

## Effects of Labor Standards on Labor Costs and FDI Flows

David Kucera<sup>1</sup>

International Institute for Labour Studies

[forthcoming in *Labor Standards in an Integrating World Economy*, edited by Jagdish Bhagwati and Hugh Corbet]

*Abstract.* This chapter summarizes the main findings of a recent study applying new country-level measures of labor standards – constructed from coding textual information and emphasizing actual worker rights – in a statistical analysis of labor costs and foreign direct investment (FDI) inflows in the 1990s. Labor standards addressed are in regard to freedom of association and collective bargaining, child labor, and gender discrimination and inequality. Consistent with prior studies, no solid evidence is found in support of what has been referred to as the “conventional wisdom” that foreign investors favor countries with lower labor standards, with all evidence of statistical significance pointing in the opposite direction.

### 1. Introduction

There has been a steady expansion of foreign direct investment (FDI) in recent decades. Figure 1 shows inward FDI stock as a percentage of GDP from 1980 to 1998 for the world and for less developed countries. The upward trend is particularly strong for less developed countries, suggesting the increased importance for these countries of FDI as well as the increased presence of multinational firms. Alongside the expansion of FDI have risen concerns regarding competition among countries or regions to attract FDI. Some determinants of FDI location, such as market size, are not amenable to short-run policy manipulation and so

---

<sup>1</sup> This paper benefited from the comments of a number of colleagues, in particular Richard Anker, Rossana Galli, Ajit Ghose and Rolph van der Hoeven.

do not come into play in this regard. These more persistent long-run determinants have been referred to as “classical sources of comparative advantage” regarding FDI location.<sup>2</sup> But other potential determinants are more malleable, among them taxation policy and environmental and labor regulations. The scenario of countries or regions competing against each other by offering to investors ever greater tax breaks and ever weaker regulations has been referred to as a “race to the bottom.”

A recent Organization for Economic Co-operation and Development (OECD) study on competition among countries to attract FDI addresses whether there is in fact evidence of a “race to the bottom.” The study concludes that there is no decisive evidence of “any inexorable tendency towards global ‘bidding wars’ among governments in their competition to attract FDI,” but that the “‘prisoner’s dilemma’ nature of the competition creates a permanent danger of such ‘wars’.”<sup>3</sup> A “race to the bottom” does not depend on investors being truly attracted to countries with lower labor standards. Perception, true or false, will suffice. Thus a critical evaluation of the effects of labor standards on FDI is of policy importance.

In a study of the effects of labor standards on FDI location, Rodrik writes of “the conventional wisdom about low-standard countries being a haven for foreign investors.”<sup>4</sup> Friedman, Gerlowski and Silberman refer to the “conventional wisdom” that foreign investors tend to locate where union representation is weaker.<sup>5</sup> How strong is the evidence for this “conventional wisdom,” if it may be fairly called that? Rodrik finds no such evidence and

---

<sup>2</sup> David Wheeler and Ashoka Mody, “International Investment Location Decisions: The Case of U.S. Firms,” *Journal of International Economics* 33(1-2) (1992), 57.

<sup>3</sup> Charles Oman, *Policy Competition for Foreign Direct Investment: A Study of Competition among Governments to Attract FDI* (Paris: OECD, 2000), 10.

<sup>4</sup> Dani Rodrik, “Labor Standards in International Trade: Do They Matter and What Do We Do About Them?,” in Robert Lawrence, Dani Rodrik, and John Whalley (eds.) *Emerging Agenda for Global Trade: High Stakes for Developing Countries* (Washington, D.C.: Overseas Development Council, 1996), 57.

<sup>5</sup> J. Friedman, D. Gerlowski, and J. Silberman, “What Attracts Foreign Multinational Corporations? Evidence from Branch Plant Location in the United States,” *Journal of Regional Science* 32(4) (1992), 411.

neither do studies by the OECD.<sup>6</sup> In assessing the Rodrik and 1996 OECD studies, however, Freeman writes as follows:

Neither the Rodrik nor the OECD study is definitive. The effect of labor standards on comparative advantage and trade is one of empirical magnitude, which further research should be able to clarify. We need studies with alternative measures of standards, models, and samples of countries.<sup>7</sup>

The need for more studies seems plain, but not many have been forthcoming. The bottleneck is that few alternative measures of labor standards are available, and that, as Martin and Maskus put it, “Available measures of labor standards are questionable indicators of actual worker rights and could be improved.”<sup>8</sup> This chapter summarizes a recent study attempting to make some headway in these regards by employing newly constructed indicators of labor standards that focus on actual worker rights.<sup>9</sup> These indicators are employed in a cross-country statistical analysis of labor costs and FDI inflows in the 1990s for samples of up to 127 countries. The standards addressed are commonly called core labor standards, along the lines of the International Labor Organization’s (ILO) “fundamental rights at work,” as regards “freedom of association and the effective recognition of the right to

---

<sup>6</sup> OECD, *Trade, Employment and Labour Standards: A Study of Core Workers’ Rights and International Trade*. Paris: OECD, 1996; OECD, *International Trade and Core Labour Standards*. Paris: OECD, 2000.

<sup>7</sup> Richard Freeman, “International Labor Standards and World Trade: Friends or Foes?,” in Jeffrey Schott (ed.) *The World Trading System: Challenges Ahead* (Washington, D.C.: Institute for International Economics, 1996), 103.

<sup>8</sup> Will Martin and Keith Maskus, “Core Labor Standards and Competitiveness: Implications for Global Trade Policy,” *World Bank Development Research Group Paper* (October 1999), 20.

