# Foreign Direct Investment and Fundamental Workers' Rights



#### INTRODUCTION

PERHAPS THE MOST VISIBLE CONSE-OUENCE OF THE GLOBALISATION OF INTERNATIONAL MARKETS SEEN IN THE LAST FEW DECADES IS THE ENORMOUS INCREASE IN FOREIGN DIRECT INVEST-MENT (FDI). For example, the average annual growth rate of FDI was 25 percent between 1986 and 2001 (UNCTAD 2002). It increased much faster than other economic aggregates like world production (7 percent) or trade (9 percent). Most international investments take place within the Quad – Japan, the European Union (EU), the United States, and Canada. In the 1995-2001 period, they accounted for a good three-quarters of global FDI inflows and 87 percent of outflows.

For this reason, FDI flows to developing and emerging market countries are relatively small in absolute terms. In the 1995-2001 period, the 49 least-developed countries' attracted less than 1 percent of FDI inflows, which amounted to an annual average of just USD 3.2 billion. Yet a different picture emerges if the shares of FDI flows of host-country gross domestic product (GDP) are considered. Whereas the ratio of FDI inflows to GDP in the least-developed countries was as low as 0.2 percent in the 1980-1985 period, it increased to 2.3 percent in the 1995-2001 period (world average: 1.9 percent), suggesting an increase in the relevance of FDI to these countries (UNCTAD 2002).

The economic benefits of increasing FDI inflows, in particular in developing countries, are well known in the literature: FDI will, in most cases, augment the capital stock of the host country, introduce new technologies, increase competition within key sectors of the economy, and benefit local workers through more and better paid jobs.<sup>2</sup> While FDI itself appears to have beneficial effects, the intensifying global competition among governments to attract FDI could have unwelcome consequences. More specific concerns have been raised that not only will there be pressure on environmental standards or the creation of costly tax breaks and other financial incentives, which can harm countries which are already financially weak, but also a lowering of workers' rights, effects which have been labelled "social dumping". Related to that issue is the widespread concern that there might be a "race to the bottom' on (fundamental) workers" rights (Addo 2002).

Evidently, the level of workers' rights, which may also be referred to as labour

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standards, varies across countries, depending on cultural, political, and social preferences and conditions, as well as real-income levels (Brown et al. 1998). For the purpose of analysing the effects on FDI and for more clarity, the distinction between "core" and other labour standards is crucial. Core (or fundamental) labour standards focus on important human rights and include: (I) freedom from forced labour, in the form of compulsory labour and slavery; (2) the abolition of exploitative forms of child labour that put the safety and health of children at significant risk; (3) equal opportunity in employment, that is, the right to equal treatment for all workers; and (4) fundamental union rights like the freedom of association and collective bargaining, i.e. rights of workers to organise themselves and to negotiate their working conditions freely with their employers (OECD 1996; ILO 2002b).

Other standards like health and safety standards in the workplace, annual leave with pay, or minimum wages are related to actual working and labour market conditions. These other labour standards, occasionally called "acceptable conditions of work", are highly controversial, whereas core labour standards are more or less universally accepted. The conventions of the International Labour Organisation (ILO) on core labour standards have come closest to a set of standards that most countries can agree on. So far, the ILO has adopted eight conventions on core labour standards, two each on forced labour, child labour, equal opportunity in employment, and union rights (ILO 2002b).

Against this background, this article seeks to shed light on the interaction between labour standards and decisions made by transnational corporations (TNCs) on where to invest abroad. It concentrates on the question of whether countries could derive a competitive advantage from low labour standards, and thereby influence FDI flows. In view of that, this article is structured as follows: Section 2 reviews previous empirical work, while the underlying theoretical aspects, that is, important channels through which labour standards can influence FDI flows, are discussed in Section 3. The results of empirical tests concerning the influence of labour standards on FDI flows are reported on in Section 4. The article ends with a summary of the main results and some policy implications in Section 5.

