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# **Do Transnational Corporations Care About Labour Standards?**

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# **Do Transnational Corporations Care About Labour Standards?**

**Matthias Busse**

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## **HWWA DISCUSSION PAPER**

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## **Abstract**

This paper explores the relationship between foreign direct investment, or the activities of transnational corporations, and core labour standards. It discusses the channels through which labour standards may influence foreign direct investment and presents the results of an empirical test of that linkage. The results show that, contrary to the conventional wisdom that transnational corporations engage predominately in countries with low standards, higher labour standards are positively associated with foreign direct investment inflows. Concerns about “social dumping” or “a race to the bottom” on such standards appear to be mistaken. This result even holds for poor developing countries.

## **Zusammenfassung**

Die Beziehung zwischen ausländischen Direktinvestitionen, das heißt die Aktivitäten internationaler Konzerne, und grundlegenden Sozialstandards werden in dem vorliegenden Beitrag untersucht. Im Mittelpunkt dabei steht zum einen eine Diskussion möglicher Wirkungskanäle zwischen Sozialstandards und ausländischen Direktinvestitionen; zum anderen eine empirische Überprüfung dieser Zusammenhänge. Die Ergebnisse zeigen, dass internationale Konzerne überwiegend in Ländern investieren, die überdurchschnittlich hohe Sozialstandards aufweisen. Befürchtungen über „soziales Dumping“ oder eine wettbewerbsbedingte Verschlechterung der Standards nach unten sind demnach nicht zu erwarten. Dies gilt auch für relativ arme Entwicklungsländer.

**JEL Classification:** F23, O19

**Key Words:** Transnational Corporations, Foreign Direct Investment, Labour Standards, Cross-Country Regression Framework

## 1 Introduction

The rapid expansion of foreign direct investment (FDI), or the rise of transnational corporations' (TNCs) activities across countries, is maybe the clearest sign of the globalisation of the world economy over the past 15 years. The average annual growth rate of FDI was 26 per cent between 1986 and 2000, much faster than other economic aggregates like world production (7 per cent) or trade (9 per cent) (UNCTAD, 2001). Most international investments take place within the *Triad* - Japan, the European Union and the United States. In the period 1995-2000, they accounted for three-quarters of global FDI inflows and 85 per cent of outflows.

Accordingly, absolute levels of FDI flows to developing countries are relatively small. In the period 1995-2000, the 49 least-developed countries<sup>1</sup> attracted less than 1 per cent of FDI inflows, which amounted to an annual average of only US\$ 3.3 billion. Yet a different picture emerges if shares of FDI flows of host country GDP are considered. Whereas the ratio of FDI inflows to GDP in the least-developed countries was as low as 0.2 per cent in the period 1980-1985, it increased to 2.2 per cent in the period 1995-2000 (world average: 1.9 per cent), suggesting an increase in the relevance of FDI to these countries.

The economic benefits of increasing FDI inflows and activities of TNCs, 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, an intensifying global competition among governments to attract FDI might 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 labour standards.

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1 Currently, there are 49 countries on the United Nations (UN) list of least-developed countries, with the majority in sub-Saharan Africa (UNCTAD, 2001). All of them have a GDP per capita of less than US\$ 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.



These issues have attracted interest not only from economists and governments, but also from a large public audience, including humanitarian organisations, partly due to concerns about the effects of the increasing globalisation of the world economy. In particular, non-governmental organisations have raised their voices. Amnesty International (2002), for instance, stated in a recent report on the activities of TNCs in developing countries:

“Many transnational corporations operate in countries with repressive administrations where the rule of law is weak, where the independence of the judiciary is questionable, and where arbitrary arrest, detention, torture and extra-judicial executions occur. The government may ban free trade union activity and deny its citizens freedom of association. Factory workers in plants from which companies source their products may be subject to inhuman and degrading working conditions.”

This paper seeks to address these concerns, and shed light on the interaction between labour standards and decisions of 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. A second question, partly related to the first one, is whether TNCs have an influence on labour standards in the country of operation or whether they can improve respect for these standards. This reversed link, however, is beyond the scope of this paper and hence not addressed.