<sup>9</sup> David Kucera, “The Effects of Core Worker Rights on Labour Costs and Foreign Direct Investment: Evaluating the ‘Conventional Wisdom,’” *IILS Decent Work Research Programme Working Paper*, No. 130, 2001. <http://www.ilo.org/public/english/bureau/inst/download/dp13001.pdf>; David Kucera, “Core Labour Standards and Foreign Direct Investment,” *International Labour Review*, forthcoming in 2002.

collective bargaining,” “the effective abolition of child labour,” and “the elimination of discrimination in respect of employment and occupation.”<sup>10</sup>

This new study finds no solid evidence in support of the “conventional wisdom.” If anything, the balance of evidence leans in the opposite direction, with all evidence of statistical significance suggesting that FDI tends to be greater in countries with higher labor standards. The lack of evidence for the “conventional wisdom” holds even though stronger freedom of association and collective bargaining rights are estimated to be associated with higher labor costs (accounting for differences in labor productivity), and that higher labor costs are estimated to have a negative effect on FDI. The negative effect of freedom of association and collective bargaining rights on FDI through labor costs is found to be offset by other positive effects of freedom of association and collective bargaining rights on FDI, such that countries with stronger freedom of association and collective bargaining rights are generally estimated to receive greater FDI inflows. The interpretation tendered is that stronger freedom of association and collective bargaining rights are associated with greater political and social stability, which previous work indicates is an important positive determinant of FDI location.

Though new measures are employed and a wider sample of countries considered, these findings are similar overall with those of prior studies of the effects on FDI of labor costs, unions, labor standards, and political and social stability – studies that variously evaluate total FDI inflows by country, outward U.S. FDI by country and region, and manufacturing FDI into the states of the U.S. These studies are surveyed in some detail elsewhere, but can be summed up as follows.<sup>11</sup> The evidence of the effects of labor costs on FDI is mixed, but leans

---

<sup>10</sup> ILO, *ILO Declaration on Fundamental Principles and Rights at Work and its Follow-up*. Geneva: International Labour Office (1998), 7. The other “fundamental right” is in regard to “the elimination of all forms of forced or compulsory labour.” A forced labour index was constructed and tested in the FDI model, but did not yield stable results, with small sample changes yielding widely varying coefficients estimates of opposite signs (Kucera, 2001).

<sup>11</sup> Kucera, 2001.

toward suggesting that higher labor costs negatively affect FDI. This is more clearly so for the two studies that directly account for differences in labor productivity. Regarding the effects of unions, the evidence is mixed and inconclusive. Regarding labor standards, studies suggest that FDI tends to be greater in countries with higher labor standards. Similarly with labor standards, studies addressing political and social stability suggest that greater stability positively affects FDI.

This chapter contains five sections. The next, section 2, addresses the multiple channels through which labor standards might affect FDI – not just through labor costs but also through facilitating human capital development and political and social stability – and also how the effects of labor standards depends on the type of FDI, particularly vertical versus horizontal FDI. Section 3 provides a brief description of the labor standards indicators used in this study, both those newly constructed from coding textual sources and others from previously available data. Section 4 provides an overview of main empirical results, and section 5 concludes.

## **2. Causal connections**

There are two lines of argument that taken together provide support for the notion that foreign investors favor countries with lower labor standards. First is that lower labor standards lead to lower labor costs. There is reason in this view. It should not surprise, for instance, if severe and persistent violations of basic freedom of association and collective bargaining rights were to lead to lower labor costs, nor, regarding discrimination, if some groups of workers are paid less than others for similarly productive work. The second line of argument is also credible, that foreign investors prefer to locate where labor costs are lower, other things equal, most importantly accounting for differences in labor productivity. For once one

accounts for differences in labor productivity, labor costs represent labor's share of income, and from the remaining share come profits.

If labor costs were the sole mediating link between labor standards and FDI location, then the case for the "conventional wisdom" would be more clearcut. But there are multiple channels through which labor standards might influence FDI location. For starters is evidence that higher standards, or stronger rights, might lead to more rapid economic growth, and several studies provide evidence that economic growth is a plus for attracting FDI.<sup>12</sup> Regarding gender inequality in education, for instance, a study by Klasen finds that greater inequality is associated with slower economic growth.<sup>13</sup> Klasen argues that this results from a "selection distortion factor," through which greater inequality translates into lower average human capital. Regarding the economic effects of child labor, a recent survey by Galli identifies several channels through which reductions of child labor might lead to more rapid economic growth, such as by facilitating human capital development.<sup>14</sup> Higher labor standards might also be associated with greater political and social stability – particularly freedom of association and collective bargaining rights that are in essence civil rights for workers – and a number of studies find that greater political and social stability are associated with more rapid economic growth.<sup>15</sup>

These are examples of possible positive effects of higher labor standards on FDI location mediated by economic growth. There is also the possibility of more direct positive effects of higher labor standards on FDI based on the same human capital and political and social stability factors contributing to economic growth, factors that might also be

---

<sup>12</sup> Surveyed in Nicholas Billington, "The Location of Foreign Direct Investment: An Empirical Analysis," *Applied Economics* 31(1) (1999), 65-76.

<sup>13</sup> Stephen Klasen, "Does Gender Inequality Reduce Growth and Development? Evidence from Cross-Country Regressions," World Bank Policy Research Report on Gender and Development, Working Paper Series, No. 7, 1999. Such a broad view of "discrimination in respect of employment and occupation" is motivated by ILO Convention 111, as is discussed in section 3.

<sup>14</sup> Rossana Galli, "The Economic Impact of Child Labour," *IILS Decent Work Research Programme Working Paper*, No. 128, 2001.

<sup>15</sup> Surveyed in Ronald Bénabou, "Inequality and Growth," *NBER Working Paper*, No. 5658, 1996.

determinants of FDI in their own right. Suggestive in this regard is a recent survey of several hundred “managers of transnational corporations [67 percent of respondents] and international experts around the world [33 percent of respondents],” who provided scores of 0 to 5, not important to very important, for thirteen FDI location criteria.<sup>16</sup> These location criteria are ranked in order of importance, most to least, as follows, with scores given in parentheses:<sup>17</sup>

1. Growth of market (4.2)
2. Size of market (4.1)
3. Profit perspectives (4.0)
4. Political and social stability (3.3)
5. Quality of labour (3.0)
6. Legal and regulatory environment (3.0)
7. Quality of infrastructure (2.9)
8. Manufacturing and services environment (2.9)
9. Cost of labour (2.4)
10. Access to high technologies (2.3)
11. Fear of protectionism (2.2)
12. Access to financial resources (2.0)
13. Access to raw materials (2.0)

The top two ranked criteria, “growth of market” and “size of market,” relate to market potential; “political and social stability” ranks fourth; “cost of labour” is well down the list, ranked ninth. These survey results suggest that if higher labor standards are associated with

---

<sup>16</sup> Fabrice Hatem, *International Investment: Towards the Year 2001* (New York: United Nations, 1997), 14, 47, 55-56.

