drive FDI and examine their impact across countries, they cannot provide an in-depth analysis. This is the main advantage of a country case study. Ghana's proven track record in implementing political and economic reforms makes it a good choice for such a study. In fact, Ghana was one of the first sub-Saharan African countries to carry out market-friendly economic reform programmes. Beginning with the implementation of the Economic Reform Programme (ERP) in 1983, the adoption of the Mining Code in 1986, the enactment of the Investment Code in 1994, and the Free Zone Act in 1995, Ghana has greatly improved the business environment for foreign (and domestic) investors (UNCTAD 2003). At the time Ghana implemented the Investment Code, this code was viewed as best practice in Africa.

While the reform agenda lost some momentum in the late 1990s, the World Bank (2008a) has recognised Ghana for having implemented significant economic and institutional reforms in recent years. In fact, Ghana belongs to the group of top reformers and continues to increase the efficiency of its public services. On the political level, Ghana introduced a multi-party democratic system in 1992, helping to ensure a key prerequisite for attracting FDI, namely political stability.

Despite liberalising investment rules and improving the business climate, Ghana did not receive as much FDI as the government had expected. Though absolute FDI inflows increased in the 1990s, they started from a very low level in the preceding decade (Figure 1). Between 1993 and 2005, annual FDI inflows fluctuated between US \$50 million and US \$250 million. In 2006, FDI rose to almost US \$450 million. The fluctuations in the level of FDI reflect erratic levels of investment and inflows linked to privatisation.

Figure 1: FDI in Ghana, 1980-2006 (US\$ Million)



Source: UNCTAD (2008).

Most of the foreign investment to Ghana is concentrated in the mining sector. According to estimates by UNCTAD (2008), some 70 percent of total FDI inflows over the last 15 years went to this sector.<sup>2</sup> Outside the mining sector, FDI inflows mainly went to the service sector and light manufacturing (Table 1). FDI in manufacturing is predominantly resource-based, for example in agro-processing. Within the service sector, Ghana has managed to attract significant amounts of foreign capital in telecommunications and banking (UNCTAD 2008). Hence, FDI flows to Ghana predominately consist of resource and market-seeking, rather than efficiency-seeking foreign investment.

---

<sup>2</sup> Since the Ghana Investment Promotion Centre (GIPC) does not record FDI in the mining sector, it is difficult to obtain a full sectoral break down. Moreover, GIPC does not provide records for FDI in the Free Trade Zones.

Table 1: Sectoral Distribution of Foreign Investment in Ghana, Average 1994-2002 (US\$ Million and Percentage)

Sector	Inward FDI (US\$ Million)	Percent of total FDI
Agriculture	204	11.5%
Building and construction	125.9	7.1%
Export trade	15.6	0.9%
General trade	101.3	5.7%
Liaison office	0.1	0.0%
Manufacturing	345.6	19.5%
Service	944.4	53.3%
Tourism	34.2	1.9%
Total	1,771.1	100.0%

Source: UNCTAD (2003). Notes: Figures refer to projects registered by the GIPC only and represent actual transfers as communicated by the Bank of Ghana and the Ghana Customs, Excise and Preventive Services. Investments in Oil and Mining are excluded.

In view of Ghana's particular FDI performance, this paper addresses two main questions: (1) How do domestic and foreign firms operating in Ghana differ from one another, and (2) what are the main reasons why Ghana has not attracted more FDI (in particular, efficiency-seeking FDI) so far? In line with these two questions, the remainder of this paper is structured as follows: In Section 2, we compare and assess the characteristics of domestic and foreign-owned enterprises operating in Ghana. Using the World Bank (2008b) "Ghana Enterprise Survey 2007" data, we perform an econometric analysis to identify the principle factors that explain the differences between domestic and foreign firms. In Section 3, we examine the main determinants of FDI in Ghana using a new survey of 54 firms that are fully or partially foreign-owned. In comparison to the Ghana Enterprise Survey data, the use of this further survey allows a more in-depth analysis of the determinants of FDI. Based on the findings, the paper ends with a summary of the main results and various policy implications in Section 4.

## **2. A Comparison of Domestic and Foreign Firms Operating in Ghana**

The World Bank's (2008b) Enterprise Surveys collect data from key manufacturing and service sectors for more than 100 countries. For Ghana, the World Bank conducted the first

Enterprise Survey in 2007.<sup>3</sup> In that year, 616 firms were surveyed. Roughly half of the surveyed firms (313) belong to the manufacturing sector, while the rest are agricultural and other primary resource firms, construction companies and service sector establishments. This sample characteristic matters, as we will distinguish between manufacturing and non-manufacturing firms in the following analysis. In roughly five percent of all firms (28), foreigners own either part or the entire company.

While the Enterprise Survey contains a wealth of information on the activities and growth constraints of firms operating in Ghana, we are particularly interested in the characteristics of foreign vis-à-vis domestic firms. Accordingly, we retrieved all relevant information that might matter for the distinction between them and include the following variables in the analysis:

- *Employees*, quantifies the number of workers employed by the firm;
- *Formal Training*, represents a formal training programme for the workers of the firm (dummy 0 or 1);
- *Education Manager*, stands for the educational background of the firm's top manager, ranging from 1 (no education) to 11 (postgraduate degree);
- *Experience Manager*, represents the number of years the manager has worked in the sector the firm is operating;
- *Access to Finance*, refers to the ease of access to finance, ranging from 0 (no obstacles) to 4 (very severe obstacles);
- *Bank Credit*, quantifies the proportion of the working capital of the firm that was financed through private or state-owned banks;<sup>4</sup>
- *Value Added per Worker*, measures the productivity per worker employed, computed as total sales minus total costs (excluding labour costs and rental costs for land/buildings, equipment and furniture) divided by the number of employees (in GH¢);<sup>5</sup>
- *Investment*, denotes total investment in percent of total sales;

---

<sup>3</sup> According to the World Bank (2008b), the data retrieved from the 2007 Enterprise Survey are not comparable with earlier firm surveys, e.g., the World Bank Regional Program on Enterprise Development (RPED) 1992 to 1994 survey. Above all, the questions, the approach, and the survey methodology have changed substantially.

