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Unravelling the `race to the bottom' argument: How does FDI affect different types of labour rights?

Luca Messerschmidt
Nicole Janz

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Unravelling the 'race to the bottom' argument: Foreign direct investment and different types of labour rights

Luca Messerschmidt * Nicole Janz †

Abstract

Does foreign direct investment (FDI) lead to better or worse labour standards in developing countries? We argue that it depends on the type of labour right, and how costly it is to protect it. We propose that governments are likely to follow international pressure and 'climb to the top' of improved labour standards, but only for those rights that do not incur direct costs to foreign investors, such as collective bargaining rights. In contrast, we expect that governments engage in a 'race to the bottom' when it comes to rights that bear immediate costs for firms, such as overtime pay. To test our argument, we use novel data to distinguish between the legal protection of (1) fair working contracts, (2) adequate working time, (3) dismissal protections, which are more costly; versus (4) collective worker representation, and (5) industrial action rights, which are relatively cheaper to grant. Our panel data analysis for 75 developing countries (1982-2010) shows that higher FDI stock and flow is indeed connected to better protection of collective rights, while FDI flow is connected to a decline in relatively expensive outcome rights. These results remain robust across a range of model specifications.

Keywords: Foreign direct investment; worker rights; labour standards; developing countries; working conditions; collective rights

JEL codes: G38, J08, J50, J80, K31, K38

*Hochschule für Politik at the Technical University of Munich (TUM) and the TUM School of Governance, Munich, Germany. Email: luca.messerschmidt@hfp.tum.de.

†School of Politics and International Relations at the University of Nottingham. Address: University Park, Nottingham, NG7 2RD, United Kingdom. Mobile: +44 (0) 7794 441 894. Email: nicole.janz@nottingham.com.

1 Introduction

Multinational corporations (MNCs) and their foreign direct investment (FDI) have gained unprecedented power across the world, with often enormous impact on workers' rights.[1] Globalisation critics have long argued that increasing global FDI has led to a 'race to the bottom' in labour standards because host governments aim to keep costs of labour low to maintain a steady flow of investment into the country (Olney 2013; Drezner 2001). Indeed, reports about low labour standards and worker exploitation in global supply chains persist, especially in developing nations.[2] However, many cross-country studies testing this argument find in fact the opposite: FDI is connected to a 'climb to the top' in labour standards (Mosley and Uno 2007; Mosley 2010; Greenhill et al. 2009; Lim et al. 2015; Kim and Trumbore 2010). Some have argued that the reason for a positive connection between FDI and labour rights is the negative spotlight by NGOs and international organisations which raise reputational costs for investors and governments when exploitative labour conditions are exposed (Barry et al. 2013; Garriga 2016). At the same time, at least one study finds a negative effect of FDI on labour rights (Peksen and Blanton 2017), and some find no significant effect (Neumayer and de Soysa 2006; Adolph et al. 2016; Wang 2018; Blanton and Peksen 2016). The puzzle of FDI's effect on labour rights is therefore still unresolved. In order to further understand the complexity of the FDI-rights nexus, some studies turned towards disaggregating the independent variable, FDI, and examined how different forms of FDI impact labour rights. From these studies we learn that manufacturing investment has a positive effect on labour rights, while service investment has a negative effect (Blanton and Blanton 2012). Foreign investment in the form of joint ventures and greenfield investment improves labour rights, while investment in mergers and acquisitions have no significant effect (Biglaiser and Lee 2019).

We revisit the 'race to the bottom' argument by turning our attention to the outcome variable, labour rights. We propose that the effects of FDI might depend on the particular labour right

[1] Replication materials will be freely accessible and posted to the authors' Dataverse repository.

[2] See recent cases of labour rights violations on the Business & Human Rights Resource Centre's website, available at https://www.business-humanrights.org/en/issues/labour (accessed February 11th, 2021).

in question. We argue that governments are more likely to protect worker rights that are not immediately costly to foreign investors, such as collective labour rights (*core* standards), as it is a relatively cheap way to boost reputation for leaders and foreign investors alike. In fact, most studies that show a positive relationship between FDI and labour rights use collective rights as their outcome measure. In contrast, we expect governments to refrain from protecting those labour rights that bear immediate costs to firms, such as working conditions (*cash* standards), to avoid potential exit threats of foreign investors.

Our study overcomes a key challenge in the existing literature. Most cross-country studies focus on only collective labour rights (Mosley and Uno 2007; Mosley 2010; Greenhill et al. 2009; Blanton and Blanton 2012; Lim et al. 2015; Adolph et al. 2016; Vadlamannati 2015; Biglaiser and Lee 2019; Payton and Woo 2014), while much of the theory and anecdotal evidence, in fact, speak of exploitative working conditions. These studies use a well-established collective worker rights index by Mosley and Uno (2007), which captures unionisation and strike rights in law and practice (1985-2002), but it does not include other workers' rights.

Most of these studies find a positive impact of FDI on rights (Mosley and Uno 2007; Mosley 2010; Greenhill et al. 2009; Lim et al. 2015; Vadlamannati 2015), while some find no significant effect (Adolph et al. 2016; Wang 2018). An alternative measurement of labour rights, the worker rights index from the Cingranelli and Richards' (CIRI) human rights database (Cingranelli and Richards 2010), aggregates all rights into a single index. Studies using the CIRI worker rights index find no significant or positive effects of FDI (Kim and Trumbore 2010; Peksen and Blanton 2017; Blanton and Peksen 2016), and it is likely that collective rights within this index drive these results. Since the CIRI worker rights measure is not available in disaggregated form, and the index by Mosley and Uno (2007) focuses only on collective rights, the literature has stagnated because it is impossible to distinguish between different types of labour rights.

The lack of systematic cross-national data on a wider range of labour rights has hindered theoretical refinement of the 'race to the bottom' argument. Berliner et al. (2015, 97) point out that using collective labour rights as a "catch-all for working conditions" is "largely inappropriate", and might lead to generalisations that all labour rights are affected by FDI in the same way. Neumayer and

de Soysa (2006, 32) highlight that "it is possible that globalization is good for [collective] rights, but not necessarily for outcome-related labour standards" such as working conditions. Davies and Vadlamannati (2013, 12) state that " 'true' labor rights policy consists of both the Mosely index of bargaining rights and another, unobserved measure (such as working conditions)." The lack of cross-country studies on other important issues such as overtime pay, annual leave or dismissal rights constitutes the "greatest barrier to empirical analysis" (Elliott and Freeman 2003, 20).

To overcome these theoretical and empirical challenges, we use a novel labour rights index which distinguishes between the legal protection of fair working contracts, adequate working time, and fair dismissal; in addition to procedural rights such as collective worker representation and industrial action rights, using data which we built from the Labour Regulation Index database published by the Centre for Business Research at Cambridge University (Adams et al. 2017). Our panel data analysis for 75 developing countries (1982-2010) shows that FDI flow and stock is connected positively with the protection of collective labour rights. FDI flow is negatively connected to outcome rights, although these effects are smaller and FDI stock remains insignificant. These results remain robust to a range of model specifications including region and time effects, and different lags. To the best of our knowledge, we present the first theoretical framework and cross-country analysis that demonstrate that how effects of FDI on labour rights vary according to the labour right in question, providing a new perspective on the 'race to the bottom' versus 'climb to the top' theory.

The remainder of the paper is organised as follows: Section two develops new theory on the linkage between FDI and different forms of labour rights, section three introduces the data and models, followed by the results and robustness checks in section four. We conclude by discussing the implications for further research.

The argument about a competitive regulatory 'race to the bottom' rests on the idea that *all* labour rights are costly. Governments who protect labour rights face the risk that foreign investors might withdraw and invest in other countries with lower labour cost (Olney 2013; Drezner 2001). We refine this point and argue that this applies to *some* rights, such as collective labour rights as empirical research has shown (Mosley and Uno 2007; Mosley 2010; Greenhill et al. 2009; Lim et al. 2015; Vadlamannati 2015); but there are other labour rights that might directly raise costs for

foreign investors so hat governments might hesitate to provide strong protections. Our theoretical framework lays out why we believe that the 'climb to the top' theory is more plausible for collective labour standards while the the 'race to the bottom' theory applies to outcome-related rights such as working conditions. Our fundamental approach corresponds roughly to distinctions made in the literature between 'process-related' collective labour standards versus 'outcome' standards such as working conditions (Mosley 2010; Berliner et al. 2015; Barrientos and Smith 2007; Anner 2012). In the economic literature, an analogue distinction is made between 'core' labour rights (e.g. collective rights) versus 'cash' rights (working conditions which might cost companies more 'cash') (Elliott and Freeman 2003; Freeman 1997).

The fact that collective worker rights such as the freedom of association and collective bargaining or the right to strike are generally better protected in countries where FDI is present is relatively undisputed in the literature. These are *core* labour rights are fundamental in determining the relationship between workers and employees as they regulate the tools that workers have to improve their situation via negotiations and strikes (Mosley and Uno 2007). It is true that regulations such as protecting the rights to strike are likely to constitute a risk for MNCs' investments. However, when a government grants the general right to strike or to collectively bargain with employers, it does not automatically mean that this happens. In fact, labour activists often criticise that the protection of collective worker rights means that the burden to improve wider working conditions remains with the employees who may - or may not - choose to collectively bargain. In many cases employees depend on multinational corporations' investment for employment and may have little incentive or power to drive a hard bargain when it comes to their right (Heintz 2004). The labour rights literature routinely points to the mere procedural character of collective worker rights by labelling them 'process-based' or 'enabling' rights (Mosley 2010; Berliner et al. 2015; Barrientos and Smith 2007; Anner 2012). Economists have even gone further and seen these as relatively cheaper worker rights, stressing that collective rights can be granted by governments without immediately risking a massive exit of FDI (Elliott and Freeman 2003; Freeman 1997).

In fact, governments might not only have little to lose, but reputation to gain by protecting collective worker rights. National regulation that protects unionisation and strike rights demonstrates

good practice to the international community, consumers, and NGOs. We know from research about the effects of human rights shaming by NGOs and international organisations that many governments and foreign investors try to avoid the negative spotlight (Spar 1998; Barry et al. 2013; DeMeritt 2012; Garriga 2016; Vadlamannati et al. 2018). One might even go further and argue that protecting collective worker rights with minimal cost offers a "defense against demands from activists in advanced countries for excessive living wages or expensive working conditions" (Elliott and Freeman 2003, 12). We might not go that far, but previous studies in the FDI and labour rights literature that focus on collective worker rights have, not surprisingly, found a positive effect of FDI (Mosley and Uno 2007; Mosley 2010; Greenhill et al. 2009; Lim et al. 2015). We therefore propose, in line with existing findings, that the 'climb to the top' theory is likely to be correct for collective worker rights.

Hypothesis 1: FDI is connected to better protection of collective worker rights such as worker representation and industrial action rights.

In contrast, governments might be less inclined to protect other labour rights. Due to a lack of data, we know little about FDI and working conditions such as working time, overtime pay, annual leave, fair contracts or dismissal protections. Economists have described such standards as 'cash' standards to highlight that they "directly affect labour costs" (Elliott and Freeman 2003, 13) and thus, also potentially affect a country's competitiveness for trade and FDI. When governments legally protect these rights, they might impose immediate and direct costs for foreign investors, who now face a less flexible business environment. It is not up to employees themselves to bargain or strike for these rights, although they can if implementation is lax, but the government sets clear regulation that affects all businesses. The labour rights literature has therefore labelled working conditions as 'outcome' rights because they dictate how much employers must invest into their workers to create certain outcomes (even if employees themselves are unable or unwilling to fight for these rights).