<sup>17</sup> These rankings are based on assessments of the five years prior to the survey, but rankings based the five years following are nearly the same, the only change being a switch of rankings between “Fear of protectionism” and “Access to financial resources.”

higher labor costs – a negative for FDI – but also with greater stability – a positive for FDI – the positive effects may well offset the negative. These results are similar to those of executive surveys from the 1960s, described by Schneider and Frey as follows: “executives report political instability to be the most important variable influencing their foreign investment decisions, aside from market potential.”<sup>18</sup>

Ranked fifth in the survey is “quality of labour.” Already noted was how greater gender equality in educational attainment and reductions in child labor might contribute to economic growth by facilitating human capital development. This survey result suggests that enhancing human capital also has a direct positive effect on FDI location, in addition to the indirect positive effect through growth. In this sense too, higher labor standards might lead to greater FDI inflows. This survey finding is consistent with prior studies comparing the characteristics of multinational versus domestic firms, summarized by Hanson as follows:

That multinational firms are different from purely domestic firms is abundantly clear. Across countries and time several empirical regularities are apparent. Relative to their domestic counterparts, multinationals are larger, pay their workers higher wages, have higher factor productivity, are more intensive in capital, *skilled labor*, and intellectual property, are more profitable, and are more likely to export.<sup>19</sup>

Some considerations on child labor are worth a mention as regards “quality of labour.” Child labor is unskilled labor, and therefore even if more child labor does result in lower average labor costs, this holds only for the market for unskilled labor. Moreover, if reducing child labor facilitates human capital development, such as by enabling regular school

---

<sup>18</sup> Friedrich Schneider and Bruno Frey, “Economic and Political Determinants of Foreign Direct Investment,” *World Development* 13(2) (1985), 162.

<sup>19</sup> Gordon Hanson, “Should Countries Promote Foreign Direct Investment?” (University of Michigan, 2000) 21-22, emphasis added.

attendance or providing children with more time and energy for their studies, this relates more to the market for skilled than unskilled labor (though the effect of children's education on workforce skills unfolds over time, as these children make their way into the workforce). As the above survey results and the quote from Hanson suggest, the market for unskilled labor is less relevant for multinational firms and FDI location than the market for skilled labor. In this sense, the causal channel through which reducing child labor might lead to more FDI (by increasing human capital) is more directly linked with the determinants of FDI location than the causal channel through which reducing child labor might lead to less FDI (by increasing labor costs in the unskilled labor market). For these reasons too the relationship between FDI and labor standards is quite multifaceted. These various causal channels through which higher labor standards are hypothesized to affect FDI, negatively and positively, are illustrated in figure 2. There may be additional positive effects of higher labor standards on FDI as multinationals endeavor to avoid bad publicity, product boycotts and the like resulting from investments in low-standard countries.

Evaluating the determinants of FDI location is complicated by the fact that FDI is heterogeneous and is undertaken for different reasons. Most important is the distinction between vertical and horizontal FDI. Vertical FDI is argued to result from multinationals taking advantage of differences in factor of production costs among countries, concentrating their more labor-intensive activities where labor costs are lower and more capital-intensive activities where capital costs are lower. Brainard calls this the "factor-proportions hypothesis," which she describes as "the dominant explanation of multinational activity within traditional trade theory."<sup>20</sup> For vertical FDI, goods are produced not for sale to but for export from countries receiving FDI. Export processing zones provide a classic example of

---

<sup>20</sup> S. Lael Brainard, "An Empirical Assessment of the Proximity-Concentration Trade-off Between Multinational Sales and Trade," *The American Economic Review* 87(4) (1997), 520.

vertical FDI, for which restrictions are typically imposed on multinationals selling in the domestic market.

Horizontal FDI occurs when firms locate investment abroad in order to facilitate sales to the countries or regions in which they are investing. From the viewpoint of a firm in its home country, horizontal FDI provides an alternative to exporting as a means of selling in foreign markets. The extent to which firms rely on horizontal FDI versus exporting depends on exporting costs (particularly transport costs and tariffs), restrictions on FDI flows, and the importance of scale economies. Brainard calls this the “proximity-concentration hypothesis,” in that the exporting costs to firms of being farther from customers trade off against the scale benefits to firms resulting from the concentration of production.<sup>21</sup>

Since patterns of vertical but not horizontal FDI are argued to be determined by differences in factor costs, differences in labor costs – such as resulting from higher labor standards – matter differently for vertical and horizontal FDI. Specifically, an increase in labor costs, all else equal, is expected to have a negative effect on countries whose comparative advantage in attracting vertical FDI depends on low labor costs. At the same time, if labor costs are lowered by, for instance, weakening rights of freedom of association and collective bargaining, then all else is not equal, since this weakening can create the political and social instability to which foreign investors are averse. With horizontal FDI, the effects of labor cost increases are less clearcut, all else equal, since multinationals not only produce but also sell in recipient countries. In this sense, market potential matters in determining the location of horizontal but not vertical FDI, and labor cost increases may affect market potential. For a given level of labor productivity, labor cost increases create a shift in functional income distribution towards labor and away from other factors of production. In the short-run, the effect of such a shift on market potential is goods specific

---

<sup>21</sup> Brainard, 520.