<sup>4</sup> While *Access to Finance* provides information on the ease of obtaining credit, it does not give any evidence regarding whether or not the firms used credit from banks to expand their operations. *Bank Credit* fills that gap and, hence, acts as a complement.

<sup>5</sup> We have used different definitions of value added in the analysis, such as total sales minus costs of raw materials and intermediate goods. Yet the results do not change much. We use data for total sales instead of total production, as information for the latter is not available.



- *Market Share*, represents the market share of the firm in Ghana;
- *Exports*, measures the share of direct and indirect exports in percent of total production;
- *Imports*, stands for the share of imported material inputs/supplies in total material inputs/supplies.

The base year for all variables is 2006 (*Exports, Imports, Value Added per Worker, Investment, and Market Share*) or 2007 (all other variables). The means across various subsamples are provided in Table 2. On average, foreign firms are larger, have more formal training programmes for workers, their managers possess a higher educational degree and are slightly more experienced in the sector in which they operate, have easier access to credit (and obtain more credit from private or state-owned banks), are more productive, have higher investment levels, tend to export and import more, and have a higher local market share than domestic firms. For both groups, that is, foreign and domestically-owned firms, the corresponding figures for the manufacturing sector are usually higher than in non-manufacturing sectors, though considerable differences exist, depending on the variable.

Table 2: Descriptive Statistics (Mean) by Subsamples

Variable	All firms	Domestic firms			Foreign firms		
		All	Manu- facturing	Other	All	Manu- facturing	Other
# of firms	616	588	292	296	28	21	7
Employees	27.8	22.4	37.1	7.8	140.9	184.2	11.1
Formal Training	0.3	0.3	0.2	0.3	0.5	0.6	0.3
Education Manager	4.7	4.6	4.4	4.8	7.1	7.6	5.6
Experience Manager	13.4	13.4	16.8	10.0	14.3	14.6	13.6
Access to Finance	2.7	2.7	2.7	2.7	1.6	1.7	1.4
Bank Credit	4.7	3.8	4.2	3.4	23.9	30.4	4.3
Value Added per Worker	9,780	9,190	2,710	15,600	22,200	7,930	65,100
Investment	5.8	5.6	4.2	7.0	9.2	10.9	4.1
Exports	3.5	2.9	5.4	0.4	16.1	21.5	0
Market Share	10.0	9.6	8.5	11.1	18.6	16.2	31.3
Imports	25.7	25.1	21.2	36.7	36.0	40.1	6.7

Source: Own calculations based on World Bank (2008b) data.

While these simple means can provide a first impression of the differences between domestic and foreign-owned firms, they cannot simultaneously take various factors into account which characterise foreign ownership. Thus, we proceed with a multivariate analysis.

In the analysis, we test four main hypotheses regarding the characteristics of foreign firms versus domestic enterprises:

- (1) Foreign-owned firms use their dominant position in the local (Ghanaian) market to crowd out domestic competitors. To test this hypothesis, we use the firm size (*Employees*) and *Market Share*.
- (2) Foreign firms are more productive than their domestic competitors because they offer more training programmes to their workers, employ managers with a better education and more experience, and invest more. For this hypothesis, we use labour productivity as the main indicator (*Value Added per Worker*) along with *Formal Training*, *Education Manager*, *Experience Manager*, and *Investment*.
- (3) Foreign firms have an advantage in comparison to domestic enterprises, as they have easier access to credit. Here, *Access to Finance* and *Bank Credit* are the main variables of interest.
- (4) Foreign firms could be a burden for the current account, because they source a higher percentage of their material inputs and/or supplies from abroad in comparison to domestic enterprises. However, foreign firms might have a higher probability to export their products. Hence, the net impact on the current account is uncertain a priori. We test the hypothesis on the current account using *Exports* and *Imports*.

To compute the likelihood that a firm is foreign-owned, we first use a simple probit model. The dependent variable (*Foreign*), takes the value 1 if a foreign firm owns 0.1 percent or more of the establishment, and 0 otherwise.

Our basic probit model specification reads as follows:

$$\Pr(\text{Foreign} = 1 | x_j) = \psi(\text{Foreign}_i) \quad (1)$$

where  $\psi(\cdot)$  is a cumulative distribution function and  $x_j$  represents the set of explanatory variables introduced in the previous section.<sup>6</sup>

---

<sup>6</sup> For *Employees* and *Value Added per Worker*, we use the natural logarithm to reduce the skewness in the data. In fact, tests on the functional form of the model specification showed that the logarithmic version should be preferred.

We start with the full sample, which includes all firms and sectors reported in column 1 in Table 3. Foreign-owned firms are indeed substantially larger than domestic enterprises. Considering the statistically significant coefficient for *Employees*, on average, a marginal change in the number of workers employed is associated with a 4.5 percent increase in the probability that the firm is entirely or partially owned by foreigners. The results also show that foreign firms are not likely to offer more formal training, do not have more experienced managers, are not more productive, and do not invest or export more than domestic firms. However, *Exports* is only slightly below the 10 percent significance level. On the other hand, managers of foreign firms have a higher educational degree and face less financing problems (and have, thus, better access to credit).

We then add *Market Share* to the set of explanatory variables, as information for this indicator is available for fewer firms (column 2). However, we do not obtain a statistically significant coefficient at conventional threshold levels (10 percent level or better). The outcome for this variable (and all other variables) is quite similar if we focus only on manufacturing firms (columns 3 and 4). Also, foreign firms are not likely to import more material inputs and/or supplies.<sup>7</sup>

---

<sup>7</sup> We add *Imports* only in the manufacturing sub-sample, as there is no import data for non-manufacturing firms that provide information on market shares. In other words, the additional regression for all firms using import data would be identical to the regression reported in column 4.