Let's consider one type of outcome labour rights: adequate working time. Governments can set limit for workers' daily and weekly working hours, require that businesses allow adequate

breaks or pay annual holiday. Governments can also forbid excessive overtime hours to protect workers' safety and health, and mandate adequate overtime premia (Davies and Voy 2009, 97). Such working time regulations directly limit businesses' flexibility and raise labour cost. Another example is the protection against unfair dismissal. Governments can regulate the length of the notice period, redundancy compensation, and impose other constraints on dismissal, which incurs costs for foreign investors as they cannot adjust their workforce quickly and flexibly. A third outcome right is the regulation of contracts. This sounds like a technicality, but regulating workers' contracts and the rights of full and part-time employees as well as occasional temporary workers has direct effects on labour cost for firms. 'Typical' working contracts are defined as full-time contracts, where workers are employed with a single employer and enjoy full employee rights such as maternity leave or sick pay in a country (which cost money). A well-known loophole to evade labour law has been the use of 'atypical' workers. It is an increasingly widespread practice of governments to allow flexible, zero-hour or temporary contracts which limit the benefits and rights of workers, such as sick pay or maternity leave. Governments that want to keep labour cost low can allow firms to maintain a large and flexible portion of their workforce on never-ending, cheap atypical contracts, which has been criticised by labour activists in the past (Davies and Voy 2009, 83). It is not surprising that developing and especially least developed countries (LDCs) which heavily depend on foreign capital hesitate to improve regulation for outcome labour rights (Elliott and Freeman 2003, 9).

There is little cross-country evidence about FDI's effects on these labour rights due to a lack of comparable data. However, there is ample anecdotal evidence that governments, if they were to decrease regulation on labour rights, they are likely to hit more expensive outcome rights first. For example, Murillo (2005) points out that the deregulatory reforms in Latin American countries in the 1980s and 1990s mostly affected the laws that protected working conditions, while deregulation of collective labour rights was far less common. Murillo found this to be "consistent with economic pressures because the former has a more direct impact on labour costs than the latter" Murillo (2005, p. 12). Out of this general trend, three countries showed remarkable changes in their labour standards: Colombia and Guatemala (in the early 1990s), and Panama (in the late

1990s), introduced better collective labour rights protection while, during the exact same period, deregulating the protection of workers' conditions. Murillo (2005) concluded that, when faced with economic pressures, working conditions in Latin America seemed to be the first to suffer from the 'race to the bottom' because they were more costly for businesses.
We therefore propose that the 'race to the bottom' theory applies in particular to outcome labour rights such as the regulation of working conditions, rather than to collective rights.

Hypothesis 2: FDI is connected to worse protection of outcome labour standards such as working hours, dismissal rights, and fair contracts.

It should be noted that in our theory we focus on *de jure* labour standards, i.e. laws and regulations, rather than rights protection in practice, as we investigate the *regulatory* race to the bottom argument. A government's laws and regulations give a clear signal to present and future foreign investors about the business environment in a country. De jure rights protection reflects potential risks for foreign investors who might be held accountable in courts or be shamed by activists if they break the home country's laws. Therefore, labour regulation is a crucial component in businesses' decisions about investment locations and withdrawal - as regulations clearly indicate the legal context and business environment in which firms and employees act (Berliner et al. 2015).

2 Data and Methods

2.1 Dependent variable

We measure the legal protection of a range of of labour rights categories, distinguishing between collective labour standards (worker representation and industrial action rights) versus outcome standards (working hours, dismissal rights, and fair contracts). Our analysis includes annual observations from up to 75 developing countries between 1982 and 2010.
To construct our dependent variable, we use the Labour Regulation Index (LRI) database from the Centre for Business Research at Cambridge University (Adams et al. 2017).[3] The database

[3]The codings are based on laws, relevant court decisions (including statutory law and case law), and also

provides detailed information on the legal protection of labour standards around the world. It originally consists of 40 separate indicators, each reflecting an aspect of labour law per country and year.[4] The database is increasingly used in legal studies and economics, e.g. to assess the impact of employment protection legislation on economic outcomes (Adams et al. 2019; Ferreiro and Gomez 2019; Blanton and Peksen 2019).

We use the 40 indicators to create a labour standards measure on three levels of aggregation (see Table 1).

First, we grouped the 40 raw items into five separate categories to create the following variables: (1) fair working contracts, (2) adequate working time, (3) dismissal protections, (4) collective worker representation, or (5) industrial action rights (see Level 3 in Table 1). Each of these categories was built from between seven and nine original items that relate to particular aspects of labour rights. Following the recommendation from the Centre for Business Research, we took the average rather than creating an additive measure, because some of the variables contain more items than others. A full list of the 40 items, and how we grouped them into our variables, can be found in the Appendix (Table A4).

Second, since we are particularly interested in collective versus outcome rights, we use these five variables to build two overarching variables –collective rights versus outcome rights – which allow us to examine if there is an overall difference between these different types of rights as proposed in Hypothesis 1 and 2. The collective rights variable is the average of collective worker representation and industrial action rights. The outcome rights variable is the average of fair working contracts, adequate working time, and dismissal protections (see Level 2 in Table 1).

Third, we combine all categories into one overall labour standards index, again by taking the average, which allows us to assess overall effects and compare these with other studies on labour rights (see Level 1 in Table 1).

We will enter our labour rights measure as dependent variables into our models at the three levels

include administrative regulation and collective agreements whenever they are widely binding and serve as 'functional equivalents' to statutes or court decisions. We thank Simon Deakin from the Centre for Business Research at Cambridge University for providing and explaining the raw data. The data can be found at: https://www.repository.cam.ac.uk/handle/1810/263766 (accessed 02 March 2020).

[4]The database was designed so that researchers can use the data at various levels of aggregation and create (weighted) composite indices from the individual indicators.

Table 1: Three levels of aggregation of our labour standards measure

Level 1	**Level 2**	**Level 3**
Overall labour standards	Collective rights	(1) Collective worker representation (2) Industrial action rights
	Outcome rights	(3) Fair working contracts (4) Adequate working time (5) Dismissal protections

of aggregation separately.

Since the five categories have not been examined separately in the FDI and labour rights literature, we describe here what each of them captures and which weights we applied (see also Table A4 in the Appendix). Each of our labour standards variables is, as are the original indicators, scored between 0 and 1, whereby 1 denotes full protection; 0 no protection; and intermediate values in between 0 and 1 reflect differences in the strength of the respective laws per country-year.

The variable *working contracts* captures if part-time, flexible and agency workers have the right to equal treatment similar to 'typical' workers with a permanent contract. The variable also includes the extent to which governments limit the use of fixed-term contracts in the first place, e.g. if fixed-term contracts are only allowed for work that is actually temporary by nature (e.g. maternity replacement), and if there is a maximum duration of fixed-term contracts before the employment is deemed to be permanent.

The category *working time* measures different dimensions that regulate working time, such as the strength of the legal protection of annual leave and public holiday entitlements; the duration of the normal working week and day; limits to overtime and weekend working hours; and the payment of overtime premia.[5]

Fair dismissal includes the length and regulation of notice periods given to workers; redundancy compensation; and if there are any constraints on dismissal that hold employers to account if the dismissal was unjust. It also captures if there are rules for redundancy selection (e.g. if the employer must follow priority rules based on number of dependants of an employee).

[5]For example, annual paid leave of 30 days and working weeks of 35 hours, as well as work days of up to 8 hours are seen as best practice and achieve higher scores.

Collective worker representation includes the legal right to unionisation, the right to collective bargaining, and if employers have the legal duty to bargain with workers. It also captures if the law extends collective agreements to third parties, e.g. non-union members and if the law permits closed shops, gives unions or workers the right to nominate board-level directors in companies, and if works councils or enterprise committees have legal powers of co-decision making. Following a similar procedure conducted by Mosley and Uno (2007), we have weighted two of the seven raw indicators within this variable - the right to unionisation and the right to collective bargaining - with a factor of 2.5 to account for the relative importance governments granting these particular rights in the first place. [6]

Industrial action rights contain the right to industrial action in general, and more specifically what types of strikes are allowed. For example, if the government grants the right to unofficial industrial action (e.g. 'wildcat' strikes) or if it allows strikes over political issues. The variable also captures legal restrictions on running strikes, such as a notification period or compulsory arbitration before strikes can start, if lockouts are forbidden, or if employers are permitted to hire replacement workers during strikes. The variable consists of nine averaged indicators, out of which we weighted the general right to industrial action with a factor of 2.5 to account for its importance.

As mentioned above, each of our labour standards variables is, as are the original indicators, scored between 0 and 1, whereby 1 denotes full protection; 0 no protection; and intermediate values in between 0 and 1 reflect differences in the strength of the respective laws per country-year. For comparability, we normalised the weighted variables between the 0 to 1 range. More details of our index construction are in the Appendix, Table A4.

Our labour standards variables are an important improvement over existing measures because they allows us to distinguish between different types of rights. Our measure is distinct from the existing index of collective worker rights by Mosley and Uno (2007) and the worker rights variable by Cingranelli and Richards (2010), which contains a range of labour rights only in one aggregated

[6] Mosley and Uno (2007) have weighted these two indicators with a factor of 10, among overall 21 indicators in the *de jure* version of their collective labour rights measure. We feel that a factor of 2.5 (less than half) among seven indicators represents a relatively conservative weighting procedure.

index.[7] Instead, we measure each labour standard separately, which allows a comparison of FDI's effects on different rights, in particular, the commonly neglected outcome rights.

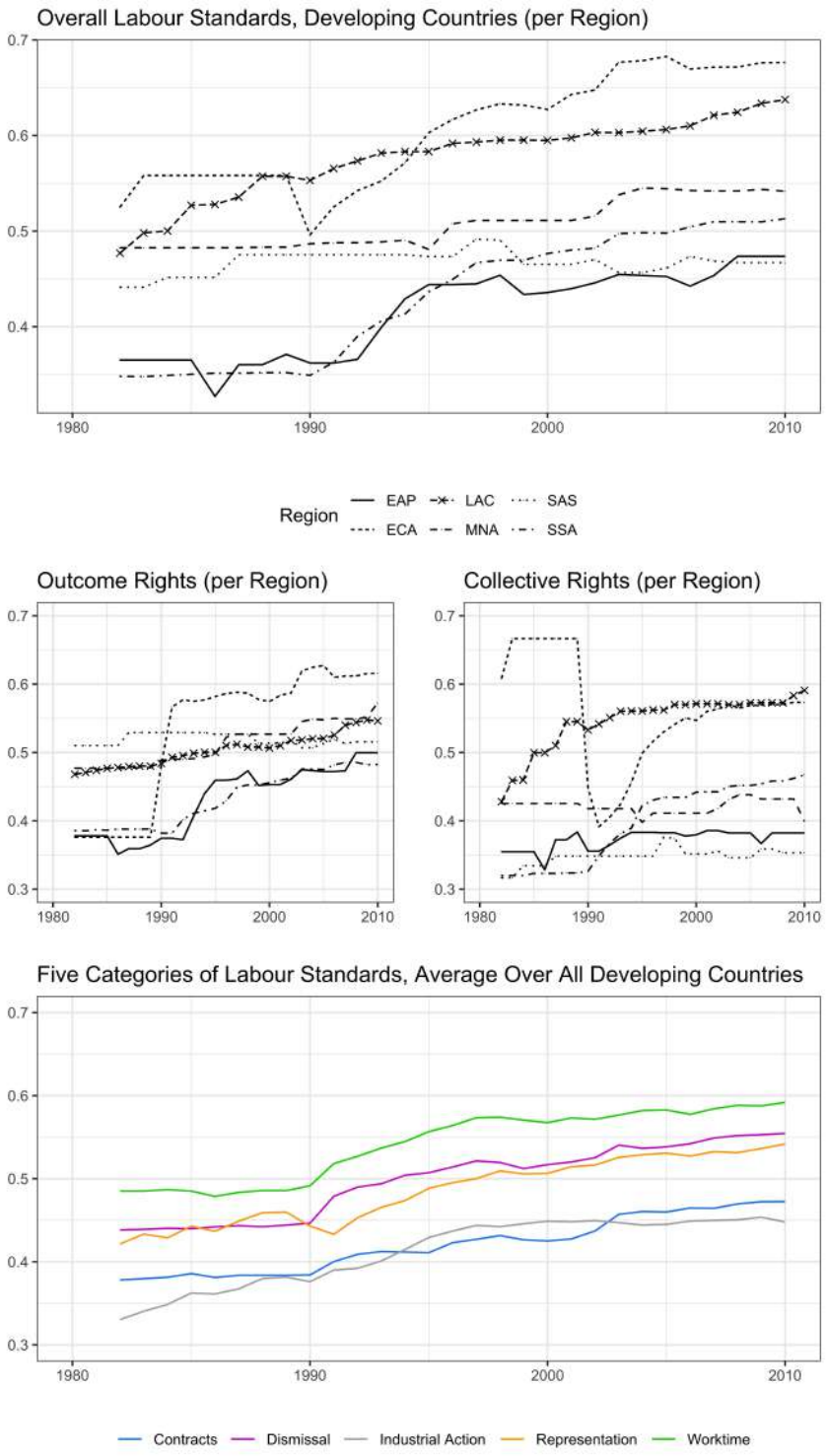
As mentioned before in the theory section, we focus on de jure rights. As well as being a good fit for our theory, measuring regulations has also the advantage that such data tends to be more reliable than hand-coding of de facto rights violations from NGO or government reports, which might carry bias (Berliner et al. 2015) or suffer from underreporting (Mosley 2010, 100).