## Previous Studies of Foreign Direct Investment and Labour Standards

CONSIDERING THE INTENSIVE INTER-NATIONAL DISCUSSION, IT IS SURPRISING THAT SO FEW STUDIES HAVE ADDRESSED THE LINK BETWEEN LABOUR STANDARDS AND FDI. Empirical studies in the literature have concentrated more on the effects of labour costs and social and political stability on FDI.<sup>3</sup> To date, three studies have examined the linkage between labour standards and FDI.

The first study was carried out by the OECD<sup>4</sup> (1996), which focused on the relationship between fundamental union rights, such as collective bargaining rights and the freedom of association, and FDI flows. The authors of that study compiled an index for fundamental union rights, ranging from 1 to 4, based on ILO and international trade union information for 76 OECD and non-OECD countries. Each country was assigned an overall score, where I represented the weakest and 4 the strongest union rights. In the analysis of the data, they first relied on a simple chart in relating fundamental union rights and FDI flows and, in an

update of the first paper (OECD 2000), also calculated a partial correlation. Both the chart and the correlation coefficient (0.20) indicate a positive but weak link between union rights and FDI flows.

Rodrik (1996) regressed several indicators for labour standards on the value of investment by majority-owned United States' affiliates abroad as a fraction of the stock of such investment. In the benchmark regression, which consisted of 40 countries for the 1982-1989 period, he used control variables like the blackmarket premium for foreign currency as a proxy for government policy distortions, population, and income growth in the host country. He then added several indicators for core and other labour standards, such as the Freedom House' indicator as a measure of democracy, the incidence of child labour, and the number of ILO conventions ratified. The indicators for child labour and democracy are statistically significant, and the coefficients imply that countries with weaker democratic rights and more child labour attract less United States' capital than democracies that protect child workers. He concluded that there is little evidence that low-standard countries provide a haven for foreign investors.

Cooke and Noble (1998), on the other hand, concentrated on the relationship between the number of ILO conventions ratified by each country and United States' FDI abroad in 33 industrialised and developing countries. They did not focus on the eight core ILO labour standards conventions, but included all ILO conventions. Nor did they incorporate any indicator to measure de facto compliance with, rather than de jure ratification, of ILO conventions. They found a positive and statistically significant relationship between the total number of ratified conventions and United States' FDI, which implies that United States' companies favour countries with a stronger record of ratifications of ILO conventions as an investment location.

#### The Determinants of Foreign Direct Investment

A COMMON STARTING POINT FOR DIS-CUSSING THE RELEVANCE OF LABOUR STANDARDS TO INVESTMENT DECISIONS BY TNCs would be to develop a stan-DARD THEORETICAL MODEL, INTEGRATE THE ECONOMIC EFFECTS OF LABOUR STAN-DARDS AND THEN ANALYSE THEM. Unfortunately, no such model exists. Over the last four decades, there have been many efforts to explain the underlying reasons why TNCs realise investment abroad.6 Researchers have analysed the internal characteristics of TNCs and singled out particular management skills, innovative product technologies, and economies of scale as determinants of both FDI and trade. Another branch of research identified the market structure, such as the dynamics of oligopoly, as an import factor for explaining FDI or came up with market size, political and economic stability, infrastructure, labour costs, exchange rate risks etc. as additional determinants.

While we have to keep in mind that this lack of theoretical agreement on the factors of FDI may severely affect any empirical analysis, there are two important channels through which labour standards can influence investment decisions by TNCs. Obviously, weaker labour standards could lead to lower labour costs. Forced labour or child labour will increase the (unskilled) labour force and, depending on the labour market conditions, could translate into lower wages. In addition, without the freedom of association and collective bargaining rights, employees will lose bargaining power in negotiating wages and working conditions. At Foreign Direct Investment and Fundamental Workers' Rights given levels of productivity, labour costs could be the first link between labour standards and FDI and, in this sense, potentially an important factor in TNCs' decisions on where to invest. The relevance of labour costs would increase with the labour-intensity of the production process.