Table 3: Determinants of Foreign Ownership, Probit Regressions

Variables	All firms		Manufacturing firms	
	(1)	(2)	(3)	(4)
Ln (Employees)	0.0451*** (2.70)	0.0711*** (2.75)	0.068** (1.97)	0.0955* (2.46)
Formal Training	0.0018 (0.12)	-0.0028 (-0.18)	0.007 (0.28)	0.0089 (0.34)
Education Manager	0.0109*** (2.87)	0.0122*** (2.87)	0.0155** (2.24)	0.0191*** (2.95)
Experience Manager	-0.00036 (-0.39)	-0.00087 (-1.03)	-0.0013 (-1.21)	-0.00161 (-1.33)
Access to Finance	-0.0131*** (-2.80)	-0.0146*** (-2.67)	-0.0147* (-1.85)	-0.0183** (-2.08)
Bank Credit	0.00098*** (2.73)	0.00102*** (2.56)	0.0012** (2.45)	0.0183** (2.30)
Ln (Value Added per Worker)	0.0123 (0.92)	0.0188 (1.08)	0.0184 (0.63)	0.0194 (0.67)
Investment	-0.00027 (-0.74)	-0.000215 (-0.50)	-0.00011 (-0.18)	-0.000557 (-0.63)
Exports	0.000595 (1.55)	0.000612 (1.52)	0.00059 (1.33)	0.000443 (0.94)
Market Share		-0.000054 (-0.09)		-0.00112 (-1.54)
Imports				0.00048 (1.37)
Observations	616	494	313	292
Pseudo R <sup>2</sup>	0.36	0.44	0.47	0.49

Notes: (Average) marginal effects are displayed; significance at the 10, 5, and 1 percent level is denoted by \*, \*\*, and \*\*\*, respectively; t-values are reported in parentheses; standard errors are heteroskedasticity-robust; constant term not shown.

Next, we run OLS regressions using the share of foreign ownership as the dependent variable (*shareforeign*), ranging from 0 to 100 per cent. As can be seen in Table 4, the outcome is quite similar to that using the binary dependent variable (*Foreign*). While the significance levels for some variables are a little bit lower, in the case of the educational background of the manager, for example, we obtain for the same set of variables significant coefficients (with the same sign).

Table 4: Determinants of Foreign Ownership, OLS Regressions

Variables	All firms		Manufacturing firms	
	(1)	(2)	(3)	(4)
Ln (Employees)	2.808** (2.54)	4.422*** (2.95)	3.592** (2.40)	4.053** (2.24)
Formal Training	0.262 (0.15)	-0.345 (-0.18)	1.518 (0.52)	2.105 (0.64)
Education Manager	0.979** (2.44)	0.993** (2.23)	1.209 (1.62)	1.265* (1.68)
Experience Manager	-0.00163 (-0.016)	-0.0309 (-0.33)	-0.0681 (-0.55)	-0.0718 (-0.55)
Access to Finance	-1.757*** (-3.04)	-1.888*** (-2.82)	-1.839** (-1.98)	-2.025* (-1.96)
Bank Credit	0.204** (2.10)	0.199* (1.94)	0.310** (2.25)	0.305** (2.21)
Ln (Value Added per Worker)	0.406 (0.66)	0.502 (0.74)	0.271 (0.25)	0.250 (0.23)
Investment	-0.00894 (-0.35)	-0.000672 (-0.022)	0.0129 (0.24)	0.0201 (0.36)
Exports	0.146 (1.35)	0.138 (1.26)	0.112 (1.00)	0.0902 (0.77)
Market Share		0.0377 (0.34)		-0.0939 (-0.68)
Imports				0.0469 (0.92)
Observations	616	494	313	292
R <sup>2</sup>	0.18	0.23	0.28	0.29

Notes: Significance at the 10, 5, and 1 percent level is denoted by \*, \*\*, and \*\*\*, respectively; t-values are reported in parentheses; standard errors are heteroskedasticity-robust; constant term not shown.

In addition to these eight regressions, we run numerous robust checks, such as using the logit rather than the probit model, employing maximum likelihood rather than OLS regressions, excluding outliers, changing the definition of value added per worker, or dropping independent variables that are closely associated with each other (multicollinearity). The outcome, however, does not change much (results not shown).<sup>8</sup> Still, we obtain no robust results for *Exports* and *Value Added per Worker* or for the other variables that are not significant in the regression analysis so far.

Regarding the four main hypotheses, the results can be summarised as follows:

- (1) Once we take their larger firm size (and other firm characteristics) into account, foreign firms are not likely to have a larger market share. Hence, we reject hypothesis 1.

- (2) Foreign firms are not more productive than their domestic competitors, after controlling for firm size and educational background of the management; while they do employ managers with a higher educational degree, they do not offer more formal training or invest more. So we reject hypothesis 2.
- (3) In comparison to domestic firms, foreign enterprises face less credit constraints and are in a better position to finance their expansion; this could – at least partly – explain the larger firm size of foreign firms. We thus find support for hypothesis 3.
- (4) Foreign firms are neither more likely to import nor to export in comparison to domestic enterprises. Hence, foreign firms are neither a burden for the current account nor a drain on foreign exchange, and we reject hypothesis 4.

Our results for productivity and exports are at odds with those obtained by several previous studies, which found that foreign firms are more productive than local (domestic) competitors and export a larger share of their production.<sup>9</sup> In fact, one of the key reasons to produce abroad is the superior productivity and management performance of multinational enterprises. The diverging results of our analysis could – to some degree – be explained by the particular data set we have used. The Ghana Enterprise Survey 2007 provides information only on 28 foreign-owned firms, which could have an impact on the results, as a more comprehensive survey of foreign-owned firms would increase the probability of obtaining representative results (and lower the statistical threshold for getting significant results). For example, the sectoral distribution could differ between foreign and domestic firms, even though both operate, for example, within the manufacturing sector. Given the low number of foreign firms in Ghana, however, any comparison of further sub-samples would not be very fruitful.