and depends on the extent to which goods produced by multinationals are purchased by workers or are rather luxury goods. If products are purchased primarily by workers, then an increase in labor costs might lead to increased demand for these goods, potentially offsetting negative effects on FDI resulting from higher labor costs. In a more long-run dynamic sense, such a shift in functional distribution might also increase overall market potential by boosting aggregate demand, depending on whether a country is in a scenario of “wage-led growth” or “profit-led growth.”<sup>22</sup>

Evaluating the effects of labor costs on the location of *total* FDI depends then on the relative importance of vertical versus horizontal FDI. It is useful in this regard to return to the survey of executives of multinationals and international experts noted above, which asks additional questions about the relative importance of horizontal FDI and vertical FDI, with breakdowns by respondents from service and manufacturing sector firms and from firms headquartered in North America, Western Europe, Japan, and Asian NIEs (newly industrialized economies). These additional and disaggregated results suggest that horizontal FDI is more important overall than vertical FDI (consistent with the top rankings given to “growth of market” and “size of market”) but that horizontal FDI is more important in the service than manufacturing sector and that horizontal FDI is more important and labor costs less important for respondents from Western European and North American than Japanese and Asian NIE firms.

Given the heterogeneity of FDI, the results of the present study, which looks at total FDI, hold as a macroeconomic average and not necessarily for FDI originating from different regions and undertaken in different sectors and for different strategic reasons.

### **3. Labor standards indicators**

---

<sup>22</sup> Lance Taylor, *Income Distribution, Inflation, and Growth*. Cambridge, MA: MIT Press. 1991; Robert Blecker, “NAFTA, the Peso Crisis, and the Contradictions of the Mexican Economic Growth Strategy,” *Center for Economic Policy Analysis Working Paper*, Series I, No. 3, 1996.

Several measures related to freedom of association and collective bargaining are used. One is the unionization rate -- the number of union members as a percentage of the non-agricultural labor force. Also used are civil liberties and political rights indices constructed by the Freedom House organization, which provide useful measures of the broader rights context within which worker rights are situated as well as of important aspects of political and social stability. The civil liberties index is partly based on a consideration of freedom of association and collective bargaining rights. The political rights index addresses questions relating to free and fair elections, the competitiveness of political parties, self-determination, and discrimination.

Newly constructed measures of freedom of association and collective bargaining are based on thirty-seven evaluation criteria that address *de jure* as well as *de facto* problems, leaning in emphasis toward the latter. These evaluation criteria are shown in table 1 and are based on ILO Conventions 87 (“Freedom of Association and Protection of the Right to Organise”) and 98 (“Right to Organise and Collective Bargaining”) and related ILO jurisprudence, as well as problems noted in textual sources. The method of construction involves the coding of three textual sources -- the International Confederation of Free Trade Unions’ *Annual Survey of Violations of Trade Union Rights*, the U.S. State Department’s *Country Reports on Human Rights Practices*, and the ILO’s *Reports of the Committee on Freedom of Association*. The method of converting textual information into quantitative indices is described in some detail elsewhere, but in general terms is based on a detailed set of definitions and decision rules indicating relevant ILO Convention articles and jurisprudence passages, how to classify the diverse range of problems observed in the information sources, and how the various evaluation criteria relate to each other.<sup>23</sup> The aim is to have a sufficiently

---

<sup>23</sup> Kucera, 2001.

detailed set of definitions and decision rules that different evaluators would arrive at the same (or at least very similar) results. That is, the aim is reproducibility.

For child labor, aggregate indicators are provided by labor force participation rates of 10 to 14 year olds as well as secondary education *non-enrollment* rates. Other measures are constructed from coding textual sources and focus on child labor in sectors more directly linked to traded goods, in particular in textiles, apparel, leather goods, footwear, and other manufacturing and craft production, as well as in mining, construction, and market-oriented agriculture, forestry, and fishing.

The definition of “discrimination in respect of employment and occupation” is restricted to focus on gender inequality. The several indicators of gender inequality are the female percentage of industrial employment, women’s representation in administrative-managerial and professional-technical occupations, and gender inequality in educational attainment and literacy. The focus on gender rather than other forms of inequality is both because data with gender breakdowns are far more available and because of the universality of gender inequality.<sup>24</sup> As for the focus on inequality rather than discrimination, the ILO uses a very broad definition of discrimination, in essence equating discrimination with not only inequality in employment outcomes but with inequality in the determinants of employment outcomes. This is apparent from Convention 111, titled “Discrimination (Employment and Occupation),” one of the key conventions undergirding “fundamental rights at work.” The reference in the Convention to “equality of opportunity” and “access to vocational training” motivates evaluating gender inequality in educational attainment and literacy.

#### **4. Empirical results**

---

<sup>24</sup> World Bank, *Engendering Development: Enhancing Development Through Attention to Gender*. Oxford: Oxford University Press, 2001.

These labor standards indicators were incorporated into cross-country statistical models of labor costs and FDI inflows, providing estimates of the average aggregate effects of labor standards. The basic logic of the models are that they attempt to account for the effects of labor standards on labor costs and FDI while at the same time accounting for other determinants of labor costs and FDI. For the labor cost model, the most important of these other determinants are labor productivity and levels of economic development (the latter measured by per capita national income). So whenever evidence is found of labor standards having an effect on labor costs, this is while accounting for the effects of labor productivity and levels of economic development on labor costs. For the FDI model, the most important of the non-labor standards determinants are market potential (measured by population and per capita national income) and trade openness (measured by the sum of exports and imports relative to national income). As with the labor cost model, whenever evidence is found of labor standards having an effect on FDI, this is while accounting for these other determinants of FDI.