In a more dynamic view, labour standards could influence growth rates of income levels. There is empirical evidence that, for instance, gender inequality in education and employment harms economic growth. According to Klasen (1999), this result is due to a "selection distortion factor" and, consequently, lower human capital levels. His results indicate that diverging growth rates in developing countries can be explained to a large extent by the discrimination against females in education and employment.

An increase in the use of child labour can also be detrimental to higher growth rates since it is likely that future generations of workers are less skilled and hence less productive. While this view is widely accepted in the literature (an overview by Brown et al. 2001), the empirical evidence can be contradictory on this point. There are studies that suggest a different outcome. For instance, Patrinos and Psacharopoulos (1997) report that child labour in Peru ensures the enrolment in school of children from some families. A few hours of work a day and schooling also appeared to be complementary rather than mutually exclusive. Nevertheless, the evidence for a large number of countries suggests that child labour reduces productivity and therefore long-term growth rates (Brown et al. 2001).

Basic trade union rights like collective bargaining and the freedom of association, by contrast, have ambiguous effects on productivity and growth rates. The outcome depends on the intentions and motives of trade unions and can be summarised in three points.<sup>7</sup> First, unions are able to protect basic workers' rights and ensure that their members are not exploited. Stronger fundamental union rights can then be associated with a similar outcome to the above mentioned labour standards, that is, a rise in productivity and growth rates.

Second, unions might introduce additional distortions in the labour market. If certain employees are better organised than others, they gain bargaining power and may be able to raise their wages above market levels. Since firms are likely to hire fewer employees at higher wage rates, this policy option would exclude other workers from joining the firm and might lead to a fall in the total number of employees and reduce economic efficiency.<sup>8</sup>

This in turn may have two effects: the average productivity of the remaining workers is likely to rise as employees with lower output per hour — in comparison to the higher wage rates — are forced to leave and unemployment will rise. On the other hand, distortions in the labour market will cause the economy as a whole to be productively inefficient. Higher unemployment implies an inefficient allocation of resources, below the production possibilities of the economy and may, hence, reduce average productivity and growth rates.<sup>9</sup>

And third, due to the activities of labour unions workers may be more motivated and hence productive (OECD 1996). Union activity may lead to a better relationship between workers and employers or, in general, to a more favourable social climate and political stability. In turn, this may result in enhanced productivity in the economy. Depending on the relative importance and size of these three effects, growth rates could either rise or fall due to fundamental union rights.

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Summing up the second link between labour standards and FDI, apart from wage premium effects due to union activities, higher labour standards are likely to enhance productivity and growth rates, which then attract FDI because of a growing market potential. That the growth rate of a particular market is a highly important host-country determinant of FDI is strengthened by results of surveys of senior executives of TNCs (UNCTAD 1998). Both market size and market growth are the two top location criteria for FDI abroad. Other empirical research points to the same result. In a survey on the available empirical evidence, Chakrabarti (2001) reports that all existing studies underline the strong explanatory power of market size of the host country, measured by GDP per capita, in its FDI inflows. Likewise, most studies also confirm that growth rates of GDP per capita are an important determinant of FDI flows.10

Given that both links between labour standards and FDI, lower labour costs and productivity gains, have opposite effects on FDI flows, it would be interesting to determine which effect dominates. Obviously, the answer depends not only on each country under consideration but also on the form of FDI. In general, there are two different types of FDI: vertical and horizontal investment abroad. Vertical FDI takes place when a TNC divides the production process up internationally by locating each stage of production in the place or country where it can be performed at lowest cost (Bjorvatn et al. 2001). Foreign affiliates of TNCs in developing countries typically produce labourintensive intermediate products that are shipped back to high-wage countries. This type of investment is called "efficiency-seeking" FDI since the main motive for the investment is to improve the cost effectiveness of the firm's production. As lower labour standards can

reduce labour costs, vertical FDI can be expected to be negatively associated with the level of labour standards.