Second, the results could be explained by the fact that FDI flows to Ghana predominately consist of resource and market-seeking investment flows. Particularly the latter form of FDI could imply that Ghana attracts foreign investment in the form of takeovers of local firms (e.g., in the service sector) or in agro-processing, food & beverages or light manufacturing. If these acquired companies do not (yet) use the latest technologies in the production process,

---

<sup>8</sup> All results that are not reported in this study can be obtained from the corresponding author upon request.

<sup>9</sup> See, for example, Moss et al. (2005), who compared domestic and foreign firms in Kenya, Uganda, and Tanzania. Caves (2007) provides a survey of the literature.

their productivity levels might be low despite of foreign ownership. Also, market-seeking FDI does not lead to a significant increase in exports. These reasons might at least partly explain why the pro-development effects of FDI in Ghana are still far below the potential.

### **3. A Case Study of the Determinants of FDI in Ghana**

As already mentioned above, foreign firms that locate in a developing country such as Ghana do so with *resource, market, and/or efficiency-seeking* objectives in mind. Factors that act as a pull for firms for which the resource-seeking objective is primary are easy to pin down. For mining, oil exploration and oil production companies, the availability of natural resources are key in terms of the factors that influence the decision of the firm to locate in a given country.

For the second set of objectives, that is *market-seeking* objectives, one may be inclined to argue that it will not be too important for a country such as Ghana. The size of Ghana's market measured by its GDP is small compared to that of neighbouring countries like Nigeria. In 2007, for instance, Ghana's GDP was about US \$15.25 billion, compared to US \$165.69 billion for Nigeria (World Bank 2008c). This suggests that, holding others factors constant, MNEs considering a location in this region should have a preference for Nigeria, where the market is more attractive. However, market potential, although correlated with market size, could be the more relevant factor (see *inter alia* UNCTAD (1996), and Nefussi (2006)). This is particularly important, as other variables remain essential in the decision of a firm to locate in either Ghana or other FDI host countries within the sub-region (see Asiedu (2002)). Also, as argued in Lucas (1993), the importance of market may be overstated when one fails to take into account the export orientation of the host country.

Objectives of the *efficiency-seeking* kind of FDI suggest that MNEs will relocate to a developing country to reduce their production costs. This has become particularly relevant in recent times, when price competition, induced by globalisation, has forced firms to continuously seek cost-reducing measures (Eckel 2003). This variable is normally expected to be particularly important for non-mining MNEs in Ghana.

In addition to these factors, other parameters that reduce the risks generally associated with investments, such as the economic and political environment, have been found to be highly relevant (Asiedu 2002). In this section we attempt to investigate the relative importance of these factors in influencing the decision of firms to locate in Ghana. In other words, we try to answer the question of whether market-seeking or efficiency-seeking investments are predominant in Ghana. The answer to this question has important implications regarding whether the pro-development benefits of foreign investments in Ghana are being maximised. We make use of a firm-level survey of 54 foreign owned firms undertaken in 2008. In addition, we discuss how the country can maximise the benefits of FDI.

The 54 interviewed foreign firms are from 17 countries. Generally, the firms in this sample can be considered large, with an average of 557 employees (or 375 without the four mining firms in the sample). About 55 percent of these firms have employees ranging from 50 to 500, whilst about 26 percent have more than 500 employees. The majority of the firms interviewed are from Europe, with Germany topping the list with 13 firms. Germany is followed by the Netherlands with nine, and the UK and France with seven and five, respectively. There are a total of six North American firms (four and two from the US and Canada, respectively). The only African country which features in the sample is South Africa, with three firms.<sup>10</sup> Of the firms in the sample, twelve percent are in agriculture, twelve percent in food and beverages and another twelve percent in retail sales. There are also nine percent each in agro-processing and other manufacturing, seven percent in financial services and six percent each in IT, mining and other services. This compared quite well with the general sectoral breakdown of FDI flows to Ghana.

#### *Factors that Determine FDI to Ghana*

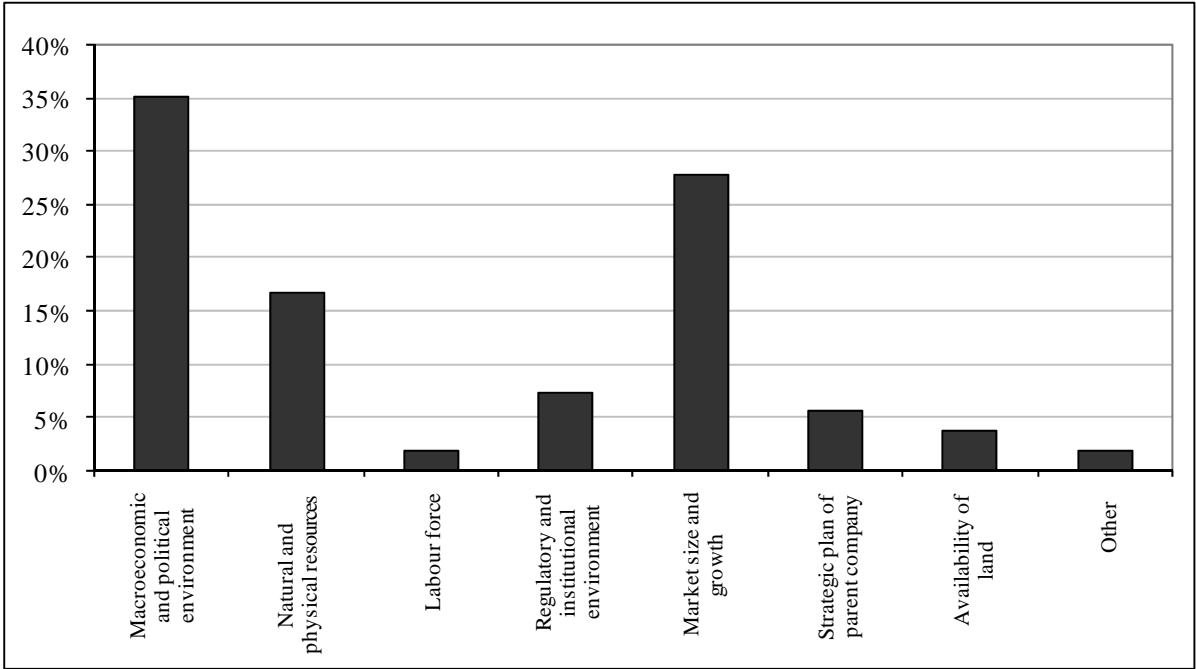
According to the data, the most important factor influencing the choice of Ghana as an investment destination is the macroeconomic and political environment (Figure 2). Nineteen of the 54 foreign firms interviewed in Ghana said the macroeconomic and political environment was the most important reason for a foreign firm to invest in Ghana.