Figure 1 provides an overview over our measure by region, labour right, and across time for 75 developing countries. On the whole, labour rights are best protected in Europe, Central Asia and Latin America. The Sub-Saharan African and East Asian Pacific regions improved the legal protection of labour rights in the mid-1990s but still lag behind. We also see that the protection of outcome standards (middle left) as well as collective standards (middle right) has improved over time in many regions, although there are still differences, and our analysis will examine which role FDI plays in this. Finally, the protection of our five categories of labour standards, averaged over all developing nations, has improved over time, but at different levels. For example, we see that collective worker representation in the form of unions is relatively well protected, but industrial action rights, which aim to utilize collective bargaining powers, lag behind. Work time and dismissal rights are better protected by the law if we take the average over all developing nations; it will be interesting to assess how FDI and GDP growth, which vary considerably across countries, influence these trends. Further, our correlation matrix (Table A3 in the Appendix) shows that the respective types of labour standards are mostly positively correlated with each other.

2.2 Independent Variables

The key independent variables of interest are FDI stock and FDI flow relative to GDP (logged) which we take from the United Nations Conference on Trade and Development (UNCTAD). FDI stock reflects the lasting impact of investment accumulated in a country over time, indicating the

[7] Bivariate correlations reflect the differences between our and existing measurements. The correlation between our overall index and the CIRI worker rights index is 0.18; the correlation between our overall index and Mosley's de jure measurement of collective rights is 0.25.



Top: Average over all labour standards by region. **Middle**: Average protection of outcome standards such as fair contracts, dismissal and work time (left) versus collective worker rights (right) per region. **Bottom**: Five categories of labour standards separately, average over all developing nations. Regions as defined by the World Bank: East-Asian Pacific (EAP), Europe & Central Asia (ECA), Latin America (LAC), Middle East & North Africa (MNA), South Asia (SAS), Sub-Saharan Africa (SSA). Higher values indicate better protection.

Figure 1: Labour standards protection in developing countries over time (1980-2010)

leverage of foreign investors over governments in shaping public policy (Neumayer and de Soysa 2006). FDI flow captures new investment and tells us more about annual, immediate influences on labor rights policy, so that we expect the impact of FDI flow to be more pronounced (Mosley and Uno 2007). The previous literature has used both measures in the past (Neumayer and de Soysa 2006; Lim et al. 2015; Mosley and Uno 2007; Greenhill et al. 2009; Blanton and Blanton 2012; Wang 2018; Blanton and Peksen 2016; Peksen and Blanton 2017), and we therefore employ both versions here.

Following previous studies (see e.g. Neumayer and de Soysa 2005, 2006; Mosley and Uno 2007; Blanton and Blanton 2012), we employ control variables for trade, democracy, GDP growth, conflict, population size and region dummies. *Trade* is measured by the sum of a country's total trade (import and export) relative to GDP. Together with FDI, trade is often used as a proxy for economic globalization. It captures the effects on labour rights protection via a reduction of tariffs and non-tariff trade barriers. The trade variable is taken from the World Bank Indicators database and logged. Trade has shown to produce mixed results in previous studies on collective labour rights protection (Peksen and Blanton 2017; Kim and Trumbore 2010; Mosley and Uno 2007).

The *democracy* variable indicates whether a country has established democratic institutions, rule of law and a good governance structure. It has been shown that democratic countries protect rights better (Mosley and Uno 2007; Neumayer and de Soysa 2006; Lim et al. 2015; Vadlamannati 2015). The variable captures larger differences in political regimes and reflects the general ability of workers to demand protection (Mosley and Uno 2007). The democracy variable is taken from the Polity IV measure of democracy and ranges from -10 (most autocratic regime) to 10 (most democratic).

Economic growth is measured by the annual growth of GDP per capita (logged). It is often argued that level of labour standards and human rights protection improve with higher economic growth of a country because rich countries can afford to grant such rights (Elliott and Freeman 2003; Lim et al. 2015); also, in wealthier countries workers might have greater opportunities for political participation (Mosley and Uno 2007). We measure the annual change of GDP per capita taken

from the World Bank Indicators database.

The *conflict* variable measures whether a country was involved in a domestic or international conflict during a given year (1=occurrence of domestic or international conflict, 0=no conflict). The variable is taken from the UCDP/PRIO Armed Conflict Dataset (PRIO 2014). Although the protection of worker rights has been shown to decline during conflict periods (Mosley and Uno 2007), we would expect a smaller effect or no effect when it comes to our *de jure* measurement, as it is unlikely that government policies towards legal protection of workers suddenly change during conflict time.

Population contains the number of people living in a country. Countries with a larger population have been shown to exhibit a decline in rights protection (Poe et al. 1999; Mosley and Uno 2007; Kim and Trumbore 2010; Greenhill et al. 2009; Blanton and Peksen 2016). The population variable is taken from the World Bank Indicators database and logged.

Following Neumayer and de Soysa (2006), Biglaiser and Lee (2019), and Mosley and Uno (2007), we include *region dummies* to control for regional characteristics in labour rights standards. Labor rights have historically been worse in some regions such as in Sub-Saharan Africa, Latin America Caribbean, and the Middle East and North Africa (Biglaiser and Lee 2019), and there might be peer effects where labour standards diffuse within neighboring countries (Davies and Vadlamannati 2013). We include dummies for East Asia, Europa and Central Asia, Latin America and Caribbean, Middle East and North Africa, South Asia, and Sub-Saharan Africa.

Table A5 in the Appendix provides a descriptive summary of the dependent and independent variables. An overview over all variables and their sources is in Table A2 in the Appendix.

2.3 Models

The main models are estimated using a time fixed effects panel regression with regional dummies and panel-corrected standard errors clustered by time (Beck and Katz 1995).[8]. Following conven-

[8]To decide between fixed or random effects in our panel data analysis we ran a Hausman test where the null hypothesis is that the preferred model is random effects vs. the alternative the fixed effects; the test indicated that fixed effects are more suitable (Greene 2008, Ch. 8). The Lagrange Multiplier Test for the necessity of time effects (Breusch-Pagan) indicated time fixed effects are appropriate (Breusch and Pagan 1980). A test for heteroskedasticity recommends including panel corrected standard errors to make the coefficients more robust (Breusch and Pagan

tion, we include a one-year lag between the dependent variables and the predictors to allow the effects of FDI stock and FDI flow to spread, and we extend the lag in our robustness section. The data set ranges from 1982 to 2010 for up to 75 developing countries (see a list of all countries in the Appendix, Table A18). Three main sets of models are estimated: the first set of models includes our overall labour rights measure as a dependent variable; second, we distinguish between outcome versus collective worker rights; third, we disaggregate our labour rights measure into the five categories. For all these models we employ FDI stock versus FDI flow respectively to capture potential differences between long-term accumulated investment (stock) versus recent annual investment in a country (flow).

3 Results

For FDI stock we find a positive and significant relationship between FDI and overall labour standards, while FDI flow remains insignificant (see Table 2, columns 1 and 4). This corresponds to much of the existing literature, the majority of which supports the 'climb to the top' theory (e.g. Mosley and Uno 2007; Lim et al. 2015). Since our overall measure includes a range of outcome and collective labour rights, it might well be that the positive coefficient is driven by the collective labour rights component in the overall index. Therefore, we next distinguish between outcome versus collective rights as our outcome variables.

As Table 2 shows, FDI stock and FDI flow are positively and significantly related to collective labour rights, i.e. the legal protection of unionisation and industrial action rights (columns 2 and 5). With this result in line with much of the existing findings from studies which concentrate on collective labour rights (e.g. Lim et al. 2015; Mosley and Uno 2007). Governments might engage in a 'climb to the top' of these rights because they are not directly and immediately costly to investors as we proposed in Hypothesis 1.

Turning to our measure of outcome labour standards, both FDI stock and FDI flow have negative coefficients, but only the coefficient of FDI flow is significant (columns 3 and 6), indicating that governments might be more reactive to new and recent investment flows into the country (Mosley

1979)

and Uno 2007), rather than FDI stock which has been present for a longer period. The coefficients are further visualised with 90 and 95 percent confidence intervals in Figure 2. The results partially (for the case of FDI flow) support our expectation in Hypothesis 2, for which we had argued that outcome standards are more expensive to protect; governments might try to avoid that new investors threaten withdrawal. The first core result of our study is, therefore, that different labour standards are differently connected to FDI.

Table 2: FDI stock and flow, overall labour standards and 'outcome' versus 'collective' rights (1982-2010) for developing nations, time fixed effects panel regression with regional dummies and panel-corrected standard errors clustered by time.

	Dependent variable:					
	Overall	Collective	Outcome	Overall	Collective	Outcome
	(1)	(2)	(3)	(4)	(5)	(6)
Log FDI stock/GDP	0.002**	0.005***	−0.001			
	(0.001)	(0.001)	(0.001)			
Log FDI flow/GDP				−0.001	0.003***	−0.004***
				(0.001)	(0.001)	(0.001)
Log Trade	−0.009*	−0.008	−0.004	−0.008*	−0.011	−0.002
	(0.005)	(0.006)	(0.004)	(0.005)	(0.007)	(0.004)
Log GDP Growth	0.016	0.021	0.005	0.028	0.023	0.018
	(0.027)	(0.025)	(0.023)	(0.026)	(0.025)	(0.021)
Log Population	−0.005**	−0.011***	0.002	−0.006***	−0.012***	0.002
	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.001)
Democracy	0.004***	0.006***	−0.0001	0.004***	0.006***	0.0001
	(0.0004)	(0.001)	(0.0004)	(0.0004)	(0.001)	(0.0003)
Conflict	0.037***	0.058***	0.001	0.038***	0.061***	−0.00002
	(0.010)	(0.011)	(0.006)	(0.010)	(0.010)	(0.006)
ECA	0.168***	0.132***	0.119***	0.164***	0.128***	0.118***
	(0.005)	(0.007)	(0.004)	(0.005)	(0.009)	(0.003)
LAC	0.149***	0.157***	0.071***	0.146***	0.152***	0.071***
	(0.005)	(0.009)	(0.007)	(0.004)	(0.009)	(0.007)
MENA	0.096***	0.084***	0.060***	0.096***	0.090***	0.055***
	(0.007)	(0.007)	(0.006)	(0.007)	(0.007)	(0.006)
SA	0.033***	−0.025***	0.065***	0.026***	−0.031***	0.062***
	(0.009)	(0.008)	(0.012)	(0.009)	(0.008)	(0.011)
SSA	0.003	0.036***	−0.025***	0.001	0.038***	−0.029***
	(0.006)	(0.009)	(0.005)	(0.005)	(0.008)	(0.005)
Observations	1 770	1 770	1 771	1 785	1 785	1 786
R^2	0.313	0.305	0.196	0.305	0.301	0.204
Adjusted R^2	0.298	0.290	0.179	0.290	0.286	0.187
F Statistic	1 500.385*** (df = 11; 1732)	527.776*** (df = 11; 1732)	417.926*** (df = 11; 1733)	1 156.547*** (df = 11; 1747)	298.836*** (df = 11; 1747)	387.814*** (df = 11; 1748)
Note:						*p<0.1; **p<0.05; ***p<0.01

We now disaggregate our labour rights measures further into the five categories: representation, industrial action, contracts, work time and dismissal protection. The results are generally consistent with our hypotheses (see Tables 3 and 4). The coefficients for FDI stock and FDI flow and two types of collective standards, i.e. representation and industrial action, are generally positive and significant (Table 3 column 1, Table 4, columns 1-2), with the exception that FDI stock is not significantly related to industrial action rights (column 2 in Table 3). This is in line with our hypothesis 1 and the literature on collective labour rights. Turning to the three outcome rights, higher FDI stock is significantly connected to lower protections of working time (Table 3 column 4), while the coefficient remains insignificant for contract rights and dismissal protections (Table 3 columns 3 and 5). The results for FDI flow are more pronounced than for stock, as it is negatively and significantly connected to all three outcome rights: contract regulation, working time, and dismissal (Table 4 columns 3-5), clearly indicating that annual investment flows are related to lower de jure rights protection as we expected in hypothesis 2. The coefficients are further visualised with 90 and 95 percent confidence intervals in Figure 2.