Horizontal FDI occurs when TNCs produce the same product in several plants and service local markets through affiliate production rather than through exports from the home country of the TNC. Horizontal FDI, sometimes called "market-seeking" FDI, is overwhelmingly directed to high-income countries since market size or potential are important determinants of this type of FDI. Since labour standards are both expected to increase productivity and growth rates and are by and large guaranteed in the law and practice of high-income OECD countries, horizontal FDI is likely to be positively associated with the level of labour standards.

#### DATA AND EMPIRICAL RESULTS

In view of the fact that the defi-NITIONS AND SCOPE OF BOTH FDI AND INDICATORS FOR LABOUR STANDARDS CAN VARY SUBSTANTIALLY, IT SEEMS APPROPRI-ATE TO DESCRIBE IN DETAIL THE DATA AND VARIABLES USED IN THE REGRES-SIONS. FDI data is taken from the World Development Indicators of the World Bank (2001), which is itself based on balance of payments statistics reported by the International Monetary Fund (IMF), supplemented by data on net foreign direct investment reported by the OECD and official national sources. According to the IMF's definition, FDI is net inflows of investment to acquire a lasting management interest (10 percent or more of voting stock) in an enterprise operating in an economy other than that of the investor. It is the sum of equity capital, reinvestment of earnings, other longterm capital, and short-term capital as shown in the balance of payments.

Foreign Direct Investment and Fundamental Workers' Rights Given that FDI flows for a single country can vary considerably from year to year, a period of five years from 1995-1999 has been chosen. The data used are average annual net FDI inflows *per capita* in the reporting economy for that period in current US dollars (the variable is labelled FDI). For the benchmark ordinary least squares regression of the FDI model, only market size (GDP), measured by average GDP *per capita* in current US dollars, and market growth (GROWTH), quantified as average GDP *per capita* growth, each for the period 1995-1999, are included."

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> Unfortunately, labour costs could not be added to the regressions due to data deficiencies. Comparable information about labour costs for a large number of countries is usually only available for manufacturing. The share of manufacturing in FDI flows and stocks, however, has declined over the last few decades. Whereas the secondary sector accounted for 42 percent of world FDI inward stocks in 1999, the share for services was 50 percent (UNCTAD 2001:66). Labour costs in the service sector in turn are not available on a comparable basis, particularly for developing countries. Further, the necessary productivity data as a control variable for labour costs are also of poor quality for many developing countries.

Previous empirical studies that include labour costs and control for differences in productivity, such as the study by Rodrik (1996), come up with some 35 countries, most of them OECD countries. Yet concerns about the observance of core labour standards concentrate mainly on low-income developing countries, which is also the main focus of this article. Labour costs are hence excluded from the analysis.

Five indicators are used to measure labour standards:

I. GDI for the degree of discrimination against women, representing the UNDP's (2001:210) gender-related development index of discrimination against women in education and working life." The GDI measures gender inequalities in life expectancy, literacy rates, the combined gross primary, secondary, and tertiary enrolment ratio as well as income. The index ranges from 0 (very high discrimination) to I (no discrimination). The variable GDI represents the average over the 1995 to 1999 period.

2. CHILD as an indicator for the prevalence of child labour, defined as the percentage of children aged 10-14 who are NOT active in the labour force.<sup>13</sup>These are the ILO estimates of child labour. Again, an average for the 1995-1999 period has been calculated.

3. FORCED is an estimation for the degree of forced labour. Based on an extensive ILO (2001) report on forced labour, each country has been assessed as to whether there are shortcomings either in legislation or enforcement. Insufficiencies in legislation relate to nonexisting forced labour regulations or to provisions in the law that are not compatible with conventions of the ILO. Inadequacies in enforcement refer to a lack of government employees or willingness to put existing legislation into practice. In the regressions, the following numbers have been used for FORCED: a 3 if there are no reported problems with both enforcement and legislation, 2 if there are inadequacies with one of them, and 1 if there are insufficiencies with both of them.<sup>14</sup>

4. UNION for fundamental union rights like collective bargaining and the freedom of association, representing the OECD's (1996; 2000) indicator for union rights. Based on ILO studies and reports from international trade union organisations, the OECD rated 76 countries on a scale from 1 (union rights almost nonexistent) to 4 (union rights guaranteed in law and practice).<sup>15</sup>