In view of that, this paper is structured as follows: Section 2 gives a brief introduction to different concepts of labour standards. Section 3 reviews previous empirical work, while the underlying theoretical aspects, that is, important channels through which labour standards could influence FDI flows are discussed in Section 4. Moreover, the results of empirical tests concerning the influence of labour standards on FDI flows are reported in Section 5. The paper ends with a summary of the major results and some concluding remarks.

## **2 Definition and Scope of Labour Standards**

Evidently, the level of labour standards varies across countries, depending on cultural, political, and social preferences and conditions, as well as real income levels (Brown et al., 1998). There is, however, a lack of agreement on a definition or a common list of

labour standards. It is necessary to outline carefully the set of labour standards used, since the choice of labour standards will definitely influence empirical results. For the purposes 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 (ILO, 2002b; OECD, 1996):

- freedom from forced labour, in the form of compulsory labour and slavery;
- the abolition of exploitative forms of child labour that put the safety and health of children at significant risk;
- equal opportunity in employment, that is, the right to equal treatment for all workers;
- fundamental union rights like freedom of association and collective bargaining, i.e. rights of workers to organise themselves and to negotiate freely their working conditions with their employers.

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 almost universally accepted. For instance, the three United Nations acts on core labour standards have been ratified by more than 130 countries (UN, 2002).<sup>1</sup>

Separately from the three United Nations acts, the conventions of the International Labour Organisation (ILO) on core labour standards have come closest to a set of standards most countries can agree on. Initially, the ILO was created in 1919 primarily for the purpose of adopting international standards to cope with problems of labour conditions, such as “injustice, hardship and privation” (ILO, 2002a). Later on in 1944, the ILO standard setting mandate was broadened to include more general, but closely related, human and civil rights and social policy matters. Core labour standards, however, have remained one of the most important issues of the ILO.

Within the ILO framework, international labour standards are in effect expressions of international tripartite agreement. The tripartite representatives consist of governments as well as workers’ and employers’ organisations. Since its foundation, the ILO has

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<sup>1</sup> The three United Nations acts are (1) the Convention on the Rights of the Child, (2) the Covenant on Economic, Social and Cultural Rights, and (3) the Covenant on Civil and Political Rights; see UN (2002) for details.

adopted more than 180 conventions and more than 190 recommendations (ILO, 2002a). ILO conventions are international treaties subject to ratification by ILO member states, whereas recommendations are purely advisory and non-binding instruments. The ILO relies basically on voluntary compliance and monitors the carrying out of the ratified conventions, since it does not have any enforcement power.

Starting with the Forced Labour Convention in 1930, so far the ILO has adopted eight conventions on core labour standards, two each on discrimination, child labour, forced labour, and union rights (see Table 1). Apart from the two on child labour, the total number of ratifications by member states is in the range of 140 to 160.<sup>1</sup> Though most countries agree on the principles of these conventions, only 69 countries have ratified all eight. In some circumstances, the precise wording or the interpretation of these conventions stands out against national laws or regulations (OECD, 1996). Ratifying a particular convention, on the other hand, does not automatically entail enforcement. Albania, for example, has ratified all eight conventions, and the United States only two, but few would argue that Albania has higher labour standards.

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<sup>1</sup> Since the Worst Forms of Child Labour Convention (No. 182) was only agreed on as recently as 1999, member countries are still in the process of ratifying this convention.

**Table 1:**  
**Ratification of ILO Fundamental Labour Standards**  
**(as of 1 April 2002)**

ILO Convention	Number of countries having ratified the convention
<u>Union Rights</u>	
(1) Freedom of Association and Protection of the Right to Organise Convention, 1948 (No. 87)	139
(2) Right to Organise and Collective Bargaining Convention, 1949 (No. 98)	151
<u>Forced Labour</u>	
(3) Forced Labour Convention, 1930 (No. 29)	160
(4) Abolition of Forced Labour Convention, 1957 (No. 105)	157
<u>Child Labour</u>	
(5) Minimum Age Convention, 1973 (No. 138)	116
(6) Worst Forms of Child Labour Convention, 1999 (No. 182)	117
<u>Discrimination</u>	
(7) Equal Remuneration Convention, 1951 (No. 100)	156
(8) Discrimination (Employment and Occupation) Convention, 1958 (No. 111)	154

Source: ILO (2002b).