The majority of the control variables show the expected results. Growth as well as democracy are connected to better labour standards. Trade is negatively connected to labour standards in our models as expected Mosley and Uno (2007). Population size shows volatile coefficients across our models. Conflict surprisingly has a positive coefficient, even though much of the human rights literature finds that conflict is related to a decline in human rights. It could well be that conflict-ridden countries still maintain their levels of labour rights protection de jure, while the situation looks different for de facto protection (which we do not measure).

3.1 Robustness

We conducted a range of robustness checks to (1) include different time lags, (2) address variation in our labour rights variable, (3) use an unweighted version of our labour standards measure, (4) include two-sided fixed effects, (5) address the potential interrelationship between collective rights and outcome standards, (6) employ a fractional logit regression, (7) replace FDI flow with

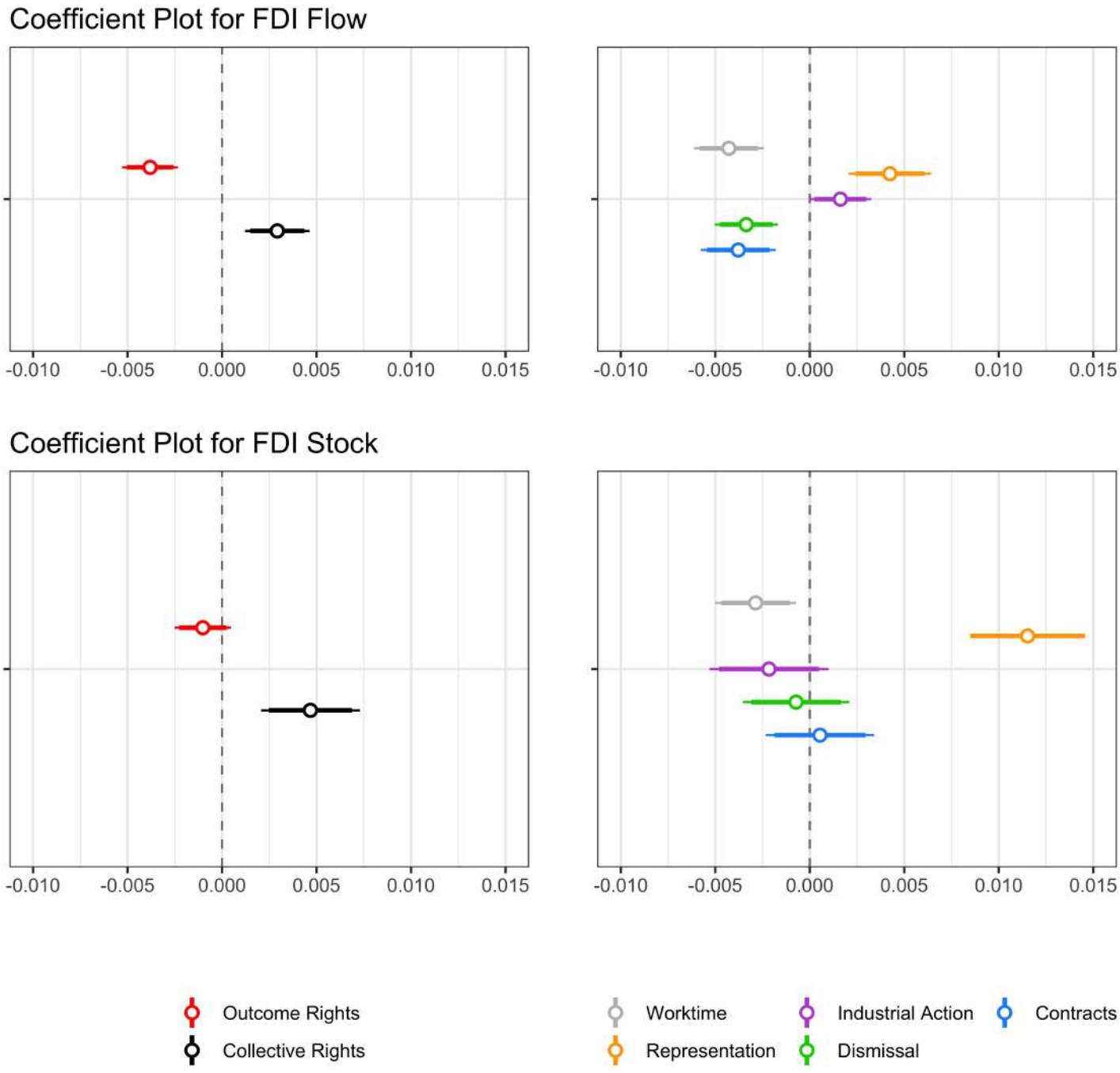


Figure 2: Coefficient plot of FDI flow (top) and stock (bottom) effects on collective and outcome labour standards as well as on the five categories with 90 and 95 percent confidence intervals.

Table 3: FDI stock and five categories of labour standards (1982-2010) for developing nations, time fixed effects panel regression with regional dummies and panel-corrected standard errors clustered by time.

	Dependent variable:				
	Representation	Industrial Action	Contracts	Worktime	Dismissal
	(1)	(2)	(3)	(4)	(5)
Log FDI stock/GDP	0.012***	−0.002	0.001	−0.003***	−0.001
	(0.002)	(0.002)	(0.001)	(0.001)	(0.001)
Log Trade	−0.025***	0.009	−0.079***	0.066***	−0.0001
	(0.009)	(0.007)	(0.012)	(0.007)	(0.006)
Log GDP Growth	0.007	0.035	−0.030	0.006	0.039*
	(0.028)	(0.031)	(0.037)	(0.031)	(0.023)
Log Population	−0.0003	−0.022***	−0.005*	0.028***	−0.016***
	(0.003)	(0.002)	(0.003)	(0.003)	(0.002)
Democracy	0.008***	0.005***	0.001	−0.003***	0.002*
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Conflict	0.070***	0.046***	0.003	0.007	−0.006
	(0.013)	(0.009)	(0.013)	(0.009)	(0.008)
ECA	0.056***	0.209***	0.119***	0.128***	0.109***
	(0.010)	(0.007)	(0.008)	(0.006)	(0.006)
LAC	0.144***	0.170***	0.111***	0.033***	0.069***
	(0.014)	(0.007)	(0.012)	(0.010)	(0.010)
MENA	0.067***	0.102***	0.018**	0.088***	0.074***
	(0.011)	(0.008)	(0.008)	(0.009)	(0.013)
SA	−0.062***	0.011	−0.091***	0.178***	0.109***
	(0.010)	(0.010)	(0.022)	(0.008)	(0.011)
SSA	0.032**	0.040***	−0.005	−0.005	−0.065***
	(0.015)	(0.006)	(0.011)	(0.010)	(0.009)
Observations	1 770	1 771	1 771	1 771	1 771
R^2	0.223	0.268	0.155	0.193	0.232
Adjusted R^2	0.206	0.252	0.137	0.176	0.215
F Statistic	341.054*** (df = 11; 1732)	1 002.759*** (df = 11; 1733)	737.011*** (df = 11; 1733)	1 656.605*** (df = 11; 1733)	184.685*** (df = 11; 1733)

Note: *p<0.1; **p<0.05; ***p<0.01

a dummy indicating if FDI entered a country or not, (8) use non-OECD countries instead of developing nations. The results remain largely the same. First, we extended the one-year lag of the main model and applied two and three year-lags. Although a one-year lag between independent and dependent variable seems reasonable for governments to react on changes in FDI (see Kim and Trumbore 2010), the effects might differ when more time has passed. We find that most results and the model fit remain stable across one-, two-, and three-year lags (see Appendix Tables A8 and A9). Second, following Neumayer and de Soysa (2006), we transformed our dependent and independent variables into three-year averages because de jure labour rights display limited annual

Table 4: FDI flow and five categories of labour standards (1982-2010) for developing nations, time fixed effects panel regression with regional dummies and panel-corrected standard errors clustered by time.

	Dependent variable:				
	Representation	Industrial Action	Contracts	Worktime	Dismissal
	(1)	(2)	(3)	(4)	(5)
Log FDI flow/GDP	0.004***	0.002*	−0.004***	−0.004***	−0.003***
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Log Trade	−0.022***	0.0004	−0.075***	0.065***	0.004
	(0.008)	(0.007)	(0.010)	(0.007)	(0.006)
Log GDP Growth	0.018	0.028	−0.015	0.025	0.045**
	(0.027)	(0.031)	(0.034)	(0.029)	(0.021)
Log Population	−0.001	−0.024***	−0.007***	0.027***	−0.015***
	(0.003)	(0.002)	(0.002)	(0.002)	(0.002)
Democracy	0.008***	0.005***	0.001*	−0.003***	0.002**
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Conflict	0.074***	0.047***	0.001	0.008	−0.009
	(0.013)	(0.010)	(0.013)	(0.009)	(0.007)
ECA	0.049***	0.207***	0.117***	0.127***	0.109***
	(0.013)	(0.007)	(0.008)	(0.006)	(0.006)
LAC	0.144***	0.161***	0.111***	0.030***	0.071***
	(0.014)	(0.007)	(0.011)	(0.009)	(0.010)
MENA	0.079***	0.100***	0.014**	0.080***	0.072***
	(0.011)	(0.008)	(0.006)	(0.010)	(0.013)
SA	−0.075***	0.013	−0.095***	0.175***	0.107***
	(0.010)	(0.009)	(0.022)	(0.006)	(0.011)
SSA	0.036***	0.040***	−0.009	−0.009	−0.069***
	(0.013)	(0.006)	(0.011)	(0.010)	(0.008)
Observations	1 785	1 786	1 786	1 786	1 786
R^2	0.211	0.267	0.157	0.198	0.238
Adjusted R^2	0.194	0.251	0.140	0.181	0.222
F Statistic	235.818*** (df = 11; 1747)	954.631*** (df = 11; 1748)	1 008.922*** (df = 11; 1748)	1 785.634*** (df = 11; 1748)	230.024*** (df = 11; 1748)

Note: *p<0.1; **p<0.05; ***p<0.01

variation. The results show no substantial changes to the main findings (see Appendix Tables A10 and A11). Third, we removed the weights included in the construction of our labour rights index, finding generally similar effects (see Appendix Table A16). Fourth, we included both time and country dummies (two-way fixed effects), which does not substantially change our results (see Table A6 and A7). The inclusion of fixed effects has been seen critical because many independent variables remain relatively similar over time so that "the inclusion of fixed effects would greatly dilute the implied importance of these variables" (Mosley and Uno 2007, 936). We therefore decided to follow the convention in the literature and present region dummies instead of country

fixed effects in our main models (see Neumayer and de Soysa 2006; Mosley and Uno 2007; Biglaiser and Lee 2019).

Fifth, it has been argued that the protection of collective standards might influences future regulation of outcome standards, and vice versa (Berliner et al. 2015). This interrelationship argument has not been tested in in the literature due to a lack of systematic data. While this is not our focus, we have addressed this in a preliminary analysis. For the models using outcome standards as dependent variable we now included collective rights as control; and for models with collective standards we included outcome rights. The results for FDI flow and FDI stock remain generally similar. We also find that both types of rights seem to positively reinforce each other, displaying positive and significant associations (see Appendix A13).

fSixth, we employed a fractional logit regression because our labour rights indices range between 0 and 1 (with intermittent scores in between); some of the scores are, for some cases, relatively time invariant. The results stay largely unchanged (see Appendix Tables A14 and A15). Seventh, we account for the volatility of FDI flow over time and country by introducing a dummy variable that indicates whether FDI entered a country (yes=1) or not (0) by recoding our FDI flow variable (see Kim and Trumbore 2010). As Table A17 in the Appendix shows, the coefficients' sizes are slightly larger, while the direction and significance remain the same. Finally, we changed the case selection from developing countries to non-OECD countries to compare our results with samples used in some other studies (see Janz 2018; Kim and Trumbore 2010). We find that for non-OECD countries the main effects for FDI are stable (see Appendix Table A12), while a few of the control variables' coefficients change, possibly due to the inclusion of wealthier non-OECD countries.