5. CONVEN for the number of ratified ILO conventions on core labour standards (0-8).

Included in the benchmark regression reported in the second column of Table 1 were all 133 countries reporting FDI, GDP, and GDP growth data for the considered period. Both explanatory variables have the anticipated signs and are statistically significant at the one-percent level. In the remaining columns, the coefficients for the above explained five indicators for core labour standards are reported. To reduce the problem of multicollinearity, each indicator is singly added to the benchmark regression. All four indicators that measure de facto compliance with the ratification of the conventions have positive signs and are statistically significant at the 1, 5, or 10 percent levels.

The results imply that a lower level of discrimination against females, less child and forced labour, and improved fundamental union rights are associated with higher FDI inflows. In other words: coun-

tries with higher core labour standards received more FDI per capita in the 1995-1999 period than would have been forecasted on the basis of the other country characteristics. To give an example, an increase in the measure of child labour by one percent, that is, a decrease in child labour, would lead to a rise in FDI inflows per capita of 1.94 percent. While the outcome of declining basic union rights is unclear on theoretical grounds, the sign for UNION is positive and the parameter is statistically significant at the 10-percent level. Stronger fundamental union rights are thus positively associated with FDI inflows per capita too.

On the other hand, CONVEN, which relates to *de jure* ratification of the ILO conventions, seems not to significantly affect FDI flows. CONVEN is just below zero and not statistically significant. Furthermore, the number of ratifications is a measure of poor quality of the *de facto* compliance. To compare ratification and compliance for each of the four core labour standards, first the number of ratifications for each of the four labour standards has been calculated. The variables Foreign Direct Investment and Fundamental Workers' Rights

Table 1: Core Labour Standards and Foreign Direct Investment, OLS Regression Results						
Independent	Dependent Variable: FDI					
VARIABLES						
Constant	-4.957*** (0.510)	-2.018 (1.281)	-3.422** (0.777)	-5.006*** (0.500)	-4.760*** (0.700)	-4.882*** (0.681)
GDP	1.092*** (0.068)	0.796*** (0.135)	0.916*** (0.095)	0.995*** (0.077)	1.001*** (0.113)	1.100*** (0.070)
GROWTH	0.127*** (0.041)	0.127*** (0.043)	0.135*** (0.042)	0.135*** (0.041)	0.000 (0.066)	0.126*** (0.042)
GDI		1.787*** (0.672)				
CHILD			1.940** (0.787)			
FORCED				0.887*** (0.341)		
UNION					0.703* (0.416)	
CONVEN						-0.008 (0.295)
Adj. R <sup>2</sup>	0.68	0.72	0.69	0.70	0.74	0.68
Ν	133	121	129	133	67	133

Notes on Table 1: Standard errors, which have been checked for heteroskedasticity, are reported in parentheses; multicollinearity has been tested by the creation of variance inflation factors (VIF); \*\*\* significant at the 1% level; \*\* significant at the 5% level; \* significant at the 10% level.

Source: Own calculations; see Appendix A for data sources.

are labelled CONDISC for discrimination and the number of ratifications of Conventions No. 100 and No. 111, CON-CHILD for child labour (No. 138 and No. 182), CONFORCE for forced labour (No. 29 and No. 105) and CONUNION for union rights (No. 87 and No. 98). Then the partial correlations between these four variables and the equivalent indicators for compliance with labour standards are computed. As Table 2 shows, the maximum is 0.22, which implies a weak positive correlation. The partial correlations for the discrimination against females and forced labour are even negative.

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> Overall, similar to the outcome of previous studies, the results clearly indicate that the level of core labour standards is positively associated with FDI inflows. One likely reason for this finding is that most FDI for the countries included in the data set (in absolute numbers) is horizontal rather than vertical. There is strong evidence for this argument. For instance, according to Brainard (1997) as little as 13 percent of the overseas production of United States-owned foreign affiliates is shipped back to the United States, and that only two percent of the output produced by foreign affiliates located in the United States is shipped to their parents.