---

<sup>10</sup> Although the sample is not random, the distribution across countries of origin is fairly consistent with the general distribution of FDI by geographic origin.



Figure 2: Most Important Factors Influencing Firms’ Decision to Invest in Ghana (Full Sample)



Source: Company Survey (2008).

This finding is consistent with that of Ahlquist (2006), who finds that FDI inflows tend to increase under more stable and democratic governments. Of the three key variables discussed (*resource, market, and efficiency-seeking* factors), the *market-seeking* factor seems to be the most important. About 28 percent of the firms identified this as the most important variable among a list of variables that included macroeconomic and political environment.<sup>11</sup> This supports the results by Nunnenkamp and Spatz (2002), who find that market-related determinants are still the dominant factors shaping the distribution of FDI to developing countries. The next most significant factor are a country’s natural and physical resources. Not surprisingly, this factor is the most important for the mining companies.

When firms were asked to pick the three most important macroeconomic and political factors influencing investments today, political stability constituted about 33 percent of the responses (Table 5). This was followed by the economic growth performance (20.1 percent), exchange rate regime (16.5 percent) and inflation (12.2 percent), in that order. A factor such as the access to and cost of credit came up only about ten percent of the time. This is consistent with the result from Section 2, where we find that foreign firms have better access to credit

compared to local firms. As expected, smaller (foreign) firms cite access to and cost of credit as an important factor, which influence investment decisions more often than larger (foreign) firms.

Table 5: Factors Determining FDI in Ghana (By Size of the Firm)

		50 or less employees	51 to 500 employees	More than 500 employees	Full sample
Macroeconomic and Political Stability	Political stability	36.0%	32.9%	31.4%	33.1%
	Growth performance	16.0%	24.7%	14.3%	20.1%
	Exchange rate regime	16.0%	17.8%	17.1%	16.5%
	Inflation	8.0%	13.7%	14.3%	12.2%
	Access to and cost of credit	16.0%	8.2%	8.6%	10.1%
Natural and Physical Resources	Road/transport networks	21.4%	20.3%	20.6%	20.7%
	Reliability of water and energy supply	17.9%	17.4%	23.5%	18.6%
	ICT infrastructure	28.6%	14.5%	17.6%	17.9%
	Availability of land	10.7%	15.9%	20.6%	16.4%
	Availability of natural raw materials	3.6%	17.4%	11.8%	13.6%
Regulatory and Institutional Environment	Investment incentives	11.5%	18.9%	16.7%	16.0%
	Protection of investors	23.1%	14.9%	13.9%	16.0%
	Trade regulation and strategy	15.4%	10.8%	22.2%	14.6%
Market Potential	Potential for markets to expand/grow	43.8%	38.5%	47.4%	41.9%
	Size of the market	6.3%	21.2%	21.1%	18.3%
	Export base for neighbouring markets	25.0%	15.4%	10.5%	15.1%
	Availability of preferential market access/reduced custom	12.5%	15.4%	15.8%	14.0%

Source: Company Survey (2008); Notes: The proportions are based on responses and not the respondents. Respondents were asked to select at most three factors.

In the case of the regulatory and institutional environment, protection of investors and investment incentives, as well as trade regulation and strategy, are the most important variables. The issue of protection of investors is especially important for firms with 25 percent or less foreign ownership.<sup>12</sup> The higher the foreign ownership of a firm, the less concern it