4 Conclusion

The purpose of this study was to unravel the regulatory race to the bottom theory and to assess the effects of FDI on different types of labour standards. We made three main contributions to the literature. First, we presented new theory about FDI and labour standards which focuses on implications of potential benefits and losses when governments regulate particular rights. Second,

we presented a new cross-national index that goes beyond common measures of collective labour standards. Third, we used this data to systematically distinguish between FDI effects on collective rights versus outcome rights such as working conditions. Our results show that FDI flow and stock is connected to better protection of collective worker rights, confirming much of the existing literature (e.g. Mosley and Uno 2007; Greenhill et al. 2009; Lim et al. 2015). We argue that such rights are relatively cheap to protect because they are not immediately costly to foreign investors which makes withdrawal threats unlikely. Governments might even gain reputational benefits by protecting unionisation and strike rights. The climb to the top effect is, in a way, a relatively 'cheap climb' when it comes to collective rights. The second major finding shows that FDI flow is connected to worse protection of outcome standards such as working hours or fair contracts (and FDI stock to some degree as well). Such outcome-related rights can directly raise costs for foreign investors, and might thereby increase the likelihood of a loss of FDI. This indicates that the well-known race to the bottom argument by globalisation sceptics applies first and foremost to outcome related labour standards, which are sometimes called 'cash' rights in the economic literature, so that we might speak of a 'cash race-to-the-bottom'.

Our study focused on *de jure* rights, but in future research would also be interesting to measure the *de facto* protection of a wider range of worker rights. For example, Payton and Woo (2014) provided evidence that better labour regulation improves protection in practice; but their study focuses only on collective rights. We do not know if there is a gap between other types of de jure worker rights and their enforcement in the presence of FDI. Especially when it comes to working conditions such a gap might be considerably larger. Future research would have to provide such de facto data to assess this question.

Further, it would be interesting to analyse if the relative costliness of particular labour rights varies by type of investment, following other studies that disaggregate FDI into sectors (Blanton and Blanton 2009; Janz 2018; Vadlamannati et al. 2020). A few studies have examined different forms of FDI and collective labour rights (Biglaiser and Lee 2019; Blanton and Blanton 2012) but we are not aware of cross-national studies focusing on FDI across industry sectors an the protection of working conditions.

Another fruitful avenue for future work relates to mutual dependence between labour rights. Our robustness check has indicated that different labour rights might positively reinforce each other. Future research could examine the argument about the interdependence of labour rights (Mosley and Uno 2007; Berliner et al. 2015) in more detail. Do process-related labour rights such as collective bargaining and unionisation create sufficient leverage for workers to demand improvements in laws about working conditions? Under which domestic and international conditions are such improvements likely, and how long does it take?

Finally, our research speaks to the literature on the repressive repertoire and policy substitution effects. Recent evidence suggests that governments strategically protect some human rights, but still violate other rights instead (DeMeritt and Conrad 2019; Payne and Abouharb 2016). Wang (2020) shows that states under competitive pressure tend to substitute a reduction of labour standards with forming Preferential Trade Agreements instead where they can determine labour rights bilaterally. Our results indicate that similar substitution effects might exist for labour standards, where governments protect some worker rights when it is beneficial, but not necessarily others, in the presence of FDI. Future work might explore such substitution effects across labour standards in more detail, and our study provides the data necessary to open up these new research avenues.

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Appendix

Table A1: Previous findings on effects of FDI on labour rights

Article	Measure for Labour Rights	Measure for FDI	Effect
Mosley & Uno 2007	FACB rights (own index)	FDI stock & FDI flow	none (stock); positive (flow)
Neumayer & de Soysa 2006	FACB rights (own index)	FDI stock/GDP	none
Greenhill, Mosley & Prakash 2009	FACB rights from Mosley & Uno (2007)	FDI flow/GDP	positive
Blanton & Blanton 2012	FACB rights from Mosley & Uno (2007)	FDI flow in Manufacturing vs. Service sectors	positive (manuf.); negative (service)
Lim, Mosley & Prakash 2015	FACB rights from Mosley & Uno (2007)	FDI stock/GDP	positive
Adolph, Quince & Prakash 2016	FACB rights from Mosley & Uno (2007)	FDI/GDP in Africa	none
Wang 2018	FACB rights, recoded from Barry et al. (2013)	FDI flow/GDP	none
Vadlamannati 2015	FACB rights from Mosley (2007)	Economic globalization index (including FDI stock and flow) from Dreher (2006)	positive
Biglaiser & Lee 2019	FACB rights from Mosley & Uno (2007)	three types of investment (M&A, JV, GI)	none (M&A); positive (JV, GI)
Peksen & Blanton 2017	CIRI Worker Rights Index; FACB rights from Mosley & Uno (2007)	FDI flow/GDP	none (CIRI); negative (FACB)
Blanton & Peksen 2016	CIRI Worker Rights Index	FDI flow/GDP	none
Kim & Trumbore 2010	CIRI Worker Rights Index	Cross-border M&As	positive

'Positive' effects suggests that more FDI was significantly connected to better rights protection. FACB rights are the freedom of association and the right to collective bargaining. M&A is FDI in the form of mergers & acquisitions; JV is investment in joint ventures; GI is greenfield investment.

Table A2: Variable Descriptions & Sources

Variable	Description	Scores
Outcome:		
Labour standards	Own index, constructed from the Labour Regulation Index database (Adams et al. 2017); score of 0 represents no protection, and 1 represents full rights protection, with intermittent scores in between signalling the strengh of the law	0-1
FDI:		
FDI Stock	FDI stock per GDP from the UNCTAD database; negative and zero values of FDI stock/GDP were recoded to 1, then logged	continuous
FDI Flow	FDI flow per GDP from the global FDI measures from UNCTAD database; negative and zero values of FDI flow/GDP were recoded to 1, then logged	continuous
Controls:		
Trade	Sum of total trade divided by GDP (log) from World Bank Indicators database	continuous
GDP growth	Annual change in GDP per capita (log) from World Bank Indicators	continuous
Population	Total population (log) from World Bank Indicators	continuous
Democracy	Measure of democracy level ("polity2" from Polity IV data set); scores of -10 are most autocratic states; 10 are most democratic states	-10 to +10
Conflict	International or domestic conflict in a country-year; score of 0 represents no conflict in a country-year; 1 = conflict; from UCDP/PRIO Armed Conflict Dataset	binary

Table A3: Correlation Table of Variables

	Overall Rights	Contracts	Worktime	Dismissal	Representation	Industrial Action	Collective Rights	Outcome Rights	FDI stock/GDP	Trade	Growth	Population	Democracy
Overall Rights													
Contracts	0.64****												
Worktime	0.59****	0.29****											
Dismissal	0.42****	0.16****	0.28****										
Representation	0.68****	0.31****	0.11****	0.02									
Industrial Action	0.68****	0.23****	0.33****	0.05**	0.37****								
Collective Rights	0.82****	0.33****	0.27****	0.04	0.83****	0.82****							
Outcome Rights	0.79****	0.72****	0.72****	0.67****	0.22****	0.29****	0.30****						
FDI stock/GDP	0.26****	0.12****	0.17****	0.02	0.27****	0.18****	0.27****	0.15****					
Trade	0.08****	-0.09****	0.15****	0.11****	-0.03	0.14****	0.07***	0.07***	0.35****				
Growth	0.09****	0.03	0.08****	0.07***	0.05*	0.06**	0.06***	0.08****	0.20****	0.07***			
Population	-0.10****	-0.03	-0.13****	0.19****	-0.04	-0.27****	-0.18****	0.02	-0.13****	-0.50****	0.05**		
Democracy	0.37****	0.18****	0.25****	-0.03	0.35****	0.32****	0.40****	0.19****	0.30****	0.12****	0.08****	-0.11****	
Conflict	-0.02	-0.04*	-0.10****	0.06***	0.05**	-0.06***	0.00	-0.03	-0.20****	-0.36****	-0.03	0.37****	-0.05**

FDI, trade, GDP, and population are logged. Completewise correlation based on Bravais-Pearson. p<0.1 *, p<0.05**, p<0.001***

Table A4: Construction of the Labour Standards Measure

Categories	Consists of average of these original indicators from Adams et al. (2017)
Fair Contracts	(1) The law determines the legal status of the worker (instead the contracting parties) (2) Part-time workers have the right to equal treatment with full-time workers (3) Costs of dismissing part-time workers is equal to full-time workers (4) Fixed-term contracts allowed only for work of limited duration (5) Fixed-term workers have right to equal treatment with permanent workers (6) Maximum duration of fixed-term contracts before the employment is deemed to be permanent (7) Agency work is prohibited or strictly controlled (8) Agency workers have the right to equal treatment with permanent workers
Working Time	(1) Annual leave entitlements (2) Public holiday entitlements (3) Premia for overtime work (4) Premia for weekend work (5) Maximum overtime working hours per week (6) Maximum hours of the normal working week (7) Maximum daily working hours
Dismissal	(1) Length of legally mandated notice period (2) Amount of legally mandated redundancy compensation (3) Minimum qualifying period for case of unjust dismissal (4) Law imposes procedural constraints on dismissal (5) Law imposes substantive constraints on dismissal (6) Reinstatement of normal remedy for unfair dismissal (6) Employer must obtain permission of a third body for dismissal (8) Redundancy selection rules in place (9) Priority selection rules for re-employment in place
Collective Representation	(1) Right to unionisation *[weighted *2.5]* (2) Right to collective bargaining *[weighted *2.5]* (3) Employers have legal duty to bargain or reach agreement with unions (4) Extension of collective agreements to third parties, national or sectoral level (5) Law permits closed shops (6) Law gives unions or workers right to nominate board-level directors (7) Work councils or committees have legal powers of co-decision making
Industrial Action	(1) Unofficial or 'wildcat' strike action allowed (2) Strikes over political (non-work-related) issues are permitted (3) No constraints on secondary or sympathy strikes (4) Lockouts are not permitted (5) Right to industrial action in constitution *[weighted *2.5]* (6) No mandatory waiting period prior to industrial action (7) Strikes are not unlawful in cases when collective agreement is in place (8) Law does not mandate conciliation procedures before the strike (9) Replacement or firing of striking workers prohibited

Table A5: Summary statistics of variables

Statistic	N	Mean	St. Dev.	Min	Pctl(25)	Pctl(75)	Max
Overall Rights	1 833	0.523	0.157	0.137	0.419	0.637	0.866
Contracts	1 833	0.427	0.192	0.125	0.250	0.562	0.944
Worktime	1 833	0.556	0.163	0.076	0.471	0.659	0.874
Dismissal	1 833	0.514	0.171	0.019	0.419	0.613	0.863
Representation	1 833	0.509	0.203	0.000	0.342	0.667	1.000
Industrial Action	1 833	0.420	0.197	0.000	0.250	0.550	1.000
Collective Rights	1 833	0.464	0.166	0.081	0.328	0.583	0.889
Outcome Rights	1 833	0.499	0.123	0.142	0.401	0.589	0.767
Log FDI flow/GDP	1 833	15.571	4.469	0.000	15.065	17.979	21.608
Log FDI stock/GDP	1 833	18.682	2.481	0.000	17.656	20.137	22.924
Log Trade	1 833	4.118	0.548	2.382	3.789	4.499	5.395
Growth	1 833	0.044	0.157	−0.978	−0.022	0.135	0.619
Log Population	1 833	16.682	1.446	13.352	15.675	17.634	21.015
Democracy	1 833	1.881	6.399	−10	−5	8	10
Conflict	1 833	0.249	0.433	0	0	0	1

Table A6: Multivariate regression with two-way fixed effects of the labour standards indices for FDI stock and flow for developing countries including panel corrected standard errors, and one year lagged independent variables.