Estimates of the effect of labor standards can vary depending on model structure, the way indicators are constructed, and estimation methods. As such, it is important to estimate the effect of labor standards based on a range of reasonable assumptions, to test the robustness of results. To address these concerns, results are based on: samples of all countries for which data are available and then only less developed countries; several variations of the labor standards indicators; models with and without statistical controls for general regional characteristics;<sup>25</sup> and estimation methods accounting for simultaneous reverse causality (the effects of labor costs and FDI inflows on labor standards). The results on the effects of labor

---

<sup>25</sup> That is, with and without regional dummy variables, with 1 indicating that a country is part of a region and 0 indicating that it is not. The regions considered are East Asia/Pacific, South Asia, Latin American/Caribbean, Sub-Saharan Africa, Middle-East/North Africa, Eastern Europe, and non-East Asia/Pacific older OECD member countries.

standards on labor costs and FDI are summarized in light of these several variations in method.

***Freedom of association and collective bargaining.*** Unionization rates are not found to be strongly related with either labor costs or FDI inflows. Consistent with prior studies, these results suggest that unions do not appear to be an important factor determining FDI location, one way or another.

Based on the Freedom House indices, stronger civil liberties and political rights are generally associated with greater FDI inflows. Results are not always statistically significant, however, and are stronger overall for all countries than less developed countries. An additional result is that higher labor costs relative to labor productivity are estimated to have a negative effect on FDI inflows. One of the most persistent results of two prior studies is that stronger rights by these same measures are associated with higher labor costs, accounting for differences in labor productivity.<sup>26</sup> Taking all these results together suggests that the effect of stronger worker rights on FDI is not only through labor costs and indeed that the positive non-labor cost effects of stronger worker rights on FDI can more than offset the negative labor cost effects.

For the newly constructed freedom of association and collective bargaining indices, results are similar to those using the Freedom House indices. As with the Freedom House indices, it is found that stronger freedom of association and collective bargaining rights are associated with both higher labor costs, accounting for differences in labor productivity, and also with generally greater FDI inflows. Given that higher labor costs are estimated to have a negative effect on FDI, this too suggests that the positive non-labor cost effects of stronger freedom of association and collective bargaining rights on FDI can more than offset the

---

<sup>26</sup> Rodrik, 1999; Kucera, 2001.

negative labor cost effects. Figure 2 suggests one possible interpretation of these results, with the positive effects of stronger freedom of association and collective bargaining rights on FDI through political and social stability acting to offset the negative effects through labor costs. This interpretation is consistent with the relationships between, on the one hand, the Freedom House and the newly constructed freedom of association and collective bargaining indices and, on the other hand, a measure of political and social stability (based on economic and political risk to investors) constructed by the Institutional Investor organization, suggesting that stronger freedom of association and collective bargaining rights are indeed associated with greater political and social stability.

***Child labor.*** Child labor might affect FDI inflows both through labor costs and skill levels. The relationship between skill levels (measured by the literacy rate and average years of educational attainment) and aggregate measures of child labor is quite strongly negative. This negative relationship indicates that less child labor is associated with higher skill levels. Since higher skills levels are a plus for FDI location, less child labor might also be associated with greater FDI inflows, depending on the effects of child labor on labor costs.

There are two reasons to think that more child labor would result in lower labor costs. First, child laborers are commonly paid less than adults.<sup>27</sup> Since this lower pay may reflect discrimination and not simply lower productivity, it is expected that more child labor would lead to lower labor costs relative to labor productivity. But here one must be mindful of compositional relationships, for only a very small minority of child laborers are employed in sectors receiving significant amounts of FDI, with roughly five percent a common estimate

---

<sup>27</sup> Richard Anker, "Overview and Introduction," in Richard Anker, Sandhya Barge, S. Rajagopal, and M.P. Joseph (eds.) *Economics of Child Labour in Hazardous Industries of India* (New Delhi: Hindustan Publishing Corporation, 1998), 17.

regarding tradeable goods sectors.<sup>28</sup> As such, the compositional relationship between aggregate measures of child labor and FDI inflows is very loose. Second, child labor might also reduce labor costs by increasing the total supply of unskilled labor, in which case aggregate level measures of child labor (labor force participation rates for 10 to 14 years olds and secondary education non-enrollment rates) are more relevant.

As regards the relationship between child labor and labor costs, no solid evidence was found that more child labor is associated with lower labor costs at the country level, even though other studies find such evidence at the enterprise level. Combining this evidence with the logic of the child labor-skill levels causal link with FDI, one should not expect more child labor to be associated with greater FDI inflows at the country level. The evidence on the effects of child labor on FDI is consistent with this expectation. Indeed the only evidence of statistical significance suggests that countries with more child labor tend to receive less FDI. Given that the results on the child labor-FDI relationship are not usually statistically significant, however, the evidence taken as a whole suggests that child labor is not an important determinant of FDI location.

---

<sup>28</sup> S.L. Bachman, "A New Economics of Child Labor: Searching for Answers Behind the Headlines," (*Journal of International Affairs* 52(2) 2000), 547.

***Gender inequality.*** Some evidence was found that higher female percentages of industrial employment are associated with lower labor costs. This was hypothesized to result from wage discrimination against women. Higher female percentages of industrial employment might also reflect the importance of such typically female-intensive industries as textiles, apparel, and electronics – industries that play a large role in export-oriented production, particularly relevant for vertical FDI. On these grounds, one might expect higher female percentages of industrial employment to be associated with greater FDI inflows, but no solid evidence of this was found.

In his study evaluating the effects of gender inequality in education and employment on investment and economic growth, Stephan Klasen concludes that greater gender inequality leads to lower rates of investment and slower growth. One of the causal linkages he proposes is through a “selection-distortion factor,” which he describes as follows regarding education:

If one believes that boys and girls have a similar distribution of innate abilities, gender inequality in education must mean that less able boys than girls get the chance to be educated, and, more importantly, that the average innate ability of those who get educated is lower than it would be if boys and girls received equal educational opportunities.<sup>29</sup>

This “selection-distortion factor” provides a sense of how a shift in educational attainment toward females (holding average educational attainment constant) can raise average levels of human capital. Such an increase in human capital is argued to raise the rate of return on investments and so to increase the rate of investment. This would hold for foreign as well as domestic investment. A similar “selection-distortion factor” is argued by Klasen to

---

<sup>29</sup> Klasen, 6.

work for gender inequality in employment. As regards the measures of women's representation in administrative-managerial and professional-technical occupations, this suggests that the average level of ability for these occupations would be higher the more equally are women represented within them.