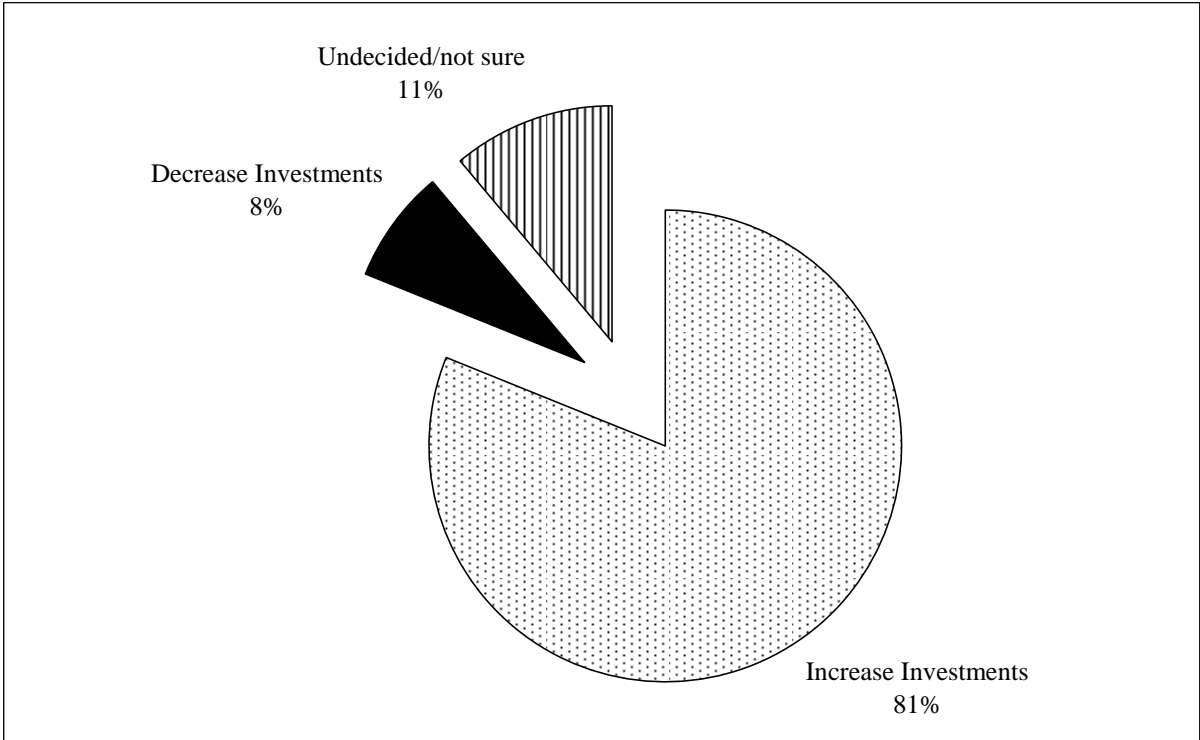
<sup>11</sup> MNEs were asked to pick only one variable from among the set of variables presented to them – i.e. the most important one.

<sup>12</sup> Disaggregated results for further subcategories not shown. Again, the detailed results from the company survey can be obtained from the authors.

has about getting protection from the host state (Ghana). This is consistent with the common view that large MNEs are ‘well connected’ in Ghana. Likewise, the investment incentives variable is the most important variable for firms with between 51 and 75 percent foreign ownership. Firms see the potential for growth of the Ghanaian market as the most important variable regarding the extent to which the market acts as a pull for foreign investments. Almost 42 percent of the respondents mentioned this as the most important market potential factor.

Firms were asked what their investment plans were for the medium term. The majority of the firms (about 81 percent) said they will increase their investments over the next three to five years (Figure 3). However, eight percent of the firms said they will decrease their investments over the period. A further eleven percent of the firms said they were unsure about which direction their investments will go over the next three to five years.

Figure 3: Firms’ Investment Decision over the next Three to Five Years (Full Sample)



Source: Company Survey (2008).

The macroeconomic and political environment remains the main reason why firms will expand their investments in the next three to five years. Other factors, such as the market size,

natural and physical resources, and the regulatory environment all remain important in positively influencing inward investments.

These results suggest that the market-seeking objective is an important one for foreign firms currently operating in Ghana. This factor, coupled with the fact that Ghana’s market is relatively small, may explain why the level of non-mining FDI in Ghana remains low in spite of the significant improvement in the macroeconomic and political environment.

### *Constraints to Maximising FDI in Ghana*

Given the relatively small size of Ghana’s market, it is not surprising that it does not attract significantly more non-mining FDI. Assuming that the market potential situation will not change significantly in the short to medium term, the country must look to attract more of the ‘efficiency-seeking’ type of FDI. How can it do this? We try to answer this question, among others, by looking at some of the major constraints faced by foreign firms in Ghana today.

Table 6: Most Difficult Obstacles Facing Firms (By Size of the Firm)

	50 or less employees	51 to 500 employees	More than 500 employees	Full sample
Access to land	22%	71%	69%	62%
Registering property	11%	54%	23%	38%
Dealing with licenses	44%	32%	23%	32%
Employing workers	33%	25%	46%	32%
Getting credit	22%	32%	23%	28%
Enforcing contracts	22%	29%	15%	24%
Starting a business	22%	14%	23%	18%
Paying taxes	44%	14%	8%	18%
Trading across borders	22%	11%	23%	16%
Protecting investors	11%	11%	0%	8%
Closing a business	0%	4%	0%	2%
Power	0%	0%	8%	2%
Past record of existing mining activity	0%	0%	8%	2%

Source: Company Survey (2008). Percentages are based on respondents.

We note that the most significant challenge facing foreign investors in Ghana today is access to land – about 62 percent of the firms said this is a problem (Table 6). This result holds regardless of the size of the firm. Other factors that also came up, albeit less strongly, include registering property (38 percent), dealing with licences (32 percent) employing workers (32

percent) and getting credit (28 percent). It is important to note that apart from three additional variables (*access to land, power and past record of other mining companies*), the variables are the same as those used in the *Doing Business Report* produced by the World Bank. In the 2008 *Doing Business Report*, it is noted that the areas where Ghana made significant improvements over the 2007-2008 period included registering property, getting credit, starting a business, trading across borders and enforcing contracts (World Bank 2008a). However, MNEs mention two of these areas (registering property and getting credit) as still being problematic. This suggests that while some progress has been made, a lot more needs to be done to attract more of the efficiency-seeking type of FDI.

Table 7: Most Important Concerns Relating to the Labour Force

	50 or less employees	51 to 500 employees	More than 500 employees	Full sample
Quality/productivity of labour	47.4%	33.3%	36.0%	36.5%
Availability of skilled labour	21.1%	29.6%	28.0%	26.9%
Cost of labour	5.3%	20.4%	24.0%	19.2%
Reliability of labour	26.3%	16.7%	4.0%	15.4%

Source: Company Survey (2008).