### **3 Previous Studies of Foreign Direct Investment and Labour Standards**

Considering the intensive international 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>1</sup> To date, three studies have examined the linkage between labour standards and FDI.

The first study was carried out by the OECD (1996), which focused on the relationship between fundamental union rights, such as collective bargaining rights and 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 1 represents weakest and 4 strongest union rights. In the analysis of the data, they first relied on a simple chart in relating fundamental union rights and

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<sup>1</sup> See Brown (2000) for a survey.

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 period 1982-1989, he used control variables like the black-market 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<sup>1</sup> indicator as a measure for democracy, 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 ratified ILO conventions 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 rather included all ILO conventions. Nor did they incorporate any indicator which measures *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 US companies favour countries with a stronger record of ratifications of ILO conventions as an investment location.

#### **4 Determinants of Foreign Direct Investment**

A common starting point for discussing the relevance of labour standards to investment decisions by TNCs would be to develop a standard theoretical model, integrate the economic effects of labour standards and then analyse them. Unfortunately, no such model exists. Over the last four decades, there have been a large number of efforts to

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<sup>1</sup> 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.

explain the underlying reasons why TNCs realise investment abroad.<sup>1</sup> 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, etcetera 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 could 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 labour market conditions, could translate into lower wages. In addition, without freedom of association and collective bargaining rights, employees will lose bargaining power in negotiating wages and working conditions. At 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 the decision of TNCs 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 discrimination against females in education and employment.

An increase in use of child labour also can 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 (see Brown et al. (2001) for an overview), 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 school enrolment of children from some families. A few hours of work a day and schooling also appeared rather to be

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

complementary than mutually exclusive. Nevertheless, the evidence for a large number of countries suggests that child labour reduces productivity and therefore long-term growth rates.

Basic trade union rights like collective bargaining and freedom of association, in 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>1</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 employed workers and reduce economic efficiency.<sup>2</sup>

This in turn may have two effects: The average productivity of the remaining workers is likely to rise, as employees with a 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>3</sup>

And third, due to 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. This in turn may result in enhanced productivity in the economy. Depending

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

2 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.

3 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.

on the relative importance and size of these three effects, growth rates could either rise or fall due to fundamental union rights.

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 in turn 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 top two 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.<sup>1</sup>

Considering 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 the TNC divides the production process 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 labour-intensive 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 could 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 multiple 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

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<sup>1</sup> 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.



important determinants of this type of FDI (see Section 1). Since labour standards are both expected to increase productivity and growth rates and are by and large guaranteed in law and practice in high-income OECD countries, horizontal FDI is likely to be positively associated with the level of labour standards.

## **5 Data and Empirical Results**

In view of the fact that definitions and scope of both FDI and indicators for labour standards can vary substantially, it seems appropriate to describe in detail the data and variables used in the regressions. FDI data is taken from the World Development Indicators of the World Bank (2001), which in turn is based on balance of payments statistics reported by the International Monetary Fund, supplemented by data on net foreign direct investment reported by OECD and official national sources. According to the definition by the International Monetary Fund, FDI is net inflows of investment to acquire a lasting management interest (10 per cent 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 long-term capital, and short-term capital as shown in the balance of payments.

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.<sup>1</sup>

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 per cent of world FDI inward stocks in 1999, the share for services was 50 per cent (UNCTAD, 2001). Labour costs in the service sector in turn are not available on a comparable basis, particularly for developing countries.

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<sup>1</sup> 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.

Furthermore, 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 paper. Labour costs are hence excluded from the analysis.

For the measurement of labour standards, five indicators are used:

- 1) GDI for the degree of discrimination against women, representing the UNDP (2001) gender-related development index of discrimination against women in education and working life.<sup>1</sup> 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 1 (no discrimination). The variable GDI represents the average over the period 1995 to 1999.
- 2) CHILD as an indicator for the prevalence of child labour, defined as the percentage of children ages 10-14 who are *not* active in the labour force.<sup>2</sup> These are the ILO estimates of child labour. Again, an average for the period 1995-1999 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 non-existing 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

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1 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.