Noted above was that estimates of the effects of labor standards are derived with and without statistical controls for general regional characteristics. It turns out that this makes a substantial difference when estimating the effects on FDI of women's representation in administrative-managerial and professional-technical occupations and also gender inequality in educational attainment and literacy. In estimations without controls for regional characteristics, the effect of on FDI of women's occupational representation and gender inequality in educational attainment and literacy is estimated to be positive and often statistically significant. These positive estimates are consistent with the "selection-distortion factor" hypothesis, meaning greater FDI in countries with greater gender equality by these measures.

In estimations with controls for general regional characteristics, estimates of the effects of gender inequality on FDI fall off considerably in value and none remain statistically significant. The difference in results with and without accounting for regional characteristics derives primarily from the Latin American/Caribbean region. As indicated by these measures of gender inequality, the Latin American/Caribbean region is relatively egalitarian by world standards. Evaluating which results are more definitive, with or without accounting for general characteristics of the Latin American/Caribbean region, requires assessing whether the region does comparatively well in attracting FDI because of the "selection distortion factor" and related human capital considerations or for other reasons not directly captured by the FDI model. This requires further investigation.

## 5. Conclusion

This study employs a range of country-level indicators of core labor standards to address the hypothesis, the so-called “conventional wisdom,” that foreign investors favor countries with lower standards. Statistical models evaluating total FDI inflows for the 1990s yield no solid evidence in support of the “conventional wisdom.” This finding is consistent overall with prior studies, but is based on alternative measures of labor standards, some newly constructed from coding textual sources, as well as on larger country samples.

One of the more noteworthy results is in regard to freedom of association and collective bargaining, as represented by the Freedom House indices and the freedom of association and collective bargaining indices constructed from coding textual sources. The lack of evidence for the “conventional wisdom” holds even though higher labor standards by these measures are estimated to be associated with higher labor costs, accounting for differences in labor productivity, and that higher labor costs are estimated to have a negative effect on FDI. The negative effect of stronger freedom of association and collective bargaining rights on FDI through labor costs is estimated to be offset by other positive non-labor cost effects of stronger freedom of association and collective bargaining rights on FDI, such that countries with stronger freedom of association and collective bargaining rights are generally estimated to receive greater FDI inflows. These results by themselves indicate that one cannot correctly determine the effects of labor standards on FDI location solely by considering the labor cost-labor productivity nexus as a causal channel. In addition, no evidence is also found that countries with more child labor and greater gender inequality have a comparative advantage in attracting FDI inflows, with all evidence of statistical significance suggesting rather a comparative disadvantage.

In addition to empirical evidence are presented theoretical grounds for addressing the relationship between labor standards and FDI location. Along these lines, a broader view of

the economics of labor standards and worker rights is argued for, beyond the labor cost-labor productivity relationship. For while this relationship provides a two-sided, cost-benefit approach, there appear more than two sides to the story as regards FDI location and also economic growth. That is, the effects of labor standards may be transmitted not only through the labor cost-labor productivity nexus, but also through enhancing political and social stability and human capital development.

## **Bibliography**

Anker, Richard. "Overview and Introduction," in Richard Anker, Sandhya Barge, S. Rajagopal, and M.P. Joseph (eds.) *Economics of Child Labour in Hazardous Industries of India*. New Delhi: Hindustan Publishing Corporation, 1998.

Bachman, S.L. "A New Economics of Child Labor: Searching for Answers Behind the Headlines." *Journal of International Affairs* 52(2) (2000): 545-572.

Bénabou, Ronald. "Inequality and Growth." *NBER Working Paper*, No. 5658, 1996.

Billington, Nicholas. "The Location of Foreign Direct Investment: An Empirical Analysis." *Applied Economics* 31(1) (1999): 65-76.

Blecker, Robert. "NAFTA, the Peso Crisis, and the Contradictions of the Mexican Economic Growth Strategy." *Center for Economic Policy Analysis Working Paper*, Series I, No. 3, 1996.

Brainard, S. Lael. "An Empirical Assessment of the Proximity-Concentration Trade-off Between Multinational Sales and Trade." *The American Economic Review* 87(4) (1997): 520-544.

Freedom House. *Freedom in the World: The Annual Survey of Political Rights and Civil Liberties 1998-1999*. New York: Freedom House, 1999.

Freeman, Richard. "International Labor Standards and World Trade: Friends or Foes?," in Jeffrey Schott (ed.) *The World Trading System: Challenges Ahead*. Washington, D.C.: Institute for International Economics, 1996.

Friedman, J., D. Gerlowski, and J. Silberman. "What Attracts Foreign Multinational Corporations? Evidence from Branch Plant Location in the United States." *Journal of Regional Science* 32(4) (1992) 403-418.

Galli, Rossana. "The Economic Impact of Child Labour." *IILS Decent Work Research Programme Working Paper*, No. 128, 2001.

Hanson, Gordon. "Should Countries Promote Foreign Direct Investment?" University of Michigan, 2000.

Hatem, Fabrice. *International Investment: Towards the Year 2001*. New York: United Nations, 1997.

ILO. *ILO Declaration on Fundamental Principles and Rights at Work and its Follow-up*. Geneva: International Labour Office, 1998.

Klasen, Stephen. "Does Gender Inequality Reduce Growth and Development? Evidence from Cross-Country Regressions." World Bank Policy Research Report on Gender and Development, Working Paper Series, No. 7, 1999.

Kucera, David. "The Effects of Core Worker Rights on Labour Costs and Foreign Direct Investment: Evaluating the 'Conventional Wisdom.'" *IILS Decent Work Research Programme Working Paper*, No. 130, 2001.

<<http://www.ilo.org/public/english/bureau/inst/download/dp13001.pdf>>

Kucera, David. "Core Labour Standards and Foreign Direct Investment." *International Labour Review*, forthcoming in 2002.