> Clearly, these findings are heavily influenced by the dominance of FDI flows between high-income countries and regions like Japan, the EU and the United States (see the figures in Section 1), where horizontal dominates over vertical FDI. The empirical results thus indicate that the second link between labour standards

and FDI *via* higher productivity and growth rates will dominate over the first one, that is, the negative effects of higher labour costs on FDI.

To see whether the inclusion of high income has a confounding role, high and upper middle-income countries have been excluded in a second set of regressions. Based on a definition by the World Bank (2001), only developing countries with a low or lower middle income with GDP *per capita* in 1999 of USD 2,995 or less were incorporated in the regressions. All together, 87 developing countries have been singled out with combined FDI inflows of USD 76 billion or 8.6 percent of world FDI inflows in 1999.

The results, reported in Table 3, are similar to those for the first set of empirical estimates. While the overall fit of the benchmark and the other regressions deteriorates, signs and statistical significance of all variables are very similar. The only exception is UNION, but this could partly be explained by the low number of countries included in the regression, which might have influenced the results. Yet labour standards are also positively associated with FDI in developing countries with low and lower middle GDP *per capita*.<sup>16</sup>

### CONCLUDING REMARKS AND IMPLICATIONS FOR POLICY

The main results of this article can be summarised as follows: no evidence can be found to support the

TABLE 2: RATIFICATIONS OF FUNDAMENTAL ILO CONVENTIONS AND LEVEL OF LABOUR STANDARDS				
VARIABLES	Partial Correlation			
GDI / CONDISC	-0.01			
CHILD / CONCHILD	0.07			
FORCED / CONFORCE	-0.15			
UNION / CONUNION	0.22			
Source: Own calculations; see Appendix .	A FOR DATA SOURCES.			

for Developing Countries						
INDEPENDENT	Dependent Variable: FDI					
VARIABLES						
Constant	-5.940*** (1.075)	-2.068 (2.600)	-3.427*** (1.755)	-5.637*** (1.062)	-6.308*** (2.035)	-5.822*** (I.270)
GDP	1.239*** (0.163)	0.786** (0.319)	0.909*** (0.244)	1.079*** (0.176)	1.204*** (0.277)	1.253*** (0.169)
GROWTH	0.143*** (0.051)	0.137** (0.056)	0.150*** (0.053)	0.154*** (0.050)	0.001 (0.117)	0.141*** (0.054)
GDI		1.691*** (0.975)				
CHILD			1.945* (1.092)			
FORCED				0.869** (0.404)		
UNION					0.862 (0.688)	
CONVEN						-0.132 (0.418)
Adj. R <sup>2</sup>	0.42	0.45	0.43	0.45	0.38	0.42
N	87	78	84	87	31	87
Notes on Table 3: According to a definition by the World Bank (2001), developing countries						

 TABLE 3: CORE LABOUR STANDARDS AND FOREIGN DIRECT INVESTMENT, OLS REGRESSION RESULTS

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Notes on Table 3: According to a definition by the World Bank (2001), developing countries can be classified as low and lower middle income countries with GDP per capita in 1999 of USD 2,995 or less; see Table 1 for further notes.

Source: Own calculations; see Appendix A for data sources.

CONVENTIONAL WISDOM THAT TNCs FAVOUR COUNTRIES WITH LOWER WORK-ERS' RIGHTS. Improved workers' rights are instead positively associated with FDI inflows. In view of this, the main line of attack from non-governmental organisations that, due to the increasing globalisation of the world economy, countries will engage in intense competition to attract FDI, leading, among other things, to "a race to the bottom" on labour standards, seems to be misplaced. On theoretical grounds, it has been shown that, apart from the possible link between wage costs and labour standards, improved workers' rights are likely to enhance productivity and, consequently, GDP growth rates. A growing market, in turn, is the most important determinant of FDI.