2 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.

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>1</sup>

- 4) UNION for fundamental union rights like collective bargaining and freedom of association, representing the OECD (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 non-existent) to 4 (union rights guaranteed in law and practice).<sup>2</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 2, 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 1 per cent 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 per cent level.

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

2 Again, to simplify the interpretation of the results, the scale from 1 to 4 has been defined exactly opposite to that of the OECD.

**Table 2:  
Core Labour Standards and Foreign Direct Investment,  
OLS Regression Results**

Independent Variables	Dependent Variable: FDI					
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. R2	0.68	0.72	0.69	0.70	0.74	0.68
N	133	121	129	133	67	133

Notes: See Appendix A for data sources; 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 1% level; \*\* significant at 5% level; \* significant at 10% level.

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: Countries with higher core labour standards received more FDI per capita in the period 1995-1999 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 1 per cent, that is, a decrease in child labour, would lead to a rise in FDI inflows per capita of 1.94 per cent. 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 per cent 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 are labelled CONDISC for discrimination and the number of ratifications of Conventions No. 100 and No. 111, CONCHILD 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 3 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.

**Table 3:  
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

See Appendix A for data sources.

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 per cent of the overseas production of United States-owned foreign affiliates is shipped back to the United States, and that only two per cent 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 European Union and the United States (see 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 a GDP per capita in 1999 of US\$ 2,995 or less were incorporated in the regressions. All together, 87 developing countries have been singled out with combined FDI inflows of US\$ 76 billion or 8.6 per cent of world FDI inflows in 1999.

The results, reported in Table 4, are similar to those of 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 a low and lower middle GDP per capita.<sup>1</sup>

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1 Neither the statistical significance nor the signs change significantly if more developing countries or emerging market economies with, say GDP per capita up to US\$ 9,265, which is the threshold for upper middle income countries, are included in the regressions.

**Table 4:**  
**Core Labour Standards and Foreign Direct Investment, OLS Regression Results**  
**for Developing Countries**

Independent Variables	Dependent Variable: FDI					
Constant	-5.940*** (1.075)	-2.068 (2.600)	-3.427** (1.755)	-5.637*** (1.062)	-6.308*** (2.035)	-5.822*** (1.270)
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

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

## 6 Concluding Remarks

The main argument of this paper has been that, contrary to the conventional wisdom that TNCs favour low standard countries, higher labour standards are positively associated with FDI inflows. The main line of attack from non-governmental organisations that due to the increasing integration of the world, countries will engage in fierce competition to attract FDI, leading, among other things, to “a race to the bottom” on labour standards, seem to be misguided. Using aggregate FDI data for 133 countries, the empirical results show that low standards are not an attraction for TNCs. This result holds for all four core labour standards.

Nevertheless, it is obvious that core labour standards may influence investment decisions in some cases. To illustrate this, violations of workers’ rights have been

reported in particular in export-processing zones in Asian and Central American countries (OECD, 2000). Poor working conditions and low standards in these zones may attract a few TNCs that use predominately unskilled labour. Likewise, some governments in Asia, such as Bangladesh or Pakistan, have exempted export-processing zones from national labour and industrial relations legislation, thereby restricting workers' rights, to help attract inward FDI (ICFTU, 2002).

The number of reported cases, however, do not lead to the conclusion that workers' rights in general are suffering from severe violations or that any of the empirical results of the present study have to be looked at again. Weak core labour standards are not considered a major factor in assessing investment opportunities by TNCs in a potential host country. The empirical results point rather to the opposite outcome: On average, TNCs prefer to invest in countries where basic human rights and workers' rights are higher, even among relatively poor developing countries.



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## Appendix A: Definition of Variables and Data Sources

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

## Appendix B: Indicator for Forced Labour

### Group 1

Bangladesh, Cambodia, China, Congo (Dem. Rep.), Congo (Rep.), 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

Note: See text for explanations.