Martin, Will and Keith Maskus. "Core Labor Standards and Competitiveness: Implications for Global Trade Policy." *World Bank Development Research Group Paper*, October 1999.

OECD. *Trade, Employment and Labour Standards: A Study of Core Workers' Rights and International Trade*. Paris: OECD, 1996.

OECD. *International Trade and Core Labour Standards*. Paris: OECD, 2000.

Oman, Charles. *Policy Competition for Foreign Direct Investment: A Study of Competition among Governments to Attract FDI*. Paris: OECD, 2000.

Rodrik, Dani. "Labor Standards in International Trade: Do They Matter and What Do We Do About Them?," in Robert Lawrence, Dani Rodrik, and John Whalley (eds.) *Emerging Agenda for Global Trade: High Stakes for Developing Countries*. Washington, D.C.: Overseas Development Council, 1996.

Rodrik, Dani. "Democracies Pay Higher Wages." *The Quarterly Journal of Economics* 114(3) (1999) 707-738.

Schneider, Friedrich and Bruno Frey. "Economic and Political Determinants of Foreign Direct Investment." *World Development* 13(2) (1985) 161-175.

Taylor, Lance. *Income Distribution, Inflation, and Growth*. Cambridge, MA: MIT Press. 1991.

Wheeler, David and Ashoka Mody. "International Investment Location Decisions: The Case of U.S. Firms." *Journal of International Economics* 33(1-2) (1992) 57-76.

World Bank. *Engendering Development: Enhancing Development Through Attention to Gender*. Oxford: Oxford University Press, 2001.

**Figure 1: Inward FDI stock as a percentage of GDP: 1980 to 1998**

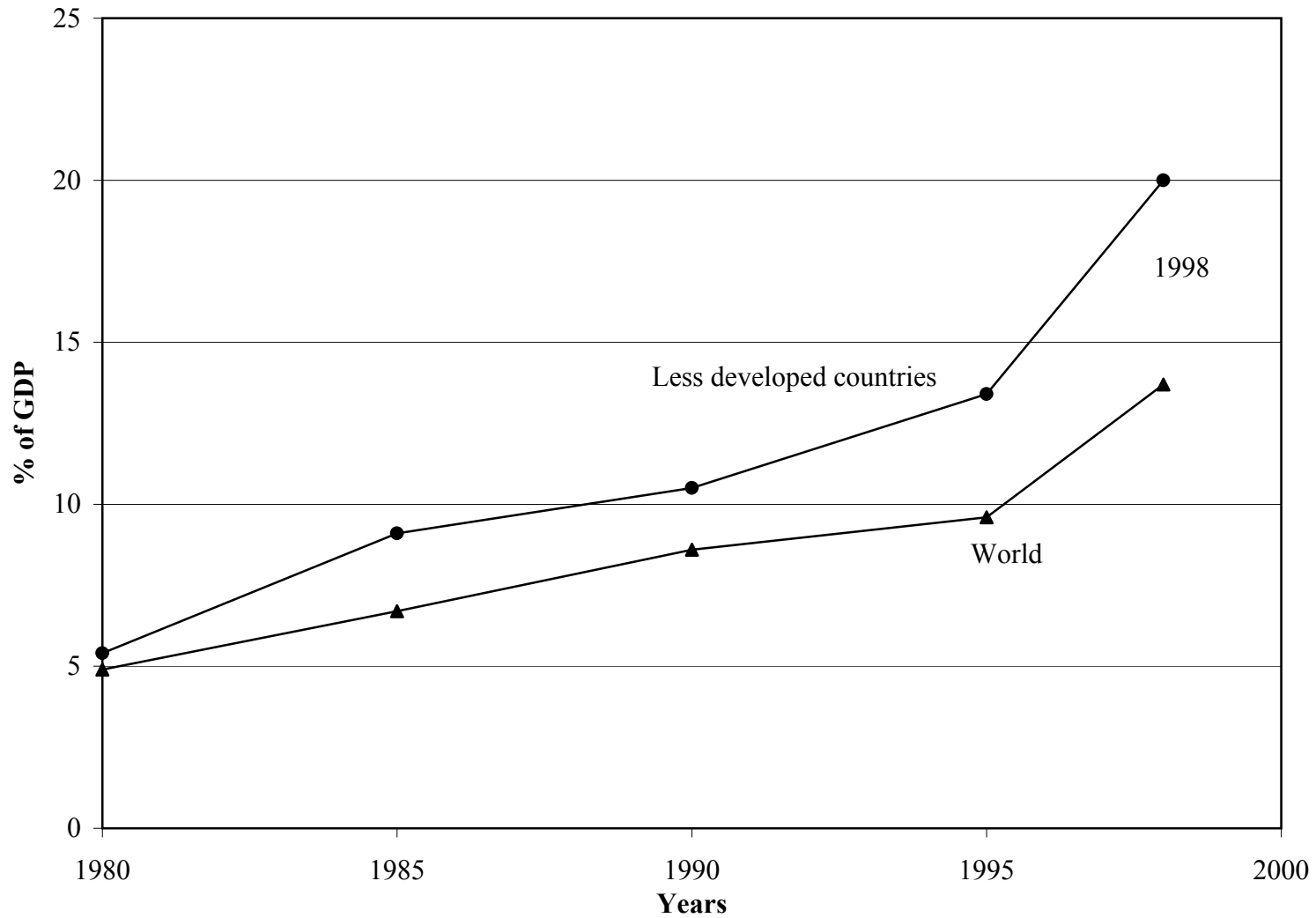
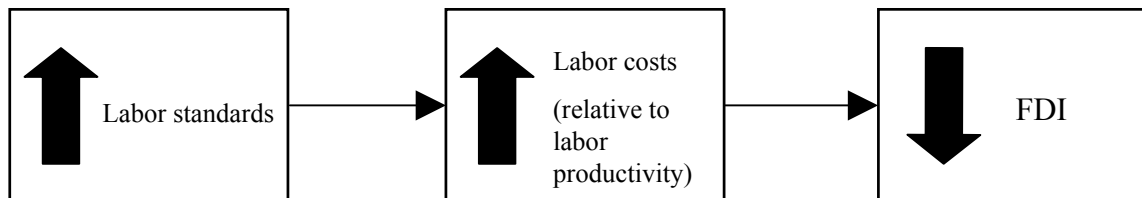
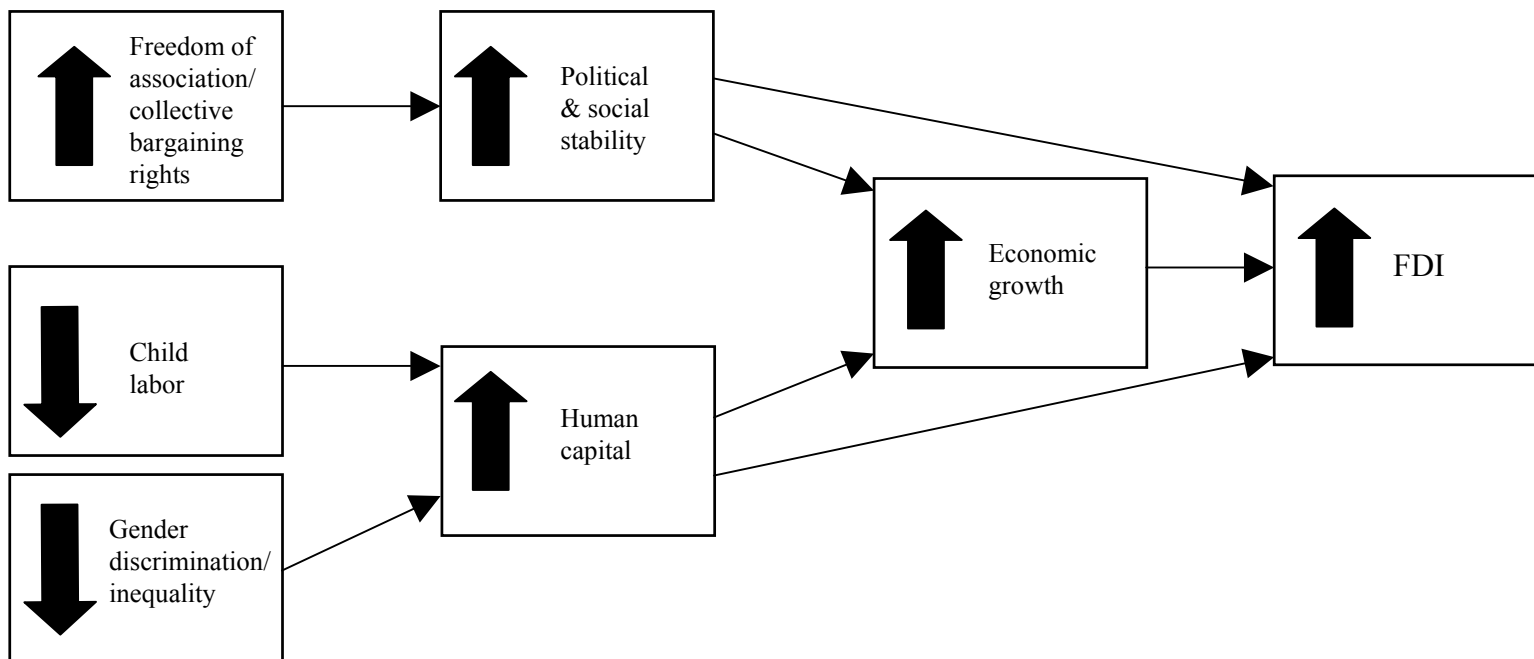