The empirical results presented in this paper support the importance of the second link between labour standards and foreign direct investment, namely an increase in FDI flows takes place due to higher productivity and growth rates of the host country. Using aggregate FDI data for 133 countries, OLS regression results show that low standards are not a major attraction for TNCs. Rather the opposite applies: FDI inflows and the level of workers' rights are positively related. This result holds for all considered indicators for the observance of core labour standards, and even for relatively poor developing countries.

In view of this evidence, recent considerations<sup>17</sup> of whether labour standards should be included into the rules and mandate of the World Trade Organisation (WTO), which watches over the international trading system, to enforce the rules at a global level are not appropriate. They may even entail negative economic consequences, as measures to enforce labour standards are likely to be abused by rich countries to protect their markets against alleged "unfair" imports from developing countries with lower standards. This, in turn, would be detrimental to growth rates (and FDI inflows) in low-income countries, because their cost competitiveness and economic welfare would partly erode.

Nevertheless, in particular the EU is still calling for a discussion of links between investment (and trade) and fundamental workers' rights and brought the issue forward at the WTO conference in Doha in November 2001. This attempt was rejected by developing countries and it has been agreed that the issue of labour standards remains in the ILO's sphere of influence. Obviously, supporting the activities of the ILO by providing technical and financial assistance as well as more transparency would show far higher effects on the improvement of fundamental workers' rights than trade or other sanctions through binding measures in the WTO regulations.

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> The WTO, however, has been asked to 'take note of work under way in the ILO on the social dimension of globalisation' (WTO 2001) and will hold talks at an expert level about labour standards. Since trade unions, human right activists and some governments of developed (high standard) countries show an ongoing interest in the matter, it is highly likely that labour standards will again appear on the agenda of future talks and will remain an important issue of international economics.

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#### Notes:

MATTHIAS BUSSE is a Research Associate at the Hamburg Institute of International Economics (HWWA).

ADDRESS: Matthias Busse, Hamburg Institute of International Economics (HWWA), Neuer Jungfernstieg 21, D-20347 Hamburg, Germany [Email: busse@hwwa.de].

I Currently, there are 49 countries on the United Nations (UN) list of least-developed countries, with the majority in sub-Saharan Africa (UNCTAD 2001: 30). All of them have GDP *per capita* of less than USD 900 and low levels of capital, human, and technological development.

2 See Klein *et al.* (2001) for a survey of studies on the economic effects of FDI in developing and emerging market countries.

3 See Brown (2000) for a survey.

4 Organisation for Economic Co-operation and Development.

5 Freedom House is a non-governmental organisation based in the United States that monitors basic democratic rights like civil liberties and political rights in the world; see Freedom House (2002) for more information.

6 See Graham (1995) for a historical review and Chakrabarti (2001) for a recent survey of the literature.

7 See Booth (1995) for a more thorough survey of the effects of trade unions.

8 This argument holds only if there are no further distortions like, for instance, a monopsony in the labour market. In this case, a higher wage rate would lead to an increase in employment levels. See Martin and Markus (2001) for a discussion of the effects with different labour market distortions.

9 The net outcome of labour market distortions on productivity and growth rates depend on the magnitude of the two effects and other labour market conditions.

10 Chakrabarti also notes that openness to trade, measured by exports and imports divided by GDP, is more likely to be positively associated with FDI than other variables like taxes, labour costs, political stability *etc*.

11 Data sources of all variables are reported in Appendix A. Similar to most studies on the determinants of FDI, a semilog model has been used.

12 The discrimination against minorities, which are also covered by the ILO conventions No. 100 and No. 111, are not part of the GDI. These could not be included due to a lack of data. The GDI, however, covers a large extent of the "spirit" of the two conventions.

13 Note that CHILD measures the non-prevalence of child labour. To ensure a straightforward interpretation of the regression results, a higher number in any of the five indicators implies a higher labour standard.

14 See Appendix B for the assigned numbers for each country.

15 Again, to simplify the interpretation of the results, the scale from 1 to 4 has been defined exactly opposite to that of the OECD. *ta* up to USD 9,265, which is the threshold for upper middle income countries, are included in the regressions.