	Dependent variable:					
	Overall	Collective	Outcome	Overall	Collective	Outcome
	(1)	(2)	(3)	(4)	(5)	(6)
Log FDI stock/GDP	0.0004	0.001*	−0.001			
	(0.001)	(0.001)	(0.001)			
Log FDI flow/GDP				0.0003	0.001*	−0.0004*
				(0.0004)	(0.001)	(0.0003)
Log Trade	0.016***	0.012*	0.011**	0.016**	0.011	0.012**
	(0.006)	(0.007)	(0.005)	(0.006)	(0.006)	(0.005)
Log GDP Growth	0.023**	0.020*	0.014	0.025**	0.026**	0.012
	(0.011)	(0.011)	(0.009)	(0.010)	(0.011)	(0.008)
Log Population	0.035	0.025	0.035**	0.023	−0.005	0.043***
	(0.029)	(0.042)	(0.015)	(0.025)	(0.037)	(0.016)
Democracy	0.002***	0.003***	0.0005**	0.002***	0.003***	0.0005**
	(0.0003)	(0.0004)	(0.0002)	(0.0003)	(0.0004)	(0.0002)
Conflict	−0.026***	−0.022***	−0.016***	−0.025***	−0.021***	−0.016***
	(0.006)	(0.006)	(0.004)	(0.006)	(0.006)	(0.004)
Observations	1 770	1 770	1 771	1 785	1 785	1 786
R^2	0.038	0.030	0.019	0.040	0.038	0.020
Adjusted R^2	−0.023	−0.032	−0.043	−0.020	−0.023	−0.042
F Statistic	16.487*** (df = 6; 1663)	12.449*** (df = 6; 1663)	12.885*** (df = 6; 1664)	17.307*** (df = 6; 1678)	15.291*** (df = 6; 1678)	13.114*** (df = 6; 1679)

Note: *p<0.1; **p<0.05; ***p<0.01

Table A7: Multivariate regression with two-way fixed effects of the labour standards sub-indices for FDI stock and flow for developing countries including panel corrected standard errors, and one year lagged independent variables.

	Dependent variable:								
	Representation	Industrial Action	Contracts	Worktime	Dismissal	Representation	Industrial Action	Contracts	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	
Log FDI stock/GDP	0.001	0.002*	−0.003***	−0.003***	0.004***				
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)				
Log FDI flow/GDP						0.001**	0.001	−0.001***	
						(0.001)	(0.001)	(0.0004)	
Log Trade	0.017**	0.006	0.006	0.013**	0.014*	0.016**	0.005	0.007	
	(0.008)	(0.008)	(0.006)	(0.006)	(0.008)	(0.008)	(0.007)	(0.006)	
Log GDP Growth	0.015	0.025**	−0.007	0.020	0.028**	0.021	0.031***	−0.011	
	(0.014)	(0.012)	(0.012)	(0.013)	(0.012)	(0.014)	(0.012)	(0.012)	
Log Population	−0.091*	0.142***	−0.276***	0.165***	0.215***	−0.127***	0.116***	−0.253***	
	(0.051)	(0.035)	(0.033)	(0.014)	(0.018)	(0.043)	(0.034)	(0.030)	
Democracy	0.004***	0.001**	0.0003	0.001*	0.0003	0.005***	0.001**	0.0004	
	(0.001)	(0.0004)	(0.0004)	(0.001)	(0.0003)	(0.001)	(0.0005)	(0.0004)	
Conflict	−0.025***	−0.019***	−0.013**	−0.025***	−0.010*	−0.024***	−0.019***	−0.014**	
	(0.007)	(0.007)	(0.006)	(0.008)	(0.005)	(0.007)	(0.006)	(0.006)	
Observations	1 770	1 771	1 771	1 771	1 771	1 785	1 786	1 786	
R^2	0.035	0.032	0.054	0.053	0.049	0.045	0.032	0.053	
Adjusted R^2	−0.027	−0.030	−0.006	−0.007	−0.012	−0.015	−0.029	−0.007	
F Statistic	15.102*** (df = 6; 1663)	7.516*** (df = 6; 1664)	12.629*** (df = 6; 1664)	37.785*** (df = 6; 1664)	38.395*** (df = 6; 1664)	18.999*** (df = 6; 1678)	7.618*** (df = 6; 1679)	12.724*** (df = 6; 1679)	39.3

Note:

Table A8: Multivariate regression of the labour standards indices for FDI stock and flow for developing countries including panel corrected standard errors, time FE, and two year lagged independent variables.

	Dependent variable:					
	Overall	Collective	Outcome	Overall	Collective	Outcome
	(1)	(2)	(3)	(4)	(5)	(6)
Log FDI stock/GDP	0.002**	0.004***	−0.001			
	(0.001)	(0.001)	(0.001)			
Log FDI flow/GDP				−0.001	0.003***	−0.004***
				(0.001)	(0.001)	(0.001)
Log Trade	−0.008	−0.007	−0.003	−0.007	−0.010	−0.0004
	(0.005)	(0.006)	(0.004)	(0.005)	(0.006)	(0.004)
Log GDP Growth	0.010	0.008	0.007	0.023	0.010	0.022
	(0.028)	(0.025)	(0.023)	(0.026)	(0.025)	(0.021)
Log Population	−0.005**	−0.011***	0.002	−0.005***	−0.012***	0.002
	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.001)
Democracy	0.004***	0.007***	−0.0001	0.004***	0.007***	0.0001
	(0.0004)	(0.001)	(0.0004)	(0.0005)	(0.001)	(0.0003)
Conflict	0.037***	0.057***	0.002	0.038***	0.060***	0.001
	(0.010)	(0.011)	(0.006)	(0.010)	(0.011)	(0.006)
ECA	0.171***	0.139***	0.118***	0.168***	0.134***	0.117***
	(0.005)	(0.006)	(0.004)	(0.005)	(0.007)	(0.003)
LAC	0.151***	0.158***	0.072***	0.148***	0.152***	0.073***
	(0.004)	(0.008)	(0.007)	(0.003)	(0.009)	(0.006)
MENA	0.097***	0.083***	0.061***	0.097***	0.088***	0.057***
	(0.006)	(0.007)	(0.006)	(0.006)	(0.007)	(0.006)
SA	0.032***	−0.027***	0.065***	0.026***	−0.032***	0.062***
	(0.009)	(0.008)	(0.012)	(0.009)	(0.008)	(0.011)
SSA	0.006	0.039***	−0.023***	0.006	0.042***	−0.026***
	(0.006)	(0.009)	(0.005)	(0.005)	(0.009)	(0.005)
Observations	1 703	1 703	1 704	1 718	1 718	1 719
R^2	0.314	0.311	0.191	0.306	0.308	0.199
Adjusted R^2	0.299	0.296	0.173	0.291	0.293	0.182
F Statistic	1 568.480*** (df = 11; 1666)	829.803*** (df = 11; 1666)	344.270*** (df = 11; 1667)	1 514.103*** (df = 11; 1681)	667.965*** (df = 11; 1681)	338.889*** (df = 11; 1682)

Note: *p<0.1; **p<0.05; ***p<0.01

Table A9: Multivariate regression of the labour standards indices for FDI stock and flow for developing countries including panel corrected standard errors time FE, and three year lagged independent variables.

	Dependent variable:					
	Overall	Collective	Outcome	Overall	Collective	Outcome
	(1)	(2)	(3)	(4)	(5)	(6)
Log FDI stock/GDP	0.002**	0.003***	−0.001			
	(0.001)	(0.001)	(0.001)			
Log FDI flow/GDP				−0.001	0.003***	−0.004***
				(0.001)	(0.001)	(0.001)
Log Trade	−0.007	−0.007	−0.003	−0.007	−0.011*	0.0004
	(0.005)	(0.006)	(0.004)	(0.005)	(0.006)	(0.004)
Log GDP Growth	0.003	0.002	0.003	0.013	−0.0002	0.017
	(0.027)	(0.024)	(0.023)	(0.026)	(0.024)	(0.021)
Log Population	−0.004**	−0.011***	0.003	−0.005***	−0.012***	0.002
	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.001)
Democracy	0.004***	0.007***	−0.0002	0.004***	0.007***	0.0001
	(0.0005)	(0.001)	(0.0004)	(0.0005)	(0.001)	(0.0003)
Conflict	0.039***	0.057***	0.004	0.040***	0.061***	0.003
	(0.011)	(0.011)	(0.006)	(0.010)	(0.011)	(0.006)
ECA	0.175***	0.144***	0.117***	0.171***	0.140***	0.116***
	(0.005)	(0.005)	(0.004)	(0.005)	(0.006)	(0.004)
LAC	0.153***	0.159***	0.073***	0.150***	0.152***	0.074***
	(0.004)	(0.008)	(0.007)	(0.003)	(0.008)	(0.007)
MENA	0.097***	0.082***	0.062***	0.097***	0.086***	0.058***
	(0.006)	(0.007)	(0.006)	(0.006)	(0.006)	(0.006)
SA	0.029***	−0.031***	0.064***	0.024**	−0.035***	0.062***
	(0.010)	(0.008)	(0.012)	(0.010)	(0.008)	(0.011)
SSA	0.009*	0.041***	−0.021***	0.009*	0.044***	−0.024***
	(0.005)	(0.010)	(0.005)	(0.005)	(0.009)	(0.005)
Observations	1 636	1 636	1 636	1 651	1 651	1 651
R^2	0.315	0.316	0.187	0.308	0.315	0.194
Adjusted R^2	0.300	0.301	0.169	0.293	0.300	0.177
F Statistic	1 769.296*** (df = 11; 1600)	1 135.503*** (df = 11; 1600)	378.652*** (df = 11; 1600)	1 641.039*** (df = 11; 1615)	858.161*** (df = 11; 1615)	379.421*** (df = 11; 1615)

Note: *p<0.1; **p<0.05; ***p<0.01

Table A10: Multivariate regression of the three-year averaged labour standards indices for FDI stock and flow for developing countries including panel corrected standard errors.

	Dependent variable:					
	Overall	Collective	Outcome	Overall	Collective	Outcome
	(1)	(2)	(3)	(4)	(5)	(6)
Log FDI stock/GDP	0,0004	0,002	−0,002*			
	(0,001)	(0,002)	(0,001)			
Log FDI flow/GDP				−0,001	0,005***	−0,005***
				(0,002)	(0,002)	(0,002)
Log Trade	0,002	0,003	0,001	0,001	−0,006	0,006
	(0,007)	(0,011)	(0,007)	(0,008)	(0,012)	(0,007)
Log GDP Growth	0,034	0,054	0,003	0,041	0,045	0,019
	(0,058)	(0,064)	(0,049)	(0,058)	(0,066)	(0,044)
Log Population	−0,006*	−0,011***	0,001	−0,006**	−0,014***	0,002
	(0,003)	(0,003)	(0,003)	(0,003)	(0,004)	(0,002)
Democracy	0,004***	0,007***	−0,0003	0,004***	0,006***	0,0001
	(0,001)	(0,001)	(0,001)	(0,001)	(0,001)	(0,001)
Conflict	0,041**	0,058***	0,007	0,039**	0,063***	0,001
	(0,019)	(0,021)	(0,010)	(0,019)	(0,021)	(0,011)
ECA	0,166***	0,122***	0,124***	0,162***	0,117***	0,124***
	(0,008)	(0,018)	(0,008)	(0,009)	(0,019)	(0,007)
LAC	0,155***	0,158***	0,079***	0,151***	0,146***	0,081***
	(0,006)	(0,014)	(0,012)	(0,005)	(0,015)	(0,012)
MENA	0,100***	0,086***	0,064***	0,099***	0,091***	0,058***
	(0,012)	(0,010)	(0,011)	(0,012)	(0,012)	(0,011)
SA	0,047***	−0,017	0,077***	0,044**	−0,019	0,076***
	(0,017)	(0,015)	(0,020)	(0,018)	(0,015)	(0,019)
SSA	0,005	0,036**	−0,022**	0,004	0,039**	−0,026***
	(0,008)	(0,015)	(0,009)	(0,008)	(0,015)	(0,009)
Observations	589	589	589	596	596	596
R^2	0,310	0,293	0,205	0,303	0,294	0,223
Adjusted R^2	0,287	0,269	0,178	0,280	0,271	0,198
F Statistic	382,498*** (df = 11; 569)	413,062*** (df = 11; 569)	133,986*** (df = 11; 569)	−218,278 (df = 11; 576)	89,542*** (df = 11; 576)	100,962*** (df = 11; 576)

Note: *p<0,1; **p<0,05; ***p<0,01

Table A11: Multivariate regression of the three-year averaged labour standards indices for FDI stock and flow for developing countries including panel corrected standard errors.

