



**Do PTAs including labor provisions reduce collective labor rights violations?
The role of labor cooperation provisions**

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Abstract:

Over the past two decades not only the number of preferential trade agreements (PTAs) containing labor provisions has increased significantly, but at the same time those labor provisions also widened and deepened in their scope. This paper systematically investigates the impact of labor-related cooperation provisions and those related to the accompanying institutional framework on state compliance with collective labor rights. We use two original datasets on the content of labor provisions in PTAs (LABPTA) and the violations of collective labor rights/trade union rights (LR indicators) around the world covering the period 1990-2012. We contend that labor-related (soft) cooperation provisions and those establishing the institutional framework for the monitoring and implementation of such provisions ought to positively influence state compliance with collective labor rights. Our results suggest that PTAs with labor-related cooperation provisions specific to trade union rights and those combining these and a strong degree of institutionalization of the bodies responsible for the monitoring and implementation of such commitments are effective in improving state compliance with collective labor rights.

1. Introduction

There is an ongoing debate whether globalization leads to improved or worsened protection for workers and whether the level of existing labor protection is a curse or a blessing. The effects of globalization on labor rights, wages and unemployment has over the past two decades generated increasing debates both in the political, social, but as well academic/scholarly spheres. These debates have only been further intensified with the recent negotiation of the “mega” trade agreements: the now failing Trans-Pacific Partnership (TPP), agreed between the US and 11 other Pacific Rim Countries in 2016, and the similarly controversial EU-US Transatlantic Trade and Investment Partnership (TTIP), which is currently still being negotiated.

The apprehension and angst surrounding these issues is not unfounded. As noted by Hafner-Burton, "Something is happening to global trade regulations"¹. The past decades have witnessed a rapid proliferation of preferential trade agreements (PTAs)² fueled in part by the end of the Cold War but also by the stalemate of the multilateral trade negotiations. What, however, has been regarded as the largest shift in the development of PTAs is the variation and expansion of the content of these agreements, going far beyond the restricted scope of tariff-elimination and regulation of economic issues. In an effort to address critics and concerns over the social dimension of such agreements, provisions concerning non-trade matters – such as environment and human rights related concerns - are also increasingly being agreed upon and included in PTAs, and this is particularly the case with regard to labor provisions.

¹ Hafner-Burton (2009) p.1

² Preferential trade agreements are agreements liberalizing trade between two or more countries without extending this liberalization to all countries.

Over the past two decades not only the number of trade agreements containing labor provisions has increased exponentially, but at the same time those labor provisions also widened and deepened in their scope. The share of PTAs with labor provisions to all PTAs entering into force in a given year has increased from an average of 13% in 1990-1999 to an average of 37% in 2000-2014 (with an average of 75% in 2012-2014) (Figure 1B)³. This development is, however, rather surprising considering the failure to adopt a social clause at the multilateral trade level during the Uruguay Round negotiations (1986-1994) and the subsequent exclusion of labor standards from the WTO agenda at the 1996 Singapore Conference resulting primarily from the resistance of developing nations⁴ based on the argument that such clause would be used as a protectionist measure undermining their comparative advantages arising from lower cost of labor. For those, however, in favor of the social clause, the growing trend of bilateral and regional trade agreements offered the alternative path to pursue and address labor related concerns.

In spite of the above developments, we still know fairly little about the human and labor rights impact of preferential trade agreements. Few studies have examined this relationship systematically and this in part stems from the fact that the incorporation of social, environmental and human rights clauses into PTAs is a relatively new phenomenon and, accordingly, researchers have until recently not had enough country-years to study the downstream consequences of such agreements (e.g., Häberli *et al.* 2012).

This paper takes a first crack at this daunting task of assessing the impact of labor provisions in PTAs with a particular focus on the evolution and effect of labor related cooperative activities and the accompanying institutions set-up to monitor and implement related cooperation commitments, which still remains largely understudied. To do so, we rely

³ Author's calculation.

⁴ Besides the developing countries, until the change in their political administration, important European governments, such as the UK and Germany supported the claims of the majority of developing countries and remained against any discussion of labour standards within the WTO. (Wilkinson and Hughes, 2000)

on two brand new databases developed by the authors of this paper. The first concerns the design of labor provisions in PTAs (LABPTA database; Raess and Sari 2016). The database contains 484 PTAs coming from the DESTA database (Dür *et al.* 2014), the most comprehensive in terms of the number of such agreements covered and is based on the coding of labor provisions in PTAs against a template of 145 items. The other database (Labor Rights Indicators, LRI, Kucera and Sari 2016) concerns brand new indicators on the violation of freedom of association and collective bargaining (FACB) rights around the world. It is based on the coding of violations of such rights both in law and in practice against 108 evaluation criteria in nine different textual sources.

We next examine the impact of variation in the design of labor-related cooperation and institution provisions in PTAs on compliance with collective labor rights at the global level. FACB rights -- often considered as enabling rights for the full realization of other basic workers' rights -- are one of the four core principles and rights identified in the ILO 1998 Declaration on Fundamental Principles and Rights at Work. They bear particular relevance among workers' rights given their direct impact on labor market outcomes, such as wages and employment or social welfare. Indeed, although FACB rights may not be a perfect proxy for overall level of protection of workers, there is an established association between greater respect for collective labor rights and improvements in wages and working conditions (e.g., Aidt and Tzannatos 2002).

The paper is structured as following: the next section provides a comprehensive review of existing literature followed by the elaboration of our key arguments and the two hypotheses we aim to test empirically. Section four introduces our data sources and the coding of the labor provisions in PTAs and that of the collective labor rights violations, while section five provides a historical description of cooperation and institution related labor provisions in existing agreements with concrete examples where such mechanisms yielded to some

changes. Section six details our regression analysis with the key results of our analysis followed by the final section providing for our conclusion over the main findings.

2. Literature review

Scholars interested in the international determinants of collective labor rights have tended to focus on trade and FDI flows and openness to such flows as opposed to the effects of international trade and investment agreements (Flanagan 2006; Mosley 2011). Most studies find different facets of globalization to improve labor standards (Neumayer and de Soysa 2005; Edmonds and Pavcnik 2006; Flanagan 2006; Davies and Voy 2009; Neumayer and de Soysa 2007), including better labor rights with respect to the freedom of association and collective bargaining (Flanagan 2006; Neumayer and de Soysa 2006). A few scholars find globalization to deteriorate collective labor rights. Mosley (2011), for example, finds that trade is negatively related to labor laws measured in terms of trade union and collective bargaining rights. Others argue that the relationship between globalization and labor rights is mediated by domestic political-institutional factors and by the ways in which countries are involved in the global economy (Mosely 2008 and 2011). Kucera and Sarna (2006), however, find that the relationship between trade union rights and labor-intensive manufacturing exports is highly sensitive to the classification of labor-intensive manufacturing industries and to model specification, yielding statistically significant results of opposite sign depending on assumptions.

Another strand of the literature has examined patterns of diffusion and competitive dynamics in the adoption of labor rights (Davies and Vadlamannati 2013; Greenhill *et al.* 2009; Lim *et al.* 2015). Turning to the labor effects of participation in international organizations and agreements, scholars have also assessed the effectiveness of a range of ILO instruments to improve labor rights worldwide (Weischelbaumer and Winter Ebmer, 2007).

Of particular interest has been the question whether ratification of ILO conventions on labor standards reduces a country's violations of collective labor rights. In this regard Neumayer and de Soysa (2006) find that government ratification of ILO core conventions 87 (freedom of association) and 98 (right to organize and collective bargaining) does not influence behavior.

With respect to the socio-political effects of the design of trade agreements, political scientists have been interested in outcomes such as government's chance of surviving in office (Hollyer and Rosendorff 2012), government's propensity to “buy national” and thus to discriminate foreign firms when awarding lucrative contracts (Rickard and Kono 2013), democratization and peace (Pevehouse 2005), environmental performance (Baghdadi *et al.* 2013), and human rights violations (Hafner-Burton 2005; Spilker and Böhmelt 2013). In her seminal article, Hafner-Burton (2005) has argued that while international human rights treaties are ineffective in changing repressive state behaviors, preferential trade agreements containing “hard” human rights standards tied to market access do significantly reduce government's human rights violations. This key finding, however, has recently been challenged by Spilker and Böhmelt (2013) on methodological grounds, claiming that countries, being aware of the “shadow of the future”, agree on “hard” human rights standards only if they have a general propensity to abide by human rights in the first place. A recent study by Kim (2012), building on Putnam’s two-level game theory, argues in the context of US signed trade agreements, that the improvement of labor rights happens through an ex ante due diligence mechanism: countries improve their labor standards before signing a PTA with the US, knowing that this will increase their attractiveness as potential PTA partners. Building on Kim’s study, Postnikov and Bastiaens (2014) argue that the improvement in labor rights in EU PTA signatory countries is exhibited ex post, rather than ex ante as in the case of US PTAs. Using qualitative comparative analysis of US free trade agreements, Giumelli and van Roozendaal (2016), however, find that stricter agreement conditions (measured by the pre-

ratification conditions, the existence of a credible threat with stronger sanctioning mechanism and by the amount of financial support received by the signatory state from the US) do not contribute to the improvement of labor standards, with one notable exception, Colombia. Similarly, Kamata (2016) finds no impact of PTAs including labor clauses on labor conditions measured as the mean, monthly, real earnings, mean weeks work hours per employee, fatal occupations injury rate, and the number of the ILO's Core Conventions ratified.

A number of qualitative studies (Compa and Vogt, 2001; ILO 2013; Vogt 2014) have examined the effects labor provisions in PTAs may produce in terms of labor legislation and compliance with labor laws. Echoing the main finding by Hafner-Burton (2005) for human rights, these studies find that conditional labor provisions are more effective than promotional labor provisions, that is, trade agreements with enforceable labor provisions are more effective than agreements that provide for capacity-building and cooperation over labor provisions. The second finding is that pre-ratification conditionality often leads to significant changes in labor legislation, especially improvements or adoption of legal guarantees of workers' rights, while post-ratification conditionality (via complaint and dispute settlement mechanisms) plays a modest role with respect to compliance of national laws. Finally, effectiveness depends crucially on the political will of partner countries, that is, the ability of trade unions and civil society organizations to activate the different dimensions of labor conditionality in trade agreements.

To sum up, we lack systematic knowledge about the social consequences of PTAs with and without labor provisions, not to mention the dearth of attention to the effect of variation in the design of labor provisions in PTAs. For instance, the latest major entry in the debate on the causes and consequences of the design of PTAs, the volume edited by Andreas Dür and Manfred Elsig (2015), contains no contribution on labor clauses.

3. Argument

We believe that the role and effectiveness of voluntary commitments by states to cooperate over social and human rights in international (trade) agreements have so far been underappreciated. The conventional wisdom offered by existing literature addressing the effects of PTAs on human/labor rights is that only PTAs with enforceable labor provisions are effective in influencing state compliance with such rights (Hafner-Burton 2005; Kim 2012; ILO 2013). It is commonsense to argue that unless international commitments taken up by governments are enforceable they are ineffective in changing state behavior, that is, international agreements require a combination of material benefits to incentivize participation and sanction mechanisms to ensure compliance. Cooperative mechanisms such as exchange of information and best practices, capacity-building, persuasion and mutual learning as enforcers of mutual commitments in international (trade) agreements are on the whole considered to be ineffective in changing social behavior as they do not provide coercive capacity (Hafner-Burton 2005). Only a handful of recent studies attempted to look at such provisions more closely (Polaski 2004, ILO 2013, Oehri 2015, Ebert 2015, Banks 2011) to highlight the potential they may have, but always with the caveat that their impact largely depends on their design, the financial resources available and the political will of governments.

Contrary to previous findings, we argue that the complexity of labor standard related issues distinguish them from the kinds of problems that can be effectively addressed through adjudication, even where economic leverage is available (Banks 2011). The adjudication based model of governance is heavily influenced by the perceptions of how international trade law works (tit-for-tat) and as such it disregards the intricacy that compliance with labor standards requires in practice even where the political will is given. Also, considering that economic or trade sanctions do not only cause economic damage to the sanctioned but to the

sanctioning party as well, actors might as well prefer to activate the cooperation provisions instead of the long road of adjudication (Krasner and Weinstein 2014).

We also have more empirical reason to believe that soft labor provisions relative to cooperation in PTAs can influence state compliance with collective workers' rights. As we will document below, the incidence and scope of labor cooperation clauses in newly signed PTAs has significantly increased since the early 2000s. Cooperation activities led by the US and the EU have become much deeper in recent years (e.g., US-Colombia). Earlier research with a similar research question may have failed to capture such effect either because the analysis ended in the early 2000s or because the effect of soft provisions was not investigated (Hafner-Burton 2005; Böhmelt and Spilker 2013).

The general purpose of intergovernmental regimes is to facilitate cooperation at the international level and thereby enable countries to solve problems that they are unable to solve independently, thus realizing benefits from mutual cooperation (Keohane 1984). The main dividing line in state interest on trade-related labor standards lies between developing and developed states, that is, between the global South and the global North. Poor working conditions and wide-ranging violations of labor rights in the global South is a problem or concern for developing and developed countries alike.⁵ The former often lack the willingness and/or capacity to act upon dismal labor standards at home, whereas the latter are under increased pressure and scrutiny to address poor social and environmental governance in global supply chains and to respond to rising demand for ethically produced goods and services. Abandoning repressive behavior with respect to workers' rights might be a costly strategy for many developing countries. In the fierce global competition to attract mobile (productive) capital, developing countries might forge a competitive advantage by reducing

⁵ We note that such issues are also problematic in North-North relationships (cf. TTIP).

workers' social and labor protections. In other words, repressive actors might have good reasons to continue abusing workers' rights.

We argue that membership in trade agreements with soft, labor-related cooperation provisions may influence compliance with collective labor rights in developing countries, particularly by way of building capacity of domestic labor bureaucracy and civil society actors. *Where developed and developing country preferences are aligned* and a lack of capacities in developing countries is at stake, developed country parties to trade agreements provide much needed resources and know-how that help developing countries to revise their labor related laws, strengthen the capacity and role of social partners and the supporting labor bureaucracy, etc. To the extent that there is an efficiency case for international labor standards (Brown *et al.* 2013; Schrank 2013), developing countries might be eager to engage in international labor cooperation and experience domestic labor improvements.

Where developed and developing country preferences are unaligned because abandoning repressive behavior can be costly for developing countries, in the absence of enforcement there are two mechanisms through which cooperation over labor issues in trade agreements might influence a country's willingness to enhance its protection of workers' rights. First, international agreements may compel member states to obey their rules by raising the reputational stakes for renegeing on treaty commitments (Keohane 1984). Second, international regimes create norms defining good behavior. Membership in trade agreements with labor provisions may be important to socializing states in relation to the protection of fundamental workers' rights. Interaction at the international level through trade ties, which serve as a channel for the exchange of information and best practices and as a forum where state actors can meet, deliberate and persuade one another, may play a critical role in the socialization process among states (Pevehouse 2005).

We, however, also argue that the specific design of labor-related cooperation provisions is key in improving compliance with collective labor rights, among others, by defining the level of commitments versus the level of discretion the parties may have in the implementation of those provisions. Vague wording with shallow commitments and weak institutions are less likely to create the necessary mechanisms to foster much needed assistance and capacity, particularly without the existence of strong civil society and social partners. As argued by Abbott et al. (2000), precise rules can specify clearly and unambiguously what is expected of a state or other actors (in terms of intended objectives and the means of achieving it) and as such can narrow the scope for reasonable interpretation. While general labor cooperation provisions should matter for trade union rights, references in PTAs that specify cooperation over those rights should have an even greater influence on compliance with FACB rights. This is because in this particular case the trade agreement explicitly specifies FACB issues over which signatory parties have to cooperate and thus the parties taken upon themselves commitments to work on FACB improvements in law and in practice. Similarly, precision in the references to specific means of cooperation provided for in PTAs (ranging from simple exchange of information at international fora to commitments to provide technical assistance) is central in confining discretion and an important indication of the degree of the parties' determination to realize their commitments. In other words, when trade partners explicitly target FACB rights for cross-border cooperation activities and agree on the set of means to carry out those activities with, it should make the overall outcome less dependent on the political will of governments and should be associated with stronger improvements in compliance with FACB rights. Hence our first hypothesis:

Hypothesis 1: State commitment to PTAs with precise labor-related cooperation provisions over FACB rights should reduce violations of FACB rights.

The design of the accompanying institutional framework, however, also matters and can directly influence the level of compliance with labor rights. We argue that PTAs providing for a separate body with the involvement of social partners, civil society organizations and other actors (e.g. ILO) to monitor and implement labor-related provisions yield better results than PTAs where such body is not established or established only with a symbolic role (i.e., lacking the effective participation of civil society organizations).

The existence of a designated separate forum, particularly with regular meetings, allows relevant stakeholders to have recurring discussions and consultation on their commitments, and to identify and raise their technical assistance and capacity related needs. Frequent state-to-state exchanges together with the high importance attached to the implementation of trade agreements may also create additional incentives to prioritize labor issues on the political agenda and thereby to assist with setting the labor agenda and its direction in the given country. Also, attaching more importance and visibility to such labor-related cooperation activities might help avoiding a one-sided implementation of labor provisions and could contribute to more fairly sharing the costs of improving labor standards (Ebert 2015). The involvement of civil society and other third actors carries alike significance. While a considerable amount of research is devoted to the role of civil society during trade negotiations (Dür and De Bièvre 2007, Spalding 2008, Del Felice 2012), less attention has so far been paid to their role in the implementation of PTAs, particularly beyond their relevance in the complaint mechanisms (Van den Putte 2015, Oehri 2015). The institutional framework supporting the implementation of labor-related cooperation provisions provides an important avenue for civil society organizations to strengthen their transnational relations and cooperation and thereby to improve their involvement and effectiveness vis-à-vis other stakeholders. It is in this form that they can best provide the necessary pressure and checks in the implementation of labor-related provisions. They also bring a set of expertise and point of

view that has for long been missing from trade relations and which bear particular substance in better targeting agreed cooperation activities.

For the above mechanisms, however, to be effective, a high level of institutionalization is also needed. Borrowing from the legalization concept established by Abbott et al. (2000), the level of institutionalization in this context consists of two key elements: obligation and precision (Van den Putte 2015). On the one hand, the functioning of the institution should not be left to the discretion of the parties, and, on the other hand, the relevant provisions should be established with a sufficiently high degree of precision to strengthen the accountability of those involved. Hence our second hypothesis:

Hypothesis 2: State commitment to PTAs with highly institutionalized and inclusive bodies responsible for the implementation of FACB related provisions should reduce violations of FACB rights.

4. Data sources and coding

Central to our analysis are, of course, the PTAs themselves. Our source for the PTAs is the DESTA database.⁶ DESTA is a recent dataset on the content of PTAs that comprises approximately 790 PTAs signed in the post-war period providing a larger dataset than those exist under the WTO.

In order to code the PTAs in terms of the presence/absence of labor provisions and of the actual design of the provisions we developed our own coding scheme consisting of 145 items. The coding table is structured around five overarching categories: I. Substantive commitments in relation to labor provisions; II. Obligations in relation to labor provisions; III. Enforceability of the substantive labor provisions; IV. Cooperation and V. Institutions. Each overarching category has a detailed list of items against which the PTAs are coded. Given that

⁶ <http://www.designoftradeagreements.org/>

the units of analysis during the coding are the specific items listed under the substantive commitments, the coding scheme is highly repetitive in other parts resulting thereby in the large number of items listed in the coding scheme.

Under substantive commitments we list items related to relevant international instruments, fundamental rights at work, conditions of work (such as health and safety, working time and wages) and also domestic law related commitments such as non-derogation, effective enforcement and access to domestic courts. Under the second overarching category (Obligations in relation to labor provisions), following a strict legal interpretation of the agreement texts, we code the extent of obligations undertaken by the signatory parties. Under enforcement we apply the distinction adopted by a WTO mapping (Chase *et al.* 2013) and distinguish between three types of dispute settlement mechanisms (Political, Quasi-Judicial and Judicial DSM) and also code provisions with regard to remedies provided in relation to labor provisions. Given our particular interest in the impact of labor related cooperation provisions, we constructed a comprehensive list of items under our fourth overarching category, capturing not only a list of issues that can be covered under such cooperation related commitments, but also the means by which the activities are carried out. The fifth and last category depicts the attributes that can determine the role and influence the institutional set up may have in the effective implementation of labor provisions. Such items include the coding of the type of bodies responsible for the cooperation, their operation, the status of participants and consultation with third parties (e.g., social partners, ILO, NGOs, etc.).⁷

⁷ To test the reliability of our coding we cross-checked our results on 13 dimensions with that of the coding developed by Lisa Lechner for non-trade issues in PTAs (Lechner 2016). The average Cohen-Kappa across the 13 dimensions of labor rights is 0.75 (range: 0.63 to 0.88) which is recognized as substantive agreement. These 13 dimensions are: FACB rights; prohibition of forced labor; prohibition of child labor; non-discrimination in respect of employment and occupation; health and safety at work; working time; wages; corporate social responsibility; means of cooperation (technical assistance and exchange of information/people); separate committee for the monitoring and implementation of labor provisions; reference to ILO 1998; and reference to internationally recognized labor standards.

The main shortcoming of many of the existing studies is the significant data constraint they face in relation to labor rights. Such rights are inherently qualitative in their nature and as such do not lend themselves to be measured by traditional quantitative indicators (such as union density rates, collective bargaining or existing data on strike action). A commonly used way of measuring compliance with labor standards was to rely on the number of ratifications of ILO Conventions (i.e. Rodrik 1996; Busse 2002; and Böhning 2003). This approach, however, implies a significant measurement constraint, where the variable is defined in a single act of ratification without controlling it with data on the actual implementation and application of rights set out in the relevant Conventions. To overcome the above constraint a number of new country-level “qualitative” indicators have been developed.⁸

Among those, the most recent, state of the art indicators are the Labour Rights (LR) Indicators, developed by two of the authors (Kucera and Sari 2016). The indicators are based on the ILO's definitions and jurisprudence of FACB rights and are constructed by coding nine different textual sources, including the reports produced by the ILO supervisory bodies (*Reports of the Committee of Experts on the Application of Conventions and Recommendations, Reports of the Conference Committee on the Application of Standards, Country Baselines Under the ILO Declaration Annual Review, Representations under Article 24 of the ILO Constitutions, and Complaints under Article 26 of the ILO Constitution*), the International Trade Union Confederation's *Survey of violations of Trade Union Rights*, the U.S. Department of State's *Country Reports on Human Rights Practices* and national legislation. The construction of the indicators builds on five basic elements: the premises of definitional validity, reproducibility and transparency; the 108 violation type used to code violations both in law and in practice; the textual sources selected for the coding; the general

⁸ Without the list being exhaustive: a) Institutional projects - NAS-ILAB indicators, WebMILS, Verité, CIRI Human Rights Data, Cambridge University Indicators, Harvard Global Labor Survey; b) Academia – W.R. Böhning; R. Block; Mosley and Uno; Kuruvilla et al.; Botero et al.; Georgiou and Baccaro; Teitelbaum; Weisband; Barenberg etc.

and source-specific coding rules; and the rules to convert the coded information into normalized indicators. One of the main benefits of the dataset comes from its clear and careful distinction between violations in law and in practice allowing for a better understanding of the underlying causes of violations, that is, how much it originates in the legal texts and how much it is a matter of enforcement and implementation. Also, contrary to other similar databases used almost exclusively in the studies on the trade/FDI-labor nexus, the coding relies not only on secondary and more subjective sources, but extends the analysis to primary legal sources as well. Another novel aspect of the indicators is the application of the “Delphi method” to construct weights for the 108 evaluation criteria, based on the opinions of internationally-recognized experts in labor law having knowledge of the ILO’s supervisory system as well as knowledge of trade union rights as defined by the ILO. In addition, for all-encompassing violations of trade union rights, the so-called “default” score, that is the worst possible score of 10 is applied irrespective of the value of the “real” normalized score.⁹

5. Descriptive analysis

Since the 1990s and particularly since the 2000s labor-related cooperation and institution provisions included in PTAs have been evolving at a rapidly increasing pace (see Figures 2.D and 2.E). During the 1990s, agreements signed with such provisions remained shallow and were almost exclusively signed by the EC with Central and Eastern European countries, all of whom become full members of the EU in 2004. While labor commitments under “Substance” were restrictive and only within the scope of approximation of laws,

⁹ As the authors explain in their method paper (2016): “One of the advantages of applying the default score rules is that this enables us to partly address a source of information bias in the textual sources. For in many cases, the textual sources read like an insurance assessor’s report on an automobile damaged in an accident. For a minor accident, the report will address the specifics of surface damage. For a moderately serious accident, the report will additionally address such issues as damage to the frame, axles and engine. When an automobile is totally beyond repair – analogous to general prohibitions in our case – the insurance assessor’s report can be most brief and not explicitly refer to the damage that would be reported in a minor or moderately serious accident, even though such damage has occurred. Similarly, our reading of the textual sources suggests to us that the lack of reporting of other less sweeping violations when general prohibitions occur does not mean that these other violations do not occur, but rather that they are underreported because the sources do not trouble to report them.”

cooperation related provisions focused exclusively on workplace health and safety. A similar approach is being carried over into the Stabilisation and Association Agreements signed by the EC with Macedonia, Albania, Montenegro, Bosnia and Herzegovina and Serbia. The difference with previous agreements is the pronounced reference to equal opportunities.

Until the end of 1990s there were only two agreements with comprehensive cooperation provisions on labor related issues: the North American Agreement on Labor Cooperation (NAALC), a side agreement attached to the NAFTA and the agreement signed between Canada and Chile, which – as the pre-text to the side agreement clarifies – was closely modeled on the NAALC. The NAALC was the first to establish a separate institution with the task of implementing labor-related provisions and remains among the still relatively few PTAs that establishes regular meetings for the relevant representatives. While the NAALC has provided an extensive list of issues under cooperation activities and a variety of means, including capacity building, existing literature indicates that “cooperation has not been very extensive or sustained”¹⁰ and mainly remained at the level of seminars, trainings and conferences (ILO 2013, Ebert 2015). Polaski (2004), however, notes that under the public right to petition for enforcement, such petitions and their examination provided opportunities for technical assistance and, in some cases, it led to the elimination of harmful practices.

From 2000 onwards, both the number of trade agreements signed with labor-related cooperation provisions and the issues included in those have been on the rise; together with the establishment of distinct institutional mechanisms and the explicit involvement of social partners and other third parties, such as the ILO and relevant non-governmental organizations. A shift has also occurred in terms of countries signing PTAs with such provisions: while during the early 2000s it was almost exclusively the US, Canada and the EC, from the second part of the decade countries like Chile, New Zealand, Korea and – although with a more

¹⁰ Polaski (2004) p. 23; also see report <http://govinfo.library.unt.edu/tdrc/hearings/21jan00/aolaborde1.pdf> (accessed on 06.03.2016)

limited scope – even China joined the list of countries signing PTAs with provisions on labor related cooperation.

Figure 3 lists the substantial issues and the frequency of their references in PTAs, as coded under our coding scheme. From Figure 3 it can be seen that labor administration and fundamental rights included under the ILO 1998 Declaration on Fundamental Principles and Rights at Work and particularly those related to discrimination and freedom of association and collective bargaining rights – together with industrial relations and social dialogue – are among the issues that are featured at the highest number in PTAs.

Figure 4 A-C exhibits the above mentioned evolution in the PTAs signed by major players (i.e. US, Canada, and EC). Between 2003 and 2007 the U.S. has signed a series of trade agreements with particularly broad and stringent provisions on labor cooperation included in the main agreements themselves instead of being detailed in a side agreement, as was the case with NAALC. In all the US signed PTAs a separate body is established to oversee the implementation of the labor chapter with frequent references to the involvement of social partners and, to a lesser degree, to the ILO. The issue areas listed under cooperation range from reference to the ILO 1998 Declaration, the rights covered by the ILO fundamental Conventions (including the explicit reference to FACB rights), domestic labor laws, industrial relations and labor administration; but also to CSR, employment creation and migrant workers. The two agreements that include less far-reaching cooperation related provisions are those signed with Australia and Jordan.

Under the established institutional framework the US has committed and carried out a series of cooperative activities focusing on compliance with international labor standards and the improved implementation of labor laws, particularly by strengthening the capacity of labor administration, social partners, inspection and labor judiciary system. One of the most extensive capacity building program has so far been carried out under the Dominican

Republic-Central America-US (CAFTA-DR) agreement with the US Government pledging over USD 142 million in funds from 2005-2010.¹¹ The goal areas were identified through a cooperative process with partner countries and civil society partners, with priority areas identified in the 2005 White Paper¹². Among those areas the first directly concerned freedom of association, trade unions and labor relations. While the overall impact in the region has remained limited and serious labor rights violations persist, according to the AFL-CIO, workers have won over USD 4 million in compensation and damages for labor rights violations, more than 1,000 workers have been reinstated after wrongful terminations, 34 new unions were formed, at least 30 collective agreements were negotiated or renewed, 50 women have been elected to union leadership positions and more than 20,000 workers have been educated on labor rights.¹³

Under the agreement signed with Morocco, the cooperation activities focused on the strengthening of industrial relations (USD 3,072,431) with capacity building for labor inspectors and training for social partners and regional directors of labor inspection on the new labor law and on bargaining techniques and dispute resolution for Ministry officials.¹⁴ In Oman and Bahrain a technical cooperation project “Promoting fundamental principles and rights at work and social dialogue” was carried out with the objectives to develop a functioning tripartite system and to improve the effectiveness of labor inspections. With the organization of a series of seminars, the project (USD 379,000/country) was of key importance in view of the recent enactment of legislation providing for freedom of association

¹¹ <https://ustr.gov/about-us/policy-offices/press-office/fact-sheets/2011/may/cafta-dr-labor-capacity-building> (accessed on 04.03.2016)

¹² The six priority areas were: (a) labor law and implementation (freedom of association, trade unions and labor relations, inspections and compliance); (b) budgetary and personnel needs of the Ministries of Labor; (c) strengthening the judicial systems for labor law; (d) protections against discrimination in the workplace; (e) worst forms of child labor; and (f) promoting a culture of compliance. (U.S. Department of Labor 2009)

¹³ Labor Capacity-Building Efforts Under the Dominican Republic-Central America-United States Free Trade Agreement, Comments from the AFL-CIO, <http://www.regulations.gov/#!documentDetail;D=DOL-2014-0005-0003> (accessed on 04.03.2016)

¹⁴ http://www.dol.gov/ilab/projects/summaries/morocco_otla.htm (accessed on 04.03.2015)

and collective bargaining.¹⁵ More recently the US adopted a specific Labor Action Plan with Colombia (2011) and a Labor Implementation Plan with Jordan (2013), both of which identifies concrete steps to be carried out in cooperation or with the assistance of the US and other organizations to further strengthen their normative commitments and the effective enforcement of basic workers' rights. Since the adoption of the Colombian Labor Action Plan, the US already committed a little over USD 9 million to strengthen protections of international recognized labor rights with capacity building of workers to file complaints for labor law violations and to promote compliance with international labor standards, particularly those associated with FACB rights¹⁶ (see Figure 4. A).

Similar to the US approach, agreements on labor cooperation (ALC) attached to the PTAs signed by Canada have retained a comprehensive approach to labor related cooperation provisions, both in terms of issues covered and the institutional mechanism attached to these activities (see Figure 4. B). In each of the ALCs, a separate body is set up for the implementation of the agreement, although contrary to the NAALC, no provision is included regarding the frequency of the meetings. Both the ILO and social partners are regularly referred to (except the Canada-Costa Rica ALC, 2001), while the means of cooperation includes exchange of information, exchange of people (i.e. study visits, joint research, seminars and workshops) and technical assistance. The Canada-Chile ALC has led to a series of seminars and conferences focusing initially on rights and labor law related matters, then on exchange of best practices on the field of occupational safety and health and then matters related to dispute resolution (ILO 2013). In spite of being less detailed than the other ALCs, the ALC signed between Canada and Costa Rica led to the implementation of a 2.5 million Canadian dollars technical assistance program strengthening Costa Rican labor

¹⁵ <http://www.dol.gov/ilab/projects/summaries/BahrainProjectDescription.pdf>
http://www.dol.gov/ilab/projects/summaries/oman_ofla.htm (accessed on 04.03.2016)

¹⁶ http://www.dol.gov/ilab/projects/summaries/Colombia_Worker_Rights_Centers.pdf
http://www.dol.gov/ilab/projects/summaries/Colombia_ILS_Compliance.pdf (accessed on 04.03.2016)

administration, while the Canada-Peru ALC brought about a six-month training course for labor inspector and a project aimed at promoting social dialogue (ILO 2013).

Given the changes in the design of labor provisions in PTAs signed by the EU, the cooperation related provisions vary significantly over time (see Figure 4. C). The first agreements with concrete reference to the ILO and the four fundamental rights listed under the ILO 1998 Declaration on Fundamental Principles and Rights at Work was the PTA signed with South Africa in 1999 and the Cotonou Agreement, a partnership agreement signed between the members of the African, Caribbean and Pacific (ACP) Group of States and the EC in 2000. Particularly the latter has been considered a key milestone in the development of the Economic Partnership Agreement signed in 2008 between the CARIFORUM States and the EC. Compared to earlier agreements, the latter is the first that devotes separate and detailed provisions for social and labor related cooperation, with a concrete list of activities together with specific consultation and monitoring process. Both the Cotonou Agreement, the CARIFORUM EC EPA and EC Chile agreement include reference to the promotion of ILO's fundamental Conventions together with reference to cooperation over national labor laws, industrial relations and labor administration. These agreements, however, do not provide for a separate body and the means of cooperation is limited to exchange of information.

The latest and one of the most considerable changes has, however, been taking place since 2010: the linking of trade with sustainable development in the agreements signed by the EC and lately the EFTA and the subsequent inclusion of labor and environment related provisions under the "Trade and sustainable development" chapters.

And indeed, the EU in its renewed Sustainable Development Strategy (2006) and more particularly in its 2010 Communication on Trade, Growth, and World Affairs (outlining the contribution of trade to inclusive and sustainable growth in the EU and abroad) has defined its trade policy as such that should be supportive of sustainable development, one of the

overarching objectives of the EU. All bilateral agreements concluded recently by the EC now have a separate “Trade and sustainable development” chapter, including not only commitment to promote and effectively implement core labor standards and up-to-date Conventions of the ILO, but also lengthy provisions on cooperation activities with detailed regulations on the supporting institutional and monitoring mechanisms and Government consultations. The agreement signed by the EC with Korea (2010), for example, provides a 13 points list under Annex 13 on “Cooperation on Trade and Sustainable Development”. Similarly comprehensive cooperation provisions are included in the agreements signed with Central America countries and with Colombia/Peru in 2012; and Georgia, Moldova and Ukraine in 2014. Contrary to previous agreements signed by the EC, each of these PTAs provide for separate body, although - with the exception of the PTA signed with Ukraine - do not regulate the frequency of the meetings.

Regarding the involvement of social partners, one of the key innovations of the last generation EU agreements is the inclusion of civil society in the Domestic Advisory Group (DAG, comprising representative organizations of civil society in a balanced representation of environment, labor and business organizations as well as other relevant stakeholders) whose task is to advise on the implementation of the Sustainable Development Chapter. Such meetings under the EU-Korea trade agreement began in 2012 and so far were held in each year since then. The first meeting under the PTA signed with Colombia and Peru was held in 2014. The limited experience with South Korea (with fierce criticism over the composition and actual independence of the Korean civil society representatives from the Korean government), however, shows so far a modest role for the DAG to play.¹⁷

Among means of cooperation, the agreements predominantly refer to exchange of information and exchange of people and only the PTA signed with Central America countries

¹⁷ Van den Putte (2015).

provide for technical assistance. While the list of issues covered is among the most comprehensive ones, including reference to all ILO fundamental Conventions (except the PTA signed with Ukraine which only refers to non-discrimination), internationally recognized labor standards, industrial relations, labor administration but also ILO's Decent Work Agenda and corporate social responsibility, the list is merely indicative in contrast to those contained in earlier agreements, such as the CARIFORUM.

Besides the key players, New Zealand has signed a series of agreements incorporating wide ranging institutional and cooperation related issues. Each of the PTAs provide for a separate body and, in the case of agreements with China and Hong Kong, it also includes provisions regarding the frequency of the meetings. While reference to social partners is frequent, no provision mentions the involvement of the ILO. Among the PTAs signed by New Zealand the most comprehensive one is that signed in 2013 with Taiwan. It is the only PTA that provides for technical assistance as means of cooperation and incorporates a substantively longer list of items over which the parties agreed to cooperate. The list includes reference to the promotion of rights covered by the ILO fundamental Conventions and, similarly to the other PTAs signed by New Zealand, labor laws, industrial relations and labor administration.

Among the growing number of South-South PTAs the more comprehensive agreements are those modelled after a North-South agreement signed earlier by one of the parties. In terms of cooperation related provisions, one of the most far reaching South-South PTA is the one signed between Nicaragua and Taiwan in 2006. These agreements typically provide for separate body, although none of them regulates the frequency of the meetings. Means of cooperation includes both exchange of information, exchange of people and technical assistance. The cooperation related provisions refer to the ILO 1998 Declaration and/or rights covered by the ILO fundamental Conventions, together with reference to

industrial relations and labor administration. Other South-South PTAs are shallower and cover fewer issues to cooperate over. While the majority of them establishes a separate body to oversee the implementation only a few of them contains reference to social partners and only the PTA signed between Chile and Peru refers to the ILO. The means of cooperation exclusively includes exchange of information and people, but no reference is found to technical assistance. Issues covered by cooperation most frequently refer to industrial relations and labor administration, but reference to decent work, working conditions/health and safety at work and labor laws also occur.

6. Regression analysis

6.1. Variable definition

Dependent variable. Our dependent variables (available for 2000, 2005, 2009 and 2012) include two of the three LR indicators: LR in law and LR in practice. Each indicator ranges in a value of 0 to 10, 0 being the best and 10 being the worst score. In law indicators are the normalized scores of weighted violations in law, i.e. national legislation that is not in conformity with FACB rights as defined by the ILO as well as actions taken on the basis of such legislation. Indicators in practice are the normalized scores of weighted violations in practice, i.e. acts committed in violation of existing national legislation that is in conformity with FACB rights as defined by the ILO.

The LR in law and in practice indicators are normalized against an agreed maximum weighted non-normalized score which is higher than the maximum weighted non-normalized score observed for a specific year. Should any country receive a non-normalized score greater than the agreed maximum, it is capped at the maximum, yielding a normalized score of 10. There is, however, one deviation from the above normalization rules: the application of

“default” scores. A “default” worst possible score of 10 is given for all-encompassing violations of FACB rights, that is, for “General prohibition of the right to establish and join organizations” in law, “General prohibition of the development of independent workers' organizations” in practice, “General prohibition of the right to collective bargaining” in law, and “General prohibition of collective bargaining” in practice.

Independent variables. The coding of labor provisions in PTAs is carried out with a binary coding. As such each criterion under which information is coded gets a score of 1 and criteria under which no provision is coded get a score of 0. There is, however, one deviation from the above rule. In cases where the coding is a choice between two options carrying different weights (e.g., an independent body set up to monitor and implement labor provisions, a so-called ‘separate committee’, or the body set to monitor and implement the entire trade agreement is also responsible for the implementation of labor-related provisions, a so-called ‘regular committee’), we decided to introduce a 0.5 weight to the option that in our system has a weaker value (‘Regular Committee’, ‘Ad hoc meetings of Separate Committee’, ‘Low rank administrators present in Separate Committee’).

Our two predictors concern our key interests: labor related cooperation provisions and provisions establishing the institutional framework for the monitoring and implementation of labor commitments. For the construction of the variables we first generated a *dummy* to capture the labor related Cooperation commitments and a *continuous* variable for the Institutions related provisions. Considering, however, the scope of our dependent variable (FACB rights) and our particular interest in the impact of labor related commitments on collective labor rights, we conditioned each of our variables on FACB rights, being calculated only when the respective PTA includes commitment(s) in relation to such rights.

Based on the specific items we code under our coding scheme, FACB rights can be defined in a narrow or a broader sense. The narrow definition concerns only commitments

directly specific to freedom of association and/or collective bargaining rights (or ILO Convention No. 87 on Freedom of Association and Protection of the Right to Organize and/or ILO Convention No. 98 on the Right to Organize and Collective Bargaining). The broad definition, however, also consists of references to items that among others comprise commitments to such rights: these being the reference to ‘ILO 1998 Declaration on the Fundamental Principles and Rights at Work’¹⁸, the more general ‘Internationally recognized labor standards’, and – in cases of labor-related cooperation commitments – references to ‘Industrial relations, social dialogue’. We adopt the broad definition of FACB rights.

The FACB cooperation dummy takes the value 1 if a country belongs to a PTA with FACB specific labor-related cooperation provisions (0 otherwise). This includes not only references to the particular issues over which the parties agree to cooperate but also the means of cooperation by which the parties agree to carry out the cooperation activities. This refers to exchange of information, exchange of people (e.g. study visits, joint research, seminars, conferences and workshops) and technical assistance or capacity building projects and it is conditioned on reference to FACB rights under the issues covered by cooperation. As noted above, our variable for the Institutions related provisions is a continuous variable. We opted for the continuous variable to best capture the level of institutionalization and inclusiveness of such provisions. It encompasses ten different items vis-à-vis the type of implementing body agreed upon by the parties (i.e. separate entity or the one established for the general implementation of the overall PTA) and the actors involved in the process of monitoring and implementation (i.e. social partners, the ILO or representatives of civil society or other relevant institutions). Given that it is this category where our weighting is applied the variable can take a minimum score of 0 and a maximum score of 8.5, but only if the PTA includes

¹⁸ The Declaration commits all ILO member States to respect and promote the principles and rights in relation to four categories of labor rights, irrespective of whether they have or have not ratified the relevant ILO Conventions. These categories are: freedom of association and the effective recognition of the right to collective bargaining, the elimination of forced or compulsory labor, the abolition of child labor and the elimination of discrimination in respect of employment and occupation.

reference the FACB rights either under substantive or cooperation related commitments (0 otherwise).

Importantly, our independent variables *Cooperation FACB* and *Institution FACB* reflect on the time dimension and the additional pressures (or opportunities) each newly signed PTA may place on the signatory parties. To generate them thus requires aggregating the various commitments made across PTAs. The calculations follow the rule that the variables introduced above (i.e., the dummy for Cooperation and the continuous variable for Institution) are additive not only within the year (i.e., all PTAs with respective references signed within the same year) but also across the period of 1990-2012. For instance, if a country signed a PTA in 2002 with a value of 1 on the FACB cooperation dummy, then that value will be carried over to each of the consecutive years and subsequent commitments will be added to it (e.g., in 2003 there are two PTAs with FACB cooperation commitments, that would amount to a score of 2 and so for 2003 the country would get a score of 3 and so on).¹⁹

Following a similar method, we generated two additional predictors, *Cooperation All* and *Institutions All*, which are not conditioned on FACB commitments. For instance, the underlying dummy for calculating *Cooperation All* takes the value 1 if the country belongs to a PTA with reference to any labor-related cooperation provisions we list in our coding scheme (0 otherwise). This includes not only references to the particular issues over which the parties agree to cooperate but also the means of cooperation by which the parties agree to carry out labor related cooperation activities. We generate those based on the assumption that general provisions might have an impact on our dependent variable irrespective of whether there is a specific reference to FACB rights. Also, we use this variable in one of the robustness checks where the dependent variable is a broader measure of collective labor rights than freedom of association and collective bargaining rights.

¹⁹ We also generated an enforcement variable *Enforcement_FACB* (see Appendix A1 for the variable definition).

Controls. We control for a number of variables that existing research has shown to independently influence collective labor rights. Our baseline model includes three controls. Freedom House’s political rights indicator is taken as our measure of *democracy*. It ranges between 1-7 with higher values implying *fewer* political rights and freedoms. In order to best reflect on the results, this variable is labelled as “Autocracy” within in our tables reporting on the results. The second control is *trade* openness measured as the sum of imports and exports as a proportion of GDP. The data come from the World Bank. Next, we also control for *GDP per capita*, measured as the log GDP per capita in constant 2005 US dollars, taken from the World Bank Development Indicators.

Our fully specified model adds another five control variables. We control for *FDI stock*, measured as a percentage of GDP, to capture the role multinational corporations may play in disseminating labor rights internationally. The data is from UNCTAD. In addition, taken from the World Bank Development Indicators, we control for the size of the *urban population* as a percentage of the total population and *industry value added* as a percentage of GDP. These two controls capture societal pressures for greater labor protections resulting from higher levels of industrialization. We also introduced a dummy for EU countries to control for harmonization of laws as part of the *acquis communautaire*. The *EU* dummy takes a value of 1 for the first year the given country signs an agreement with labor provisions and then is applied for all the consecutive years. For the EU member States that joined the EU after the EU’s first PTA with labor provisions, the dummy is added for the year of accession to the EU (and then the consecutive years).

Last, we control for the potential impact of labor provisions included in unilateral trade agreements. Given that only the EU and the US include labor provisions in their unilateral programs, we collected annual data from 1993 to 2012 for the following schemes: US Generalized System of Preferences; African Growth and Opportunity Act (AGOA), one of

the US's regional preference programs; and the EU's Special Incentive Arrangement for Sustainable Development and Good Governance (GSP+). The *GSP* dummy takes a value of 1 for every year a country was a beneficiary under any of these three schemes and the value 0 for years under which the country was suspended or ceased to be a beneficiary from the scheme (unless the country remained covered by another scheme). The data is taken from the US's annual Harmonized Tariff Schedule and the relevant EU Council Regulations (No 980/2005, No 732/2008, No 978/2012) and Commission Decisions on the list of the beneficiary countries qualifying for the GSP+ (Commission Decision 2005/924/EC) or in relation to the investigations carried out under the GSP+ (El Salvador, Panama and Sri Lanka).

One additional control, the ratification of relevant ILO Conventions, is introduced in one of our robustness specifications. *ILO8798*, ranging between 0-2, measures whether a country has ratified ILO Convention 87 on the freedom of association and Convention 98 on the right to collective bargaining. The data source is the ILO. We do not control for *ILO8798* in the main estimation as it is plausible that *ILO8798* might act as an intervening variable.

All our predictors and controls are calculated as 3-year averages as follows: 1998-2000, 2003-05, 2007-09, and 2010-12. Note that we dropped fifteen countries from the sample for reasons suggested by Kucera and Sari (2016).²⁰ We estimate our baseline model (and subsequent supplementary analysis) on the sub-sample of developing countries as we expect these countries to be the main beneficiaries of cooperation-related activities.²¹

²⁰ Kucera and Sari dropped fifteen countries (Afghanistan, Burundi, Chad, Congo, Gabon, Gambia, Guinea, Guinea-Bissau, Kyrgyzstan, Maldives, Rwanda, Somalia, South Sudan, Tajikistan and Yemen) based on whether the overall LR indicator was 5.0 or less than the Freedom House civil liberties index in at least two out of the four years (2000, 2005, 2009 and 2012) after rescaling the FH index to also range from 0 to 10 as the best and worst possible scores, respectively.

²¹ Using the country groupings constructed in the Global Employment Trends (GET) Model and Reports, one of the ILO's flagship reports and the Key Indicators of the Labor Market (KILM, see at: <http://www.ilo.org/global/statistics-and-databases/research-and-databases/kilm/lang--en/index.htm> and <http://www.ilo.org/global/research/global-reports/weso/2015/lang--en/index.htm>, accessed on: 29.08.2016), we drop countries that belong to the "Developed Economies and European Union" group, with the exception of the eleven Eastern European countries that have joined the EU since 2004 (Bulgaria, Croatia, Czech Republic,

Appendix A2 shows descriptive statistics for all variables. Appendix A3 shows the list of countries included in the analysis.

We use a fixed effect (FE) estimation with country and time FE. Breusch-Pagan Lagrange Multiplier and Robust Hausman tests were run to identify the appropriateness of FE vs OLS and RE estimation methods and a joint test (“testparm” in STATA) was run to determine the appropriateness of the inclusion of time period dummies (not shown in the regression tables below). With the inclusion of time period dummies, coefficient estimates are thus entirely driven by change over time within countries, which is particularly relevant for addressing the effects of policy interventions within countries. All standard errors are cluster robust (clustered over countries).

6.2. Results

We start the empirical analysis by estimating our benchmark models with LR in law and LR in practice as dependent variables (Table 1). The two key predictors that we emphasized in the argument are *Cooperation FACB* and *Institution FACB*. The coefficient for *Cooperation FACB* is negative and statistically significant at the 5% level (Model 1, Table 1). Higher levels of participation in FACB-specific cooperation activities agreed among trading partners is associated with fewer in law violations of FACB rights. We find a similar effect for *Institution FACB*. The coefficient for *Institution FACB* is negative and significant at the 5% level (Model 2, Table 1), indicating that higher levels of specialization and inclusiveness in the institutions that oversee the implantation of FACB-specific cooperation commitments correlate negatively with in law violations of collective labor rights.²²

Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovakia, Slovenia). The countries dropped are: Andorra, Australia, Austria, Belgium, Canada, Cyprus, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Israel, Italy, Japan, Liechtenstein, Luxemburg, Malta, Monaco, the Netherlands, New Zealand, Norway, Portugal, San Marino, Spain, Sweden, Switzerland, United Kingdom and the United States.

²² Note also that though the R^2 are very low in our results tables, these are calculated in STATA without accounting for country fixed-effects. Accounting for country fixed-effects yields much higher R^2 .

Turning to the determinants of LR in practice, the statistically significant controls are as follows. As expected, autocracies tend to be associated with more in practice violations of FACB rights. GDP per capita is weakly positively associated with more in practice violations of FACB rights. As far as our predictors are concerned, the coefficients for both *Cooperation FACB* and *Institution FACB* are again negative (Models 3-4, respectively, Table 1). This time, however, they are not statistically significant at conventional levels of statistical significance. In short, commitments over FACB-specific cooperation and over strong, inclusive institutions to oversee the implementation of those commitments are effective at increasing compliance with in law but not in practice freedom of association and collective bargaining rights.

Our results in relation to in practice violations of FACB right can be partially explained by three key factors: 1) the information bias that exist between the reported in law and in practice violations (significantly more information being available for the former than for the latter); 2) the limitation of the LR indicators in accounting for differences in the severity of violations within any given evaluation criteria (e.g. by treating the dismissal of 100 workers for union activities the same as the dismissal of a single worker); and 3) the lag between in law and in practice progress meaning that potential progress in practice following the change in law takes longer time given it usually requires change and adjustment in the labor administration at the very least, but – in some cases - even change in the underlining culture of violence.

Because we get no results for LR in practice, our subsequent analyses focus on LR in law only. In the fully specified models with five additional controls, higher levels of FDI penetration correlate with increased compliance with in law FACB rights, suggesting that multinational corporations help diffuse internationally good practices relating to collective labor rights. Most importantly, the coefficients for *Cooperation FACB* and *Institution FACB* remain negative and are strongly statistically significant (Models 1-2, respectively, Table 2).

Compared to the benchmark results, the size of the coefficients for the key predictors are only slightly lower. The main results also hold when we further include ILO8798 as an additional control (Models 3-4, Table 2). Our results are consistent with the assumption that ILO8798 works as an intervening variable. (Note that they are also consistent with the alternative assumption that ILO8798 is an omitted variable.)

Next, we run sensitivity analyses. First, we examine whether *general* cooperation and institutional provisions in PTAs are equally effective in reducing in law violations of FACB rights (Model 1-2, Table 3). The coefficient for *Cooperation All* is negative and statistically insignificant whereas the coefficient for *Institution All* is negative and statistically significant. Moreover, the coefficients for the *_All* variables are smaller than the coefficients for the *_FACB* variables (i.e., compare Model 1-2 in Table 1 with Model 1-2 in Table 3). Taken together, the conclusion is that the type of commitments taken up in PTAs strongly conditions the framework within which the parties think and operate in the post-ratification period.

Finally, we re-run our baseline model for the sub-sample of developing countries with the Cingranelli-Richards (CIRI) workers' rights indicator (Cingranelli and Richards 2010) as the dependent variable (Models 3-4 in Table 3). This variable indicates the extent to which workers enjoy FACB rights and other internationally recognized rights at work, including a prohibition on forced labor, a prohibition on child labor, and acceptable conditions of work with respect to wages, hours, and health and safety. It is measured on a 3-point scale with 0 indicating that workers' rights are severely restricted and 2 that they are fully protected. Because this outcome variable is broader than FACB, we report results for the *_All* predictors. *Cooperation All* and *Institution All* are correctly signed though statistically insignificant. We obtain similar results when we run the analysis with annual data over the period 1990-2012.

This difference in results may seem surprising given the fairly high correlation (correlation coefficients greater than 0.50) between the levels of CIRI and LR. But fixed-

effects regressions are driven by change over time, and correspondingly the correlation between the differences in CIRI and LRI, particularly LR in law, is basically zero.

6.3. Robustness Checks

We ran robustness checks to address possible concerns about the high correlation between our *Cooperation FACB* and *Institution FACB* variables and self-selection bias. Regarding the former, we ran an exploratory factor analysis on all items of our template pertaining to *C* and *I* in order to uncover a smaller set of underlying uncorrelated factors. The analysis (using an orthogonal rotation) returns four factors with eigenvalues greater than 1, accounting for 70 percent of variation in the data. Interpretation of the scree plot, however, justifies retaining only three factors. Factor loadings lend themselves to a relatively straightforward interpretation of factors. The first loads highly and uniquely on conditions of work, fundamental labor rights, means of cooperation, and also strongly on the 1998 ILO Declaration as well as separate committee staffed with high rank officials and inclusive with respect to social partners and ILO. The underlying dimension may be dubbed deep cooperation and comprehensive institutional framework (*Deep CI*). The second factor loads highly and uniquely on cooperation over internationally recognized labor standards and decent work as well as on CSR and inclusiveness regarding NGOs. The underlying dimension is shallow cooperation (*Shallow C*). Two variables load uniquely and strongly the third dimension, namely the institutional features of regular committee and low rank officials, and cooperation over labor laws and the 1998 ILO Declaration also load this factor, which can be dubbed shallow cooperation and institution (*Shallow CI*).

Our expectation is that *Deep CI* should be associated with greater compliance with labor rights, because this factor includes the strongest references to FACB and because it involves deep cooperation and institutional mechanisms. The results provide strong support

for this prediction (Table 4). Deep cooperation provisions accompanied by a comprehensive institutional set-up are associated with reduced violations in labor rights (Model 1). The coefficient is statistically significant at the 5% level. Whereas the coefficients for *Shallow C* (Model 2) is wrongly signed, the coefficient for *Shallow CI* (Model 3) is correctly signed. However, both coefficients are not statistically significant.

To address the potential endogeneity of labor provisions in PTAs, following Spilker and Böhmelt (2013) who dealt with this issue regarding human rights in PTAs, we apply the technique of genetic matching. Similar to Spilker and Böhmelt (2013), we first establish a definition of what constitutes strong labor provisions in PTAs. For this we use a key variable of interest, *Cooperation FACB*, and apply a value of 1 or more as a definition of strong labor provisions and less than 1 as a definition of weak provisions. This threshold then enables us to maintain a reasonable sample of observations for our analysis after matching between comparable observations of strong and weak provisions. In particular, observations of strong provisions are matched to comparable observations with weak provisions, as determined by the three independent variables of the benchmark model. We then replicate this procedure for *Institution FACB*. Results are shown in Table 5, focusing again on LR in law in our benchmark regressions. While the coefficient estimate for *Cooperation FACB* retains statistical significance (Model 1), the coefficient for *Institution FACB* is also correctly signed but statistically insignificant (Model 2). In short, addressing endogeneity clearly weakens the main results, as one would expect, however, these seem not to be fully wash away.

In interpreting our results one might consider that there may still not be enough country-year available to fully understand how much role self-selection plays in the results. Looking at the ratio between labor rights “protector” and labor rights “repressor” countries signing up for PTAs with labor provisions during the period of 2000-2012 – measured by their overall LR score in relation to the mean score for the entire sample of countries for four

periods of time (2000-2004, 2005-2008, 2009-2011 and 2012), but with taking the score of EU member States at their EU average – our preliminary calculation indicates that while during the early 2000s it was predominantly “protector” countries that signed PTAs with labor provisions (75P:25R) in subsequent years this ratio not only begin to decrease but in 2012 more “repressor” countries signed PTAs with labor provisions than “protector” countries (5P:9R). This indicates that even if our results with the endogeneity test weaken, the concern of self-selection might no longer be as evident as previous findings suggested (Spilker and Böhmelt, 2013).²³

7. Conclusion

Our paper is the first of its kind to initiate a systematic investigation of the consequences of variation in the design of labor standards in PTAs for compliance with collective labor rights around the world. Using the most comprehensive dataset on PTAs, it provides the most fine-grained coding of labor provisions in PTAs to date and matches this data to brand new indicators on labor rights around the globe for the period of 1990-2012.

We argue that the potential impact of “soft” labor provisions such as the increasing labor-related cooperation clauses and the provisions regulating the institutional framework for the monitoring and implementation of such provisions has so far been underappreciated in existing literature. We also argue that the complexity of labor standards related issues are such which distinguish them from the types of problems that can be effectively addressed through adjudication and instead exchange of information and best practices, capacity-building, persuasion and mutual learning might provide means more effective in changing social behavior. Specifically, we argue that state commitments to labor related cooperation provisions that are specific to FACB rights ought to reduce violations of such rights. We also

²³ Appendix A4 shows the results for enforcement. Based on these results, cooperation related commitments do yield stronger results than those concerning the enforceability of such provisions.

argue that the existence of a separate, highly institutionalized and inclusive body is key in the effective implementation of the FACB commitments undertaken by the parties in the PTA and is essential in achieving better compliance with collective labor rights.

In all, our results suggest that state commitments to PTAs with precise labor-related cooperation provisions over FACB rights are associated with fewer FACB rights violations in law. Likewise, they suggest that cooperation provisions combined with a strong institutionalization of the accompanying institutions overseeing the implementation of FACB specific provisions appears to be an effective means to improve state compliance with FACB rights in law. These results are particularly surprising for two reasons: 1) cooperation provisions pertain to “soft law” when it is the role of “hard law” that has been emphasized in the literature; and 2) if we take into account the fact that labor rights are not the primary concerns of policy makers when entering trade agreements.

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Table 1. In law and in practice FACB rights violations (benchmark models)

| | (1) | (2) | (3) | (4) |
|--------------------|------------------------|-----------------------|------------------------|-----------------------|
| | in law | in law | in practice | in practice |
| Cooperation FACB | -0.126** (0.0537) | | -0.0810 (0.0723) | |
| Institution FACB | | -0.0255** (0.0106) | | -0.0176 (0.0161) |
| Autocracy | 0.0999 (0.0825) | 0.102 (0.0819) | 0.236* (0.129) | 0.236* (0.129) |
| Trade | -0.000146 (0.00216) | 0.000172 (0.00213) | -6.76e-05 (0.00305) | 0.000171 (0.00303) |
| GDP per capita | 0.368 (0.317) | 0.385 (0.316) | 1.066* (0.638) | 1.076* (0.637) |
| Constant | 0.287 (2.659) | 0.0752 (2.634) | -6.195 (5.309) | -6.318 (5.293) |
| Time fixed effects | yes | yes | yes | yes |
| Observations | 468 | 468 | 468 | 468 |
| R-squared | 0.047 | 0.045 | 0.073 | 0.073 |

Robust standard errors in parentheses *** p<0.01, ** p<0.05, * p<0.1

Table 2. In law FACB rights violations (fully specified models)

| | (1) | (2) | (3) | (4) |
|--------------------|----------------------|-----------------------|----------------------|----------------------|
| | in law | in law | in law | in law |
| Cooperation FACB | -0.122** (0.0587) | | -0.115* (0.0607) | |
| Institution FACB | | -0.0246** (0.0118) | | -0.0239* (0.0123) |
| ILO8798 | | | -0.405 (0.293) | -0.414 (0.299) |
| Autocracy | 0.0611 (0.0661) | 0.0643 (0.0653) | 0.0708 (0.0684) | 0.0737 (0.0675) |
| Trade | 0.00101 (0.00261) | 0.00130 (0.00256) | 0.00160 (0.00266) | 0.00191 (0.00261) |
| GDP per capita | -0.0731 (0.351) | -0.0730 (0.349) | 0.0375 (0.373) | 0.0386 (0.373) |
| FDI | -4,164** (1,860) | -4,280** (1,826) | -3,720* (1,886) | -3,811** (1,857) |
| Urban | -0.00881 (0.0231) | -0.00920 (0.0231) | -0.0151 (0.0225) | -0.0156 (0.0225) |
| Industry | -0.00887 (0.0130) | -0.00847 (0.0129) | -0.00937 (0.0133) | -0.00896 (0.0133) |
| GSP | 0.0597 (0.271) | 0.0746 (0.268) | 0.0721 (0.280) | 0.0843 (0.277) |
| EU | 0.293 (0.309) | 0.348 (0.305) | 0.185 (0.312) | 0.236 (0.310) |
| Constant | 4.625* (2.521) | 4.546* (2.498) | 4.681* (2.645) | 4.627* (2.639) |
| Time fixed effects | yes | yes | yes | yes |
| Observations | 429 | 429 | 429 | 429 |
| R-squared | 0.063 | 0.061 | 0.081 | 0.081 |

Robust standard errors in parentheses *** p<0.01, ** p<0.05, * p<0.1

Table 3. Sensitivity analysis

| | (1) | (2) | (3) | (4) |
|--------------------|-----------------------|-----------------------|------------------------|------------------------|
| | in law | in law | CIRI | CIRI |
| Cooperation all | -0.0453 (0.0298) | | 0.0271 (0.0199) | |
| Institution all | | -0.0237** (0.0101) | | 0.00325 (0.00530) |
| Autocracy | 0.107 (0.0834) | 0.103 (0.0820) | -0.106*** (0.0310) | -0.107*** (0.0311) |
| Trade | 0.000139 (0.00215) | 0.000227 (0.00213) | -0.000761 (0.00170) | -0.000426 (0.00167) |
| GDP per capita | 0.423 (0.317) | 0.392 (0.316) | 0.116 (0.175) | 0.132 (0.179) |
| Constant | -0.278 (2.640) | 0.0188 (2.637) | 0.791 (1.315) | 0.660 (1.348) |
| Time fixed effects | yes | yes | yes | yes |
| Observations | 468 | 468 | 463 | 463 |
| R-squared | 0.036 | 0.044 | 0.427 | 0.424 |

Robust standard errors in parentheses *** p<0.01, ** p<0.05, * p<0.1

Table 4. Robustness analysis – factor analysis

| | (1) | (2) | (3) |
|--------------------|------------------------|------------------------|----------------------|
| | in law | in law | in law |
| Deep CI | -0.0502** (0.0239) | | |
| Shallow C | | 0.000429 (0.00809) | |
| Shallow CI | | | -0.0961 (0.0630) |
| Autocracy | 0.106 (0.0824) | 0.113 (0.0843) | 0.108 (0.0793) |
| Trade | -0.000118 (0.00215) | -0.000516 (0.00227) | 0.00160 (0.00249) |
| GDP per capita | 0.403 (0.318) | 0.403 (0.317) | 0.420 (0.305) |
| Constant | -0.154 (2.657) | -0.182 (2.650) | -0.267 (2.497) |
| Time fixed effects | yes | yes | yes |
| Observations | 468 | 468 | 468 |
| R-squared | 0.044 | 0.031 | 0.065 |

Robust standard errors in parentheses *** p<0.01, ** p<0.05, * p<0.1

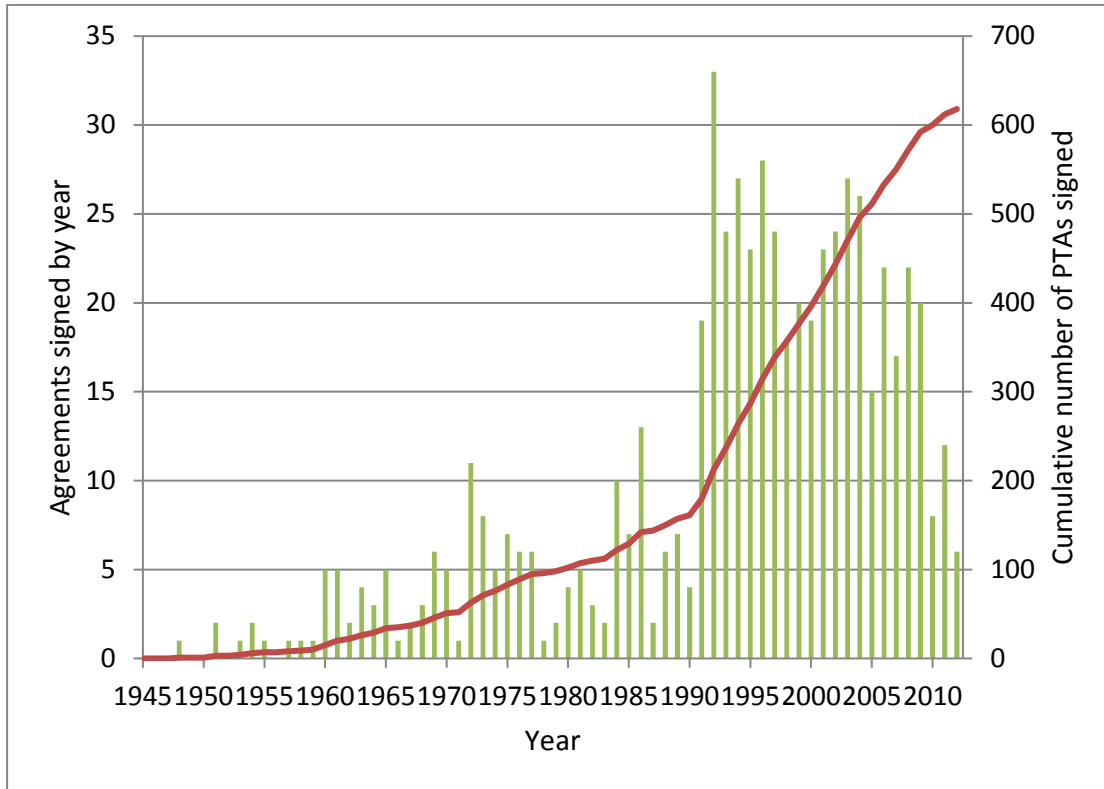
Table 5. Robustness analysis - genetic matching

| | (1) | (2) |
|--------------------|-----------|-----------|
| | in law | in law |
| Cooperation FACB | -0.105* | |
| | (0.0563) | |
| Institution FACB | | -0.0162 |
| | | (0.0115) |
| Autocracy | 0.0339 | 0.0428 |
| | (0.0613) | (0.0618) |
| Trade | 0.00133 | 0.00152 |
| | (0.00312) | (0.00315) |
| GDP per capita | 0.450 | 0.471 |
| | (0.443) | (0.448) |
| Constant | -0.726 | -0.957 |
| | (3.249) | (3.287) |
| Time fixed effects | yes | yes |
| Observations | 302 | 302 |
| R-squared | 0.052 | 0.047 |

Robust standard errors in parentheses *** p<0.01, ** p<0.05, * p<0.1

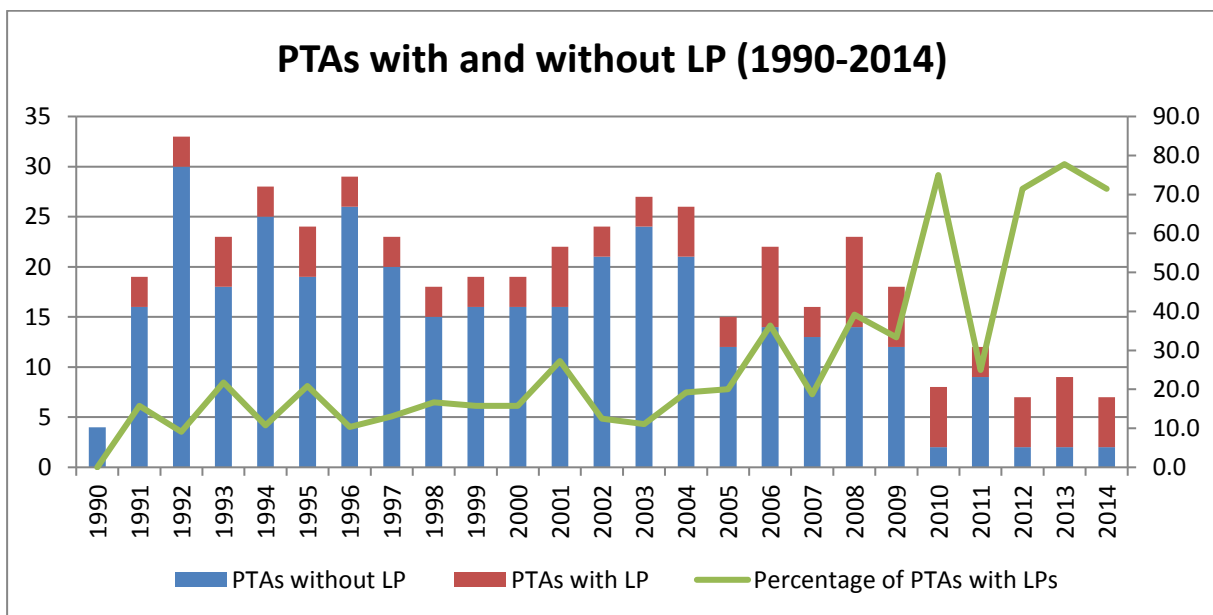
Figure 1.

A) PTAs over time



Source: DESTA database

B) Labor provisions (LP) in PTAs over time



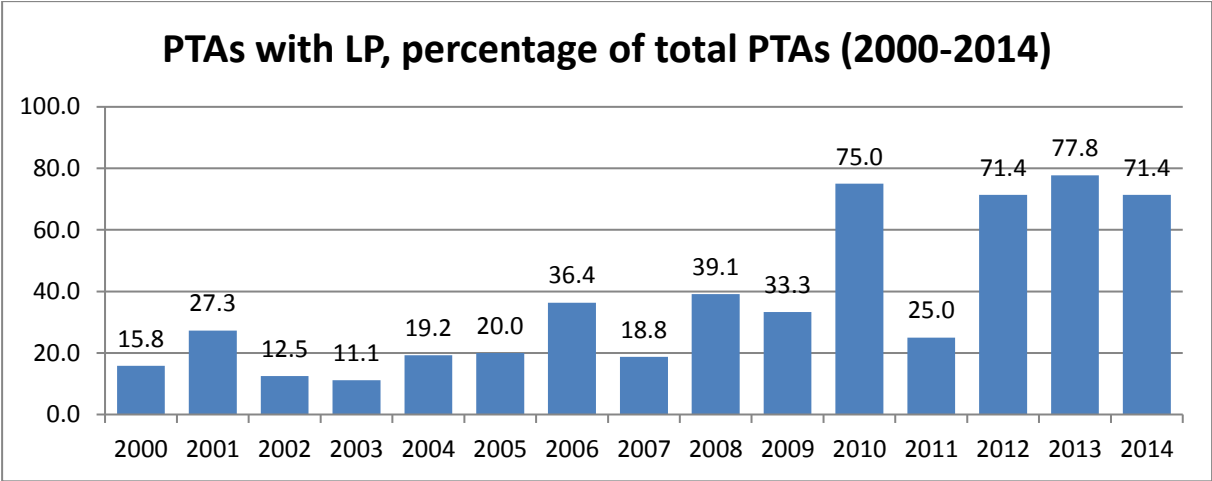
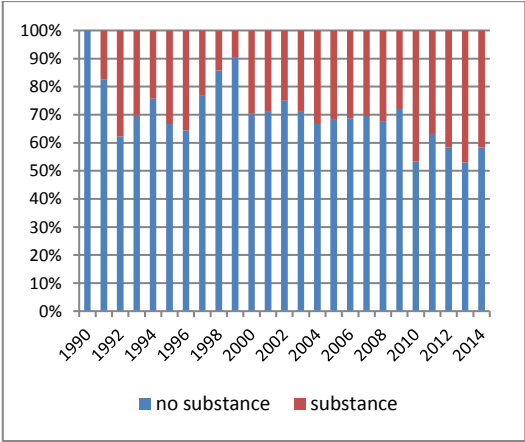
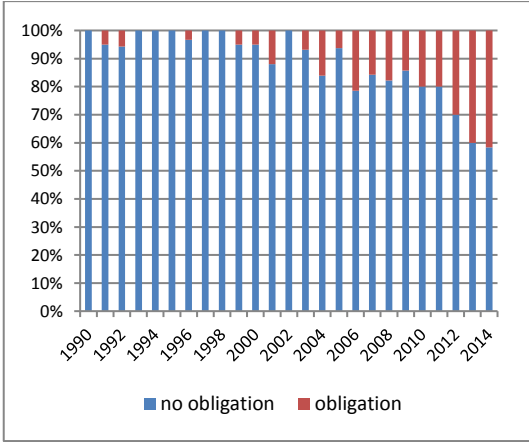


Figure 2. Share of PTAs with LPs to the total number of agreements signed in a given year

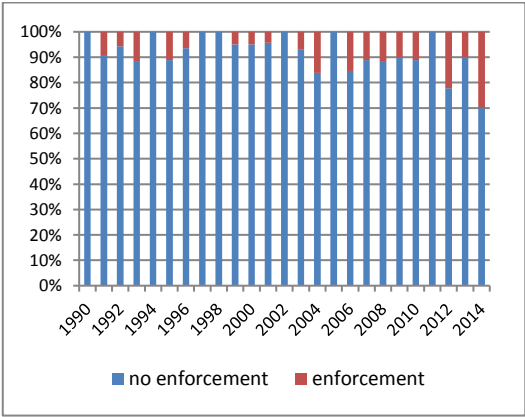
A) Substance



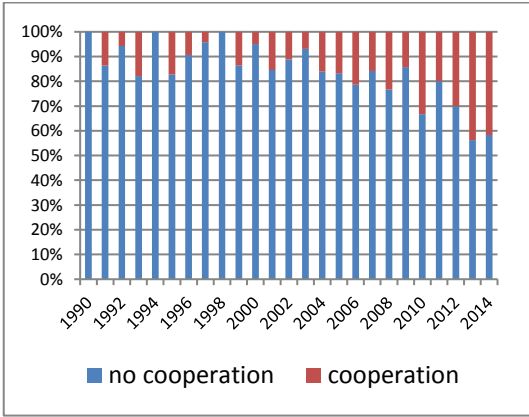
B) Obligation



C) Enforcement



D) Cooperation



E) Institution

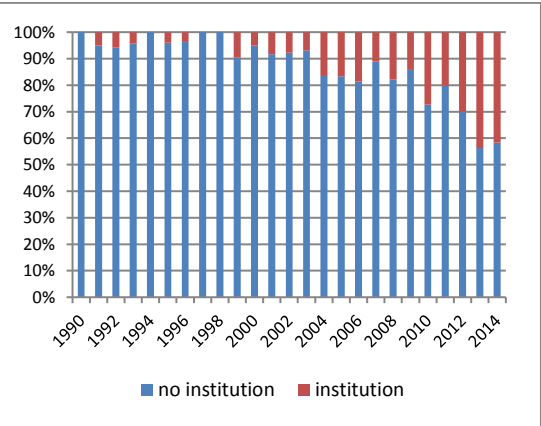


Figure 3. Number of cooperation issues coded in PTAs (1990-2014)

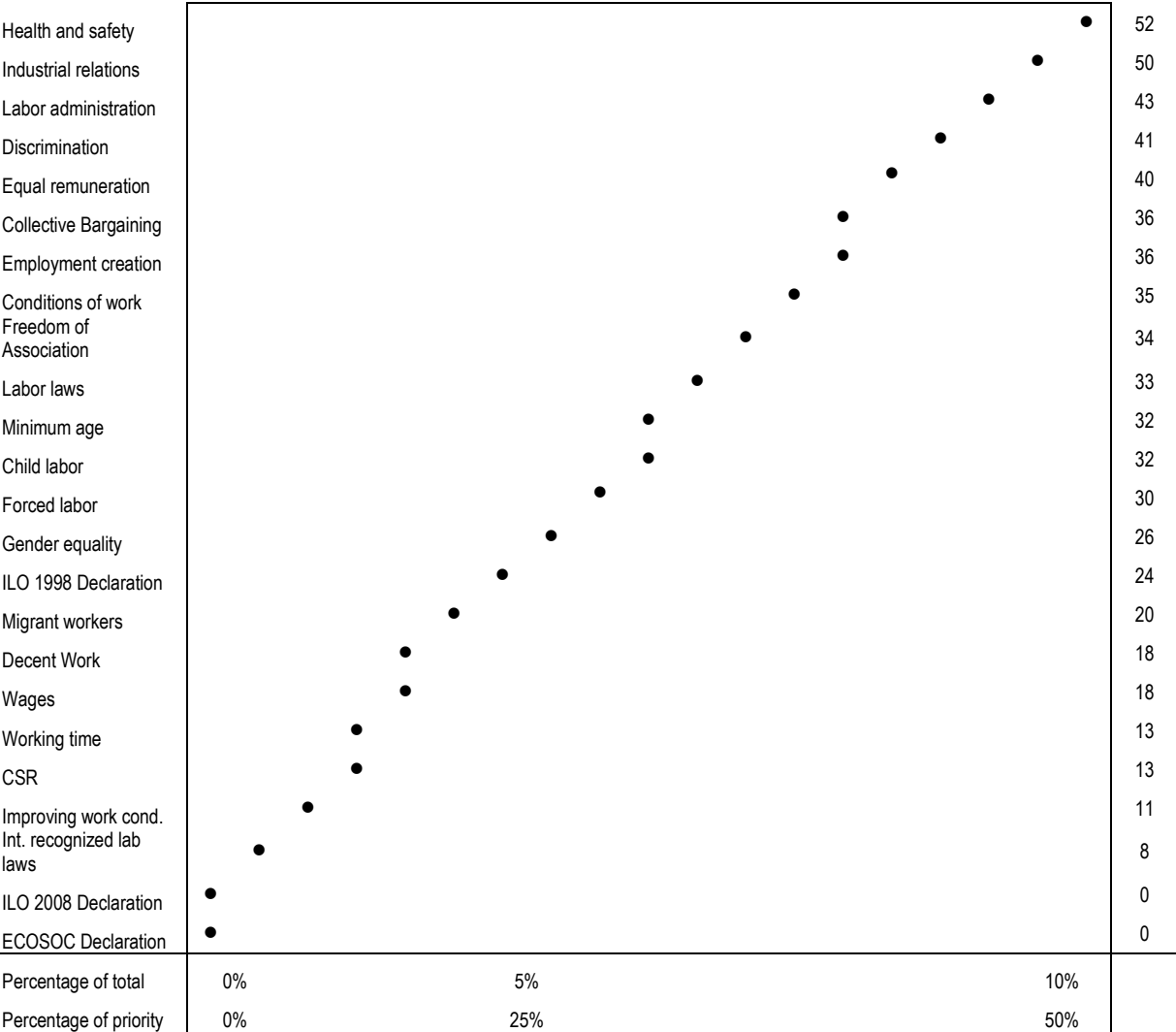
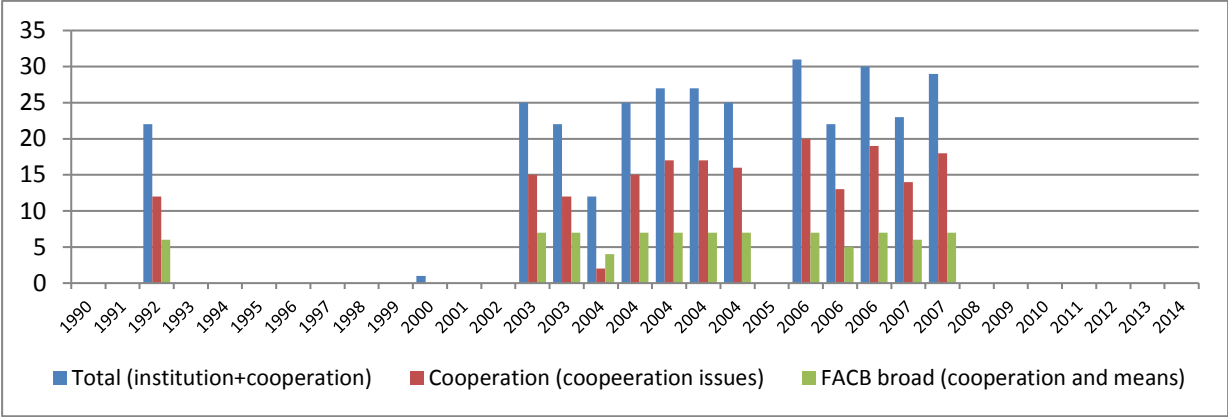
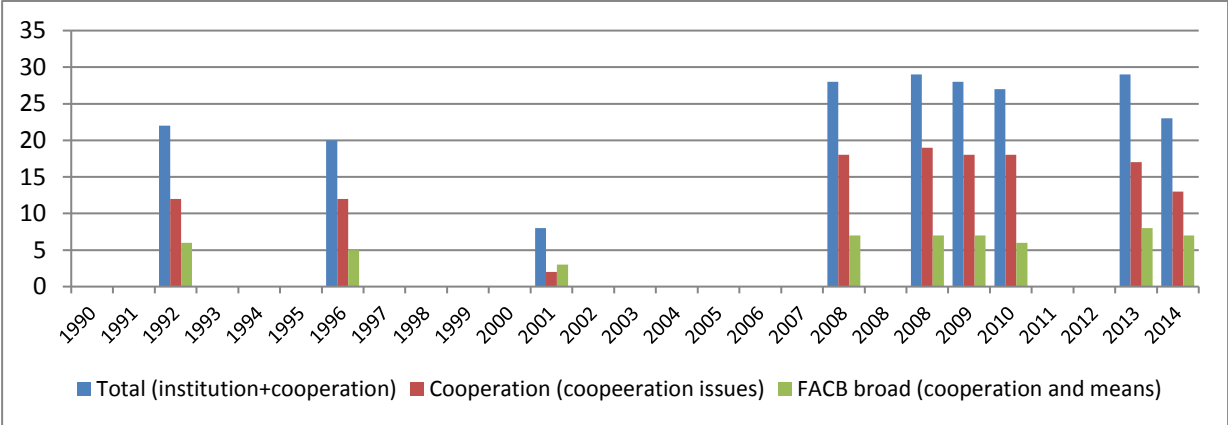


Figure 4 Evolution of cooperation mechanisms in PTAs by major players