Figure 2: Hypothesized negative and positive effects of higher labor standards on FDI

### Negative effects



### Positive effects



**Table 1: Evaluation criteria for indicator of freedom of association and collective bargaining**

**Thirty-seven evaluation criteria**

---

**Freedom of association/collective bargaining-related civil liberties**

- 1 Murder or disappearance of union members or organizers
- 2 Other violence against union members or organizers
- 3 Arrest, detention, imprisonment, or forced exile for union membership or activities
- 4 Interference with union rights of assembly, demonstration, free opinion, free expression
- 5 Seizure or destruction of union premises or property

**Right to establish and join union and worker organizations**

- 6 General prohibitions
- 7 General absence resulting from socio-economic breakdown
- 8 Previous authorization requirements
- 9 Employment conditional on non-membership in union
- 10 Dismissal or suspension for union membership or activities
- 11 Interference of employers (attempts to dominate unions)
- 12 Dissolution or suspension of union by administrative authority
- 13 Only workers' committees & labour councils permitted
- 14 Only state-sponsored or other single unions permitted
- 15 Exclusion of tradeable/industrial sectors from union membership
- 16 Exclusion of other sectors or workers from union membership
- 17 Other specific de facto problems or acts of prohibition
- 18 Right to establish and join federations or confederations of unions
- 19 Previous authorization requirements regarding above row

**Other union activities**

- 20 Right to elect representatives in full freedom
- 21 Right to establish constitutions and rules
- 22 General prohibition of union/federation participation in political activities
- 23 Union control of finances

**Right to collectively bargain**

- 24 General prohibitions
- 25 Prior approval by authorities of collective agreements
- 26 Compulsory binding arbitration
- 27 Intervention of authorities
- 28 Scope of collective bargaining restricted by non-state employers
- 29 Exclusion of tradeable/industrial sectors from right to collectively bargain
- 30 Exclusion of other sectors or workers from right to collectively bargain
- 31 Other specific de facto problems or acts of prohibition

**Right to strike**

- 32 General prohibitions
- 33 Previous authorization required by authorities
- 34 Exclusion of tradeable/industrial sectors from right to strike
- 35 Exclusion of other sectors or workers from right to strike
- 36 Other specific de facto problems or acts of prohibition

**Export processing zones**

- 37 Restricted rights in EPZs