	Dependent variable:									
	Representation	Industrial Action	Contracts	Worktime	Dismissal	Representation	Industrial Action	Contracts	Worktime	Dismissal
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Log FDI stock/GDP	0,009***	−0,004	0,0001	−0,003*	−0,002					
	(0,003)	(0,003)	(0,002)	(0,002)	(0,002)					
Log FDI flow/GDP						0,007***	0,002*	−0,005**	−0,005***	−0,005***
						(0,003)	(0,001)	(0,002)	(0,002)	(0,002)
Log Trade	−0,012	0,018	−0,075***	0,070***	0,008	−0,016	0,004	−0,069***	0,074***	0,014
	(0,017)	(0,012)	(0,020)	(0,013)	(0,011)	(0,016)	(0,013)	(0,019)	(0,014)	(0,012)
Log GDP Growth	0,024	0,084	−0,026	−0,032	0,066	0,026	0,064	−0,013	−0,016	0,086*
	(0,069)	(0,074)	(0,075)	(0,070)	(0,054)	(0,073)	(0,073)	(0,065)	(0,066)	(0,051)
Log Population	0,0002	−0,022***	−0,008	0,027***	−0,017***	−0,002	−0,025***	−0,007*	0,028***	−0,015***
	(0,006)	(0,002)	(0,005)	(0,005)	(0,002)	(0,005)	(0,003)	(0,004)	(0,004)	(0,002)
Democracy	0,008***	0,006***	−0,0003	−0,003***	0,002	0,008***	0,005***	0,0004	−0,003***	0,002*
	(0,002)	(0,001)	(0,001)	(0,001)	(0,001)	(0,001)	(0,001)	(0,001)	(0,001)	(0,001)
Conflict	0,071***	0,046***	0,002	0,012	0,006	0,076***	0,050***	−0,007	0,008	0,001
	(0,026)	(0,018)	(0,026)	(0,018)	(0,013)	(0,025)	(0,018)	(0,027)	(0,018)	(0,013)
ECA	0,048**	0,197***	0,112***	0,140***	0,120***	0,036	0,197***	0,109***	0,142***	0,120***
	(0,021)	(0,019)	(0,015)	(0,012)	(0,015)	(0,026)	(0,015)	(0,014)	(0,012)	(0,015)
LAC	0,141***	0,174***	0,118***	0,039**	0,079***	0,136***	0,157***	0,119***	0,041**	0,082***
	(0,026)	(0,014)	(0,020)	(0,018)	(0,021)	(0,024)	(0,011)	(0,017)	(0,018)	(0,021)
MENA	0,066***	0,106***	0,019	0,088***	0,084***	0,077***	0,105***	0,014	0,082***	0,079***
	(0,016)	(0,013)	(0,016)	(0,015)	(0,024)	(0,016)	(0,014)	(0,013)	(0,017)	(0,024)
SA	−0,052***	0,017	−0,069*	0,185***	0,116***	−0,058***	0,019	−0,073**	0,186***	0,114***
	(0,016)	(0,018)	(0,036)	(0,014)	(0,021)	(0,016)	(0,017)	(0,036)	(0,013)	(0,021)
SSA	0,027	0,045***	0,002	−0,006	−0,061***	0,034	0,043***	−0,004	−0,010	−0,064***
	(0,025)	(0,011)	(0,019)	(0,016)	(0,017)	(0,023)	(0,012)	(0,018)	(0,017)	(0,017)
Observations	589	589	589	589	589	596	596	596	596	596
R^2	0,210	0,266	0,141	0,206	0,256	0,209	0,261	0,149	0,215	0,264
Adjusted R^2	0,183	0,242	0,112	0,180	0,231	0,183	0,236	0,121	0,189	0,240
F Statistic	2 547,702*** (df = 11; 569)	203,598*** (df = 11; 569)	252,011*** (df = 11; 569)	1 344,346*** (df = 11; 569)	38,475*** (df = 11; 569)	798,623*** (df = 11; 576)	−807,524 (df = 11; 576)	−2 595,354 (df = 11; 576)	52,094*** (df = 11; 576)	64,828*** (df = 11; 576)

Note: *p<0,1; **p<0,05; ***p<0,01

Table A12: Multivariate regression of the labour standards indices for FDI stock and flow for Non-OECD countries including panel corrected standard errors, and one year lagged independent variables.

	Dependent variable:					
	Overall	Collective	Outcome	Overall	Collective	Outcome
	(1)	(2)	(3)	(4)	(5)	(6)
Log FDI stock/GDP	−0.001	0.001	−0.002**			
	(0.001)	(0.001)	(0.001)			
Log FDI flow/GDP				−0.002***	0.002*	−0.004***
				(0.001)	(0.001)	(0.001)
Log Trade	−0.024***	−0.023***	−0.012***	−0.023***	−0.027***	−0.009***
	(0.004)	(0.005)	(0.004)	(0.004)	(0.006)	(0.003)
Log GDP Growth	0.026	0.036	0.006	0.036	0.036	0.018
	(0.028)	(0.027)	(0.023)	(0.027)	(0.026)	(0.021)
Log Population	−0.001	−0.010***	0.005***	−0.002	−0.010***	0.005***
	(0.003)	(0.003)	(0.002)	(0.002)	(0.003)	(0.001)
Democracy	0.006***	0.009***	0.001***	0.006***	0.009***	0.001***
	(0.0005)	(0.001)	(0.0003)	(0.0005)	(0.001)	(0.0003)
Conflict	0.043***	0.056***	0.012*	0.043***	0.058***	0.011
	(0.011)	(0.011)	(0.007)	(0.011)	(0.011)	(0.007)
ECA	0.182***	0.132***	0.138***	0.176***	0.128***	0.133***
	(0.007)	(0.011)	(0.004)	(0.007)	(0.012)	(0.003)
LAC	0.138***	0.150***	0.061***	0.137***	0.145***	0.064***
	(0.005)	(0.009)	(0.006)	(0.004)	(0.009)	(0.006)
MENA	0.064***	0.035***	0.057***	0.061***	0.036***	0.052***
	(0.008)	(0.008)	(0.006)	(0.008)	(0.008)	(0.006)
SA	0.001	−0.053***	0.046***	−0.001	−0.055***	0.045***
	(0.011)	(0.009)	(0.012)	(0.011)	(0.009)	(0.011)
SSA	0.005	0.035***	−0.021***	0.004	0.037***	−0.024***
	(0.006)	(0.010)	(0.005)	(0.006)	(0.009)	(0.005)
Observations	1 800	1 800	1 801	1 828	1 828	1 829
R^2	0.328	0.335	0.219	0.321	0.333	0.224
Adjusted R^2	0.314	0.321	0.203	0.307	0.320	0.208
F Statistic	1 706.064*** (df = 11; 1762)	798.553*** (df = 11; 1762)	538.120*** (df = 11; 1763)	−1 910.480 (df = 11; 1790)	−26.873 (df = 11; 1790)	519.985*** (df = 11; 1791)
Note:						*p<0.1; **p<0.05; ***p<0.01

Table A13: Multivariate regression of the labour standards indices for FDI stock and flow for developing countries including panel corrected standard errors, one year lagged independent variables. The model controls for the cross-validating controls for outcome and collective rights.

	Dependent variable:							
	Collective Rights		Outcome Rights		Collective Rights		Outcome Rights	
	FE	2FE	FE	2FE	FE	2FE	FE	2FE
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Log FDI stock/GDP	0.005***	0.002**	−0.002**	−0.0005				
	(0.001)	(0.001)	(0.001)	(0.001)				
Log FDI flow/GDP					0.004***	0.001**	−0.004***	−0.0005*
					(0.001)	(0.001)	(0.001)	(0.0003)
Outcome Rights	0.208***	0.191***			0.222***	0.196***		
	(0.013)	(0.020)			(0.012)	(0.020)		
Collective Rights			0.117***	0.062***			0.124***	0.066***
			(0.010)	(0.013)			(0.010)	(0.013)
Log Trade	−0.008	0.010	−0.004	0.009*	−0.011	0.009	−0.001	0.010*
	(0.007)	(0.007)	(0.004)	(0.005)	(0.007)	(0.006)	(0.004)	(0.005)
Log GDP Growth	0.018	0.019	−0.002	0.005	0.017	0.026**	0.012	0.004
	(0.026)	(0.012)	(0.023)	(0.007)	(0.026)	(0.011)	(0.022)	(0.007)
Log Population	−0.012***	0.016	0.004**	0.038**	−0.013***	−0.019	0.004***	0.048***
	(0.002)	(0.042)	(0.002)	(0.015)	(0.002)	(0.038)	(0.001)	(0.016)
Democracy	0.006***	0.003***	−0.001**	0.0004*	0.006***	0.003***	−0.001**	0.0004
	(0.001)	(0.0004)	(0.0004)	(0.0003)	(0.001)	(0.0004)	(0.0003)	(0.0003)
Conflict	0.059***	−0.019***	−0.007	−0.016***	0.061***	−0.018***	−0.009	−0.016***
	(0.010)	(0.006)	(0.006)	(0.004)	(0.010)	(0.006)	(0.006)	(0.004)
ECA	0.106***		0.104***		0.100***		0.102***	
	(0.008)		(0.004)		(0.009)		(0.004)	
LAC	0.141***		0.052***		0.136***		0.051***	
	(0.010)		(0.007)		(0.011)		(0.007)	
MENA	0.073***		0.048***		0.079***		0.042***	
	(0.007)		(0.005)		(0.007)		(0.005)	
SA	−0.040***		0.067***		−0.047***		0.065***	
	(0.009)		(0.012)		(0.009)		(0.011)	
SSA	0.041***		−0.030***		0.045***		−0.034***	
	(0.010)		(0.006)		(0.009)		(0.006)	
Observations	1 765	1 765	1 765	1 765	1 780	1 780	1 780	1 780
R^2	0.322	0.049	0.215	0.028	0.321	0.059	0.225	0.030
Adjusted R^2	0.307	−0.012	0.197	−0.035	0.306	−0.001	0.208	−0.033
F Statistic	169.968*** (df = 12; 1726)	31.801*** (df = 7; 1657)	402.954*** (df = 12; 1726)	15.619*** (df = 7; 1657)	332.360*** (df = 12; 1741)	34.737*** (df = 7; 1672)	383.741*** (df = 12; 1741)	15.776*** (df = 7; 1672)

Note: *p<0.1; **p<0.05; ***p<0.01

Table A14: Fractional logit regression of the labour standards indices for FDI stock and flow for developing countries including panel corrected standard errors, one year lagged independent variables.