16 Neither the statistical significance nor the signs change significantly if more developing countries or emerging market economies with, say GDP *per capi*-

17 For example, see demands for binding labour standards by non-governmental organisations such as Amnesty International (2002).

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#### **Appendix A: Definition of Variables and Data Sources**

VARIABLE	Definition	Source
FDI	Foreign direct investment, net inflows in current	World Bank (2001)
	US dollars, annual average for the 1995-1999 period	
GDP	GDP per capita in current US dollars, annual average	World Bank (2001)
	for the 1995-1999 period	
GROWTH	Growth of GDP per capita, annual average	World Bank (2001)
	for the 1995-1999 period	
GDI	Gender-related development index, index 0-1,	UNDP (2001)
	annual average for the 1995-1999 period	
CHILD	Percentage of children aged 10-14 who are not working,	World Bank (2001)
	annual average for the 1995-1999 period	
FORCED	Indicator for forced labour, scale from 1-3, 1999	ILO (2001) and
		own calculations
UNION	Freedom of association and collective bargaining	OECD (1996; 2000)
	rights of unions, scale from 1-4, 1999	
CONVEN	Number of ratifications of the eight fundamental ILO	ILO (2002b)
	conventions, Dec. 1999	
CONDISC	Number of ratifications of the two fundamental ILO	ILO (2002b)
	conventions on discrimination No. 100 and No. 111, Dec. 1999	
CONCHILD	Number of ratifications of the two fundamental ILO	ILO (2002b)
	conventions on child labour No. 138 and No. 182, Dec. 1999	
CONFORCE	Number of ratifications of the two fundamental ILO	ILO (2002b)
	conventions on forced labour No. 29 and No. 105, Dec. 1999	
CONUNION	Number of ratifications of the two fundamental ILO	ILO (2002b)
	conventions on basic union rights No. 87 and No. 98, Dec. 1999	

## **Appendix B: Indicator for Forced Labour**

#### GROUP 1

Bangladesh, Cambodia, China, Congo (Democratic Republic), Congo (Republic), Haiti, India, Madagascar, Nepal, Sierra Leone, Sudan, Vietnam

#### **GROUP 2**

Benin, Bolivia, Brazil, Burkina Faso, Central African Republic, Costa Rica, Cote d'Ivoire, Dominican Republic, Ethiopia, Ghana, Guatemala, Honduras, Kenya, Mali, Mauritania, Mexico, Niger, Pakistan, Paraguay, Peru, Philippines, Senegal, Sri Lanka, Swaziland, Tanzania, Thailand, Togo, Zimbabwe

#### GROUP 3

Albania, Algeria, Angola, Argentina, Armenia, Australia, Austria, Azerbaijan, Bahamas, Barbados, Belarus, Belize, Botswana, Bulgaria, Burundi, Chad, Chile, Colombia, Croatia, Cyprus, Czech Republic, Denmark, Djibouti, Ecuador, Egypt, El Salvador, Estonia, Fiji, Finland, France, Gabon, Gambia, Germany, Greece, Guinea, Guyana, Hungary, Iceland, Indonesia, Iran, Israel, Italy, Jamaica, Jordan, Kazakhstan, South Korea, Kyrgyzstan, Latvia, Lebanon, Lesotho, Cameroon, Canada, Cape Verde, Lithuania, Macedonia, Malawi, Malaysia, Maldives, Malta, Mauritius, Moldavia, Mongolia, Morocco, Mozambique, New Zealand, Nicaragua, Nigeria, Norway, Panama, Papua New Guinea, Poland, Portugal, Romania, Russia, Samoa, Seychelles, Slovakia, Slovenia, South Africa, Spain, Switzerland, Syria, Trinidad and Tobago, Tunisia, Turkey, Uganda, Ukraine, United Kingdom, United States, Uruguay, Uzbekistan, Venezuela, Zambia

Foreign Direct Investment and Fundamental Workers' Rights

Note on Appendix B: See text for explanations.