Foreign firms operating in Ghana raise two main concerns in relation to the labour force: workers generally have low productivity and are not adequately trained. Also problematic, particularly for the smaller MNEs, is the reliability of labour (Table 7). Clearly this is one area that will put off the efficiency-seeking firms. In other words, one of the key aims of an efficiency-seeking MNE in relocating to a developing country such as Ghana is to take advantage of cheaper labour. However, the results suggest that Ghana may not yet be attractive for these types of MNEs from the labour market perspective.

#### 4. Summary and Policy Implications

Foreign investment can make a valuable contribution to development. However, not all types of FDI provide the same benefits. In terms of absolute investment levels, the vast majority of FDI in Ghana is concentrated in the mining industry. While this sector provides additional jobs and foreign exchange through increased exports as well as royalties and taxes, extensive technology spillovers are less likely to occur. In contrast, Ghana has not received much

efficiency-seeking FDI in manufacturing and assembly sectors, which, on average, offer higher positive growth effects in the long run.

But how exactly can a country like Ghana attract more efficiency-seeking FDI? Among the most important reasons for not receiving more FDI, we identified access to land, property registration and the labour market (regulations, availability of skilled labour, labour productivity). Factors such as credit seem to be less problematic for foreign investors, particularly the larger MNEs. With respect to FDI to the non-mining sector, political stability has been key to attracting and sustaining investment to Ghana. Outside of the mining sector, the next most attractive sector for FDI in Ghana is the food and beverages sector.

Based on these key results of the study, we are able to draw some broad policy implications, which would enable Ghana to attract more (efficiency-seeking) FDI and enhance the pro-development impact of foreign investment at the same time. To pull in more FDI, Ghana needs to speed up reforms in land administration and property registration. Currently, these impose additional costs on foreign firms. Above all, this is important for smaller firms, which are unlikely to know important personalities to help them in securing their land and property.

Also, it is important that the GIPC works more closely with the labour unions in Ghana as well as the labour commission, to make the labour market more business friendly. The labour market is an important determinant of FDI, as most of these foreign firms are likely to be operating in the tradable sector. Within the context of current trends in the world economy, it is important that firms harness competitive advantage from all areas of their operation. This is not to say that foreign firms should be allowed to exploit workers. However, it is important that the labour unions see themselves as partners in the bid to attract and maximise the pro-development benefits of foreign investments to Ghana. In a similar vein, the labour commission must be seen and equipped to decisively deal with conflicts that may arise between the labour unions and firms.

Within the manufacturing sector, it could be useful to focus on a few sectors for attracting FDI rather than to attempt to get FDI from a large number of heterogeneous industries. This approach could partly increase growth and employment effects through clusters, i.e., through positive externalities of a group of firms within the same industry. Possible sectors for this FDI promotion strategy could be, for example, agro-processing, food and beverages, and light manufacturing. In the first two sectors, Ghana could take advantage of its natural comparative

advantage for a number of agricultural products and increase the total value added of the entire production process. Within the light manufacturing sector, enhanced MNE production of, for example, wood products could offer sizeable gains, as it would make use of both scale economies and MNE knowledge of foreign markets and consumer preferences. Indeed, whatever sectors the FDI strategy focuses on should be consistent with the current seven-year Development Plan being prepared by the National Development Planning Commission (NDPC 2006).

In order for Ghana to benefit more from the presence of international investors by means of technological spillovers, the linkages between Ghanaian suppliers and MNEs need to be strengthened. Currently, Ghanaian industrial capabilities are inadequate with respect to offering more of the high-quality products MNEs would like to source domestically. They also lack the capacity to benefit from technological spillovers. It could be useful to develop a national technology strategy that focuses on key sectors for development and involves all parties concerned with science and technology. The main advantage of such a programme is that it could raise the awareness of the value of technological knowledge by, for example, beginning with an analysis of current strengths and weaknesses, identifying priority sectors and setting up an action plan which both mobilises resources and enhances commitment by stakeholders.

Despite recent improvements in secondary school enrolment ratios and – in comparison to other sub-Saharan African countries – the prevalence of relatively high literacy rates, there is a shortage of adequately skilled workers. This applies in particular to technical and managerial skills. As a consequence, Ghanaian firms cannot take advantage of the spillovers as much as would be possible. The key actors should make the education sector more functional and meet the needs of firms. Foreign firms continue to complain about workers' productivity levels, as well as the shortage of skilled work in Ghana. The starting point to solving this problem is to understand which types of foreign investors the country wishes to attract and the manpower needs of these investors. Armed with this information, the educational sector should then begin to work to ensure that the country has the right cadre of workers to meet the demands of foreign firms.

To conclude, Ghana has great potential to attract more FDI and to use foreign investment to better promote development. With a wealth of natural resources, relative political stability and

an excellent geographic position, ensuring access to markets in Europe and the sub-region, Ghana is a suitable place for foreign investors. However, policy makers should continue, and reinforce, the reform agenda.

## References

- Ahlquist, J.S. (2006), Economic Policy, Institutions, and Capital Flows: Portfolio and Direct Investment Flows in Developing Countries, *International Studies Quarterly*, Vol. 50, pp. 687-710.
- Asiedu, E. (2002), On the Determinants of Foreign Direct Investment to Developing Countries: Is Africa Different?, Vol. 30, No. 1, pp. 107-119.
- Caves, R. (2007), *Multinational Enterprises and Economic Analysis*, 3<sup>rd</sup> Edition, Cambridge, UK: Cambridge University Press.
- Eckel, C., (2003), Fragmentation, Efficiency-seeking FDI, and Employment', *Review of International Economics*, Vol. 11, No. 2, pp. 317-331.
- Helpman, E. (2006), Trade, FDI, and the Organization of the Firms, *Journal of Economic Literature*, Vol. 44, No. 3, pp. 589-630.
- Lucas, R. (1996), On the Determinants of Direct Foreign Investment: Evidence from East and South East Asia, *World Development*, Vol. 21, No. 3, pp. 391- 406.
- Markusen, J. (2002), *Multinational Firms and the Theory of International Trade*, Cambridge, MA: MIT Press.
- Moran, T. (2006), *Harnessing Foreign Direct Investment for Development: Policies for Developed and Developing Countries*, Washington, DC: Centre for Global Development.
- Moss, T., V. Ramachandran and M.K. Shah (2005), Is Africa's Scepticism of Foreign Capital Justified? Evidence from East African Firm Survey Data, in T. Moran, E. Graham, and M. Blomström (eds.), *Does Foreign Direct Investment Promote Development?* Washington D.C.: Institute for International Economics and Center for Global Development, pp. 337-366.
- Navaretti, G. and A. Venables (2004), *Multinational Firms in the World Economy*, Princeton, NJ: Princeton University Press.
- National Development Planning Commission, (2006), Implementation of the Ghana Poverty Reduction Strategy, 2003 – 2005: 2005 Annual Progress Report, Accra.
- Nefussi, B. (2006), Exports Versus FDI with Market Potential: Evidence from France, [http://www.ces.census.gov/docs/caed/abstracts/abs\\_107\\_Nefussi\\_Benjamin.pdf](http://www.ces.census.gov/docs/caed/abstracts/abs_107_Nefussi_Benjamin.pdf)
- Nunnenkamp P. and J. Spatz (2002), Determinants of FDI in Developing Countries: Has Globalisation Changed the Rules of the Game?, *Transnational Corporations*, Vol. 11, No. 2, pp. 1–34.



- Nunnenkamp P and J. Spatz (2004), FDI and Economic Growth in Developing Economies: How Relevant are Host-economy and Industry Characteristics?, *Transnational Corporations*, Vol. 13, No. 3, pp. 54-86.
- UNCTAD (1996), *World Investment Report, Transnational Corporations and Competitiveness*, Vol. 5 – Africa, Geneva: United Nations.
- UNCTAD (2003), *Investment Policy Review Ghana*, New York and Geneva: United Nations.
- UNCTAD (2008), Foreign Direct Investment Database (online), Internet Posting: <http://www.unctad.org/Templates/Page.asp?intItemID=1923&lang=1>.
- World Bank (2007), *Ghana: Meeting the Challenge of Accelerated and Shared Growth, Country Economic Memorandum, Vol. II: Background Papers*, Washington, DC: World Bank.
- World Bank (2008a), *Doing Business 2008 Ghana*, Washington, DC: World Bank.
- World Bank (2008b), Ghana Investment Climate Assessment 2007, Internet Posting: <http://www.enterprisesurveys.org/Portal/>.
- World Bank (2008c), World Development Indicators, Online Database.

## HWWI Research Papers

by the HWWI Research Programme „World Economy“

13. Liquidity Constraints and Linkages with Multinationals  
Mariana Spatareanu, Beata S. Javorcik  
Hamburg, November 2008
13. Zur Internationalisierung des Dienstleistungssektors  
Georg Koopmann, Thomas Straubhaar  
Hamburg, Mai 2008
12. Taxation, Corruption and the Exchange Rate Regime  
Carsten Hefeker  
Hamburg, März 2008
11. Determinants of Corruption in Developing Countries  
Mumtaz Anwar, Ghulam Shabbir  
Hamburg, November 2007
10. Teacher Shortages, Teacher Contracts and their Impact on Education in Africa  
Jean Bourdon, Markus Frölich, Katharina Michaelowa  
Hamburg, May 2007
9. Technology trade in economic development  
Matthias Busse, José Luis Groizard  
Hamburg, March 2007
8. Consequences of Economic Partnership Agreements between East and Southern African countries and the EU for inter- and intra-regional integration  
Axel Borrmann, Matthias Busse, Manuel de la Rocha  
Hamburg, January 2007
7. Does Africa really benefit from trade?  
Matthias Busse, José Luis Groizard  
Hamburg, January 2007
6. Learning by doing in market reform: lessons from a regional bond fund  
Guonan Ma, Eli M. Remolona  
Hamburg, October 2006
5. Institutional and Structural Problems of China's Foreign Exchange Market and the RMB's Role in East Asia  
Zhang Jikang, Liang Yuanyuan  
Hamburg, October 2006
4. The ASEAN Economic Community and the European Experience  
Michael G. Plummer, Reid W. Click  
Hamburg, September 2006
3. The institutional challenge of the ACP/EU Economic Partnership Agreements  
Axel Borrmann, Matthias Busse  
Hamburg, July 2006
2. Steuern und Steuerpolitik in Entwicklungsländern: Die Eigenverantwortlichkeit der Regierungen  
Karl-Wolfgang Menck, Leif Mutén  
Hamburg, April 2006
1. Capital Markets and Exchange Rate Stabilization in East Asia – Diversifying Risk Based on Currency Baskets  
Gunther Schnabl  
Hamburg, March 2006

The **Hamburg Institute of International Economics (HWWI)** is an independent economic research institute, based on a non-profit public-private partnership, which was founded in 2005. The University of Hamburg and the Hamburg Chamber of Commerce are shareholders in the Institute .

The HWWI's main goals are to:

- Promote economic sciences in research and teaching;
- Conduct high-quality economic research;
- Transfer and disseminate economic knowledge to policy makers, stakeholders and the general public.

The HWWI carries out interdisciplinary research activities in the context of the following research programmes: Economic Trends, Hamburg and Regional Development, World Economy and Migration Research Group.

Hamburg Institute of International Economics (HWWI)

Heimhuder Str. 71 | 20148 Hamburg | Germany

Tel +49 (0)40 34 05 76 - 0 | Fax +49 (0)40 34 05 76 - 776

[info@hwwi.org](mailto:info@hwwi.org) | [www.hwwi.org](http://www.hwwi.org)