	Dependent variable:					
	Overall	Collective	Outcome	Overall	Collective	Outcome
	(1)	(2)	(3)	(4)	(5)	(6)
Log FDI stock/GDP	0.012***	0.027***	0.008**			
	(0.004)	(0.010)	(0.004)			
Log FDI flow/GDP				−0.001	0.016***	−0.008***
				(0.002)	(0.004)	(0.003)
Log Trade	0.056**	0.010	0.072**	0.069***	0.003	0.099***
	(0.025)	(0.041)	(0.028)	(0.025)	(0.040)	(0.028)
Log GDP Growth	0.114*	0.128	0.141*	0.155***	0.150*	0.205***
	(0.058)	(0.087)	(0.072)	(0.057)	(0.086)	(0.070)
Log Population	0.011	−0.031**	0.041***	0.010	−0.037***	0.042***
	(0.009)	(0.013)	(0.011)	(0.009)	(0.013)	(0.011)
Democracy	0.011***	0.029***	0.004**	0.012***	0.029***	0.006***
	(0.002)	(0.003)	(0.002)	(0.002)	(0.003)	(0.002)
Conflict	0.047*	0.243***	−0.001	0.048*	0.252***	−0.003
	(0.025)	(0.039)	(0.031)	(0.025)	(0.038)	(0.031)
ECA	0.464***	0.592***	0.576***	0.458***	0.568***	0.577***
	(0.033)	(0.055)	(0.049)	(0.033)	(0.055)	(0.048)
LAC	0.333***	0.664***	0.327***	0.333***	0.650***	0.338***
	(0.038)	(0.061)	(0.049)	(0.037)	(0.061)	(0.048)
MENA	0.278***	0.395***	0.315***	0.289***	0.424***	0.321***
	(0.042)	(0.064)	(0.056)	(0.042)	(0.063)	(0.055)
SA	0.221***	−0.078	0.305***	0.205***	−0.107	0.291***
	(0.041)	(0.067)	(0.061)	(0.041)	(0.066)	(0.060)
SSA	−0.006	0.198***	−0.013	−0.0003	0.212***	−0.008
	(0.040)	(0.054)	(0.053)	(0.039)	(0.054)	(0.052)
Constant	−1.037***	−0.636	−1.374***	−0.854***	−0.263	−1.228***
	(0.245)	(0.394)	(0.282)	(0.240)	(0.371)	(0.281)

Note: *p<0.1; **p<0.05; ***p<0.01

Table A15: Fractional logit regression of the labour standards sub-indices for FDI stock and flow for developing countries including panel corrected standard errors, one year lagged independent variables.

	Dependent variable:									
	Representation	Industrial Action	Contracts	Worktime	Dismissal	Representation	Industrial Action	Contracts	Worktime	Dismissal
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Log FDI stock/GDP	0.038***	−0.001	0.018**	−0.002	0.008					
	(0.009)	(0.009)	(0.008)	(0.006)	(0.005)					
Log FDI flow/GDP						0.013***	0.008**	−0.007	−0.011***	−0.007**
						(0.004)	(0.004)	(0.005)	(0.004)	(0.003)
Log Trade	−0.028	0.093**	−0.209***	0.347***	0.078**	−0.010	0.063	−0.171***	0.355***	0.112***
	(0.042)	(0.046)	(0.046)	(0.041)	(0.038)	(0.041)	(0.045)	(0.044)	(0.040)	(0.038)
Log GDP Growth	0.018	0.128	0.103	0.104	0.227**	0.067	0.092	0.181	0.182*	0.265***
	(0.092)	(0.090)	(0.113)	(0.100)	(0.099)	(0.091)	(0.089)	(0.112)	(0.096)	(0.097)
Log Population	0.007	−0.084***	0.020	0.143***	−0.037**	0.006	−0.090***	0.019	0.140***	−0.031**
	(0.014)	(0.017)	(0.019)	(0.016)	(0.015)	(0.014)	(0.017)	(0.018)	(0.015)	(0.015)
Democracy	0.024***	0.018***	0.009***	−0.007**	0.011***	0.026***	0.017***	0.012***	−0.006**	0.013***
	(0.003)	(0.004)	(0.003)	(0.003)	(0.003)	(0.003)	(0.004)	(0.003)	(0.003)	(0.003)
Conflict	0.163***	0.090**	0.007	0.023	−0.034	0.172***	0.094**	0.004	0.029	−0.043
	(0.040)	(0.040)	(0.053)	(0.041)	(0.041)	(0.039)	(0.040)	(0.053)	(0.040)	(0.041)
ECA	0.089*	0.546***	0.608***	0.613***	0.549***	0.072	0.532***	0.607***	0.610***	0.554***
	(0.050)	(0.064)	(0.077)	(0.054)	(0.073)	(0.050)	(0.064)	(0.076)	(0.053)	(0.072)
LAC	0.315***	0.400***	0.522***	0.173***	0.311***	0.317***	0.369***	0.536***	0.170***	0.331***
	(0.062)	(0.071)	(0.077)	(0.062)	(0.073)	(0.061)	(0.069)	(0.074)	(0.061)	(0.072)
MENA	0.031	0.450***	0.176*	0.424***	0.366***	0.074	0.449***	0.190**	0.412***	0.381***
	(0.071)	(0.087)	(0.094)	(0.062)	(0.072)	(0.069)	(0.085)	(0.092)	(0.062)	(0.072)
SA	−0.115	0.331***	−0.324***	0.777***	0.479***	−0.156	0.330***	−0.348***	0.761***	0.473***
	(0.108)	(0.097)	(0.083)	(0.074)	(0.091)	(0.108)	(0.097)	(0.083)	(0.073)	(0.091)
SSA	−0.078	0.109*	0.101	0.059	−0.186**	−0.058	0.105	0.110	0.059	−0.181**
	(0.053)	(0.066)	(0.078)	(0.058)	(0.075)	(0.052)	(0.066)	(0.077)	(0.057)	(0.075)
Constant	−1.230***	0.181	−0.397	−3.967***	0.194	−0.812**	0.268	−0.091	−3.814***	0.179
	(0.383)	(0.458)	(0.453)	(0.401)	(0.388)	(0.359)	(0.453)	(0.449)	(0.391)	(0.386)

Note: *p<0.1; **p<0.05; ***p<0.01

Table A16: Multivariate regression of the labour standards indices for FDI stock and flow for developing countries including panel corrected standard errors, one year lagged independent variables. The models uses unweighted indices.

	Dependent variable:					
	Overall	Collective	Outcome	Overall	Collective	Outcome
	(1)	(2)	(3)	(4)	(5)	(6)
Log FDI stock/GDP	0.001	0.005***	−0.001			
	(0.001)	(0.001)	(0.001)			
Log FDI flow/GDP				−0.001***	0.003***	−0.004***
				(0.0005)	(0.001)	(0.001)
Log Trade	−0.002	−0.008	−0.004	−0.001	−0.011	−0.002
	(0.003)	(0.006)	(0.004)	(0.003)	(0.007)	(0.004)
Log GDP Growth	0.008	0.021	0.005	0.016	0.023	0.018
	(0.019)	(0.025)	(0.023)	(0.018)	(0.025)	(0.021)
Log Population	−0.003***	−0.011***	0.002	−0.004***	−0.012***	0.002
	(0.001)	(0.002)	(0.002)	(0.001)	(0.002)	(0.001)
Democracy	0.002***	0.006***	−0.0001	0.002***	0.006***	0.0001
	(0.0003)	(0.001)	(0.0004)	(0.0003)	(0.001)	(0.0003)
Conflict	0.012**	0.058***	0.001	0.012**	0.061***	−0.00002
	(0.006)	(0.011)	(0.006)	(0.006)	(0.010)	(0.006)
ECA	0.098***	0.132***	0.119***	0.096***	0.128***	0.118***
	(0.002)	(0.007)	(0.004)	(0.002)	(0.009)	(0.003)
LAC	0.075***	0.157***	0.071***	0.073***	0.152***	0.071***
	(0.003)	(0.009)	(0.007)	(0.003)	(0.009)	(0.007)
MENA	0.055***	0.084***	0.060***	0.054***	0.090***	0.055***
	(0.004)	(0.007)	(0.006)	(0.004)	(0.007)	(0.006)
SA	0.047***	−0.025***	0.065***	0.043***	−0.031***	0.062***
	(0.006)	(0.008)	(0.012)	(0.006)	(0.008)	(0.011)
SSA	−0.016***	0.036***	−0.025***	−0.018***	0.038***	−0.029***
	(0.003)	(0.009)	(0.005)	(0.003)	(0.008)	(0.005)
Observations	1 771	1 770	1 771	1 786	1 785	1 786
R^2	0.269	0.305	0.196	0.263	0.301	0.204
Adjusted R^2	0.253	0.290	0.179	0.248	0.286	0.187
F Statistic	1 146.858*** (df = 11; 1733)	527.776*** (df = 11; 1732)	417.926*** (df = 11; 1733)	1 132.882*** (df = 11; 1748)	298.836*** (df = 11; 1747)	387.814*** (df = 11; 1748)
Note:						*p<0.1; **p<0.05; ***p<0.01

Table A17: Multivariate regression of the labour standards indices for a dummy variable of FDI flow (receives FDI = 1, no or negative FDI =0) for developing countries including panel corrected standard errors, one year lagged independent variables.

	Dependent variable:					
	Overall Time FE	Collective Time FE	Outcome Time FE	Overall 2FE	Collective 2FE	Outcome 2FE
	(1)	(2)	(3)	(4)	(5)	(6)
FDI flow Dummy	-0.033^{**}	0.027^{**}	-0.066^{***}	0.007	0.016^{*}	-0.004
	(0.013)	(0.013)	(0.014)	(0.006)	(0.009)	(0.004)
Log Trade	-0.009^{*}	-0.007	-0.005	0.016^{***}	0.011^{*}	0.012^{**}
	(0.005)	(0.007)	(0.004)	(0.006)	(0.006)	(0.005)
Log GDP Growth	0.028	0.031	0.012	0.025^{**}	0.027^{**}	0.011
	(0.026)	(0.025)	(0.021)	(0.010)	(0.011)	(0.008)
Log Population	-0.006^{***}	-0.012^{***}	0.002	0.021	-0.009	0.044^{***}
	(0.002)	(0.002)	(0.001)	(0.025)	(0.037)	(0.016)
Democracy	0.004^{***}	0.007^{***}	-0.0001	0.002^{***}	0.003^{***}	0.0005^{**}
	(0.0004)	(0.001)	(0.0003)	(0.0003)	(0.0004)	(0.0002)
Conflict	0.037^{***}	0.059^{***}	0.001	-0.025^{***}	-0.022^{***}	-0.016^{***}
	(0.009)	(0.010)	(0.006)	(0.006)	(0.006)	(0.004)
ECA	0.164^{***}	0.128^{***}	0.117^{***}			
	(0.005)	(0.009)	(0.003)			
LAC	0.146^{***}	0.155^{***}	0.069^{***}			
	(0.004)	(0.009)	(0.007)			
MENA	0.096^{***}	0.090^{***}	0.055^{***}			
	(0.007)	(0.008)	(0.006)			
SA	0.029^{***}	-0.035^{***}	0.069^{***}			
	(0.009)	(0.009)	(0.011)			
SSA	0.002	0.036^{***}	-0.027^{***}			
	(0.006)	(0.008)	(0.005)			
Observations	1 785	1 785	1 786	1 785	1 785	1 786
R^2	0.307	0.297	0.206	0.041	0.038	0.019
Adjusted R^2	0.292	0.283	0.189	-0.020	-0.023	-0.043
F Statistic	$1\,104.761^{***}$ (df = 11; 1747)	313.355^{***} (df = 11; 1747)	359.799^{***} (df = 11; 1748)	17.349^{***} (df = 6; 1678)	14.848^{***} (df = 6; 1678)	13.123^{***} (df = 6; 1679)
Note:						*p<0.1; **p<0.05; ***p<0.01

Table A18: List of Developing Countries Included (Defined by the World Bank)

Algeria;	Chile;	Ghana;	Malaysia;	Peru;	Thailand;
Angola;	China;	Honduras;	Mali;	Philippines;	Tunisia;
Argentina;	Colombia;	India;	Mexico;	Romania;	Turkey;
Armenia;	Congo;	Indonesia;	Moldova;	Russian	Uganda;
Azerbaijan;	Costa Rica;	Iran;	Mongolia;	Federation;	Ukraine;
Bangladesh;	Côted'Ivoire;	Jordan;	Montenegro;	Rwanda;	Uruguay;
Belarus;	Cuba;	Kazakhstan;	Morocco;	Senegal;	Venezuela;
Bolivia;	Dom. Rep.;	Kenya;	Namibia;	Serbia;	Vietnam;
Botswana;	Ecuador;	Kyrgyz;	Nicaragua;	South Africa;	Yemen;
Brazil;	Egypt;	Latvia;	Nigeria;	Sri Lanka;	Zambia;
Bulgaria;	Ethiopia;	Lesotho;	Pakistan;	Sudan;	Zimbabwe
Cambodia;	Gabon;	Lithuania;	Panama;	Syria;	
Cameroon;	Georgia;	Macedonia;	Paraguay;	Tanzania;	

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Contact: Technicial University of Munich, Arcisstraße 21, 80333 München
mppe@gov.tum.de, mppe@wi.tum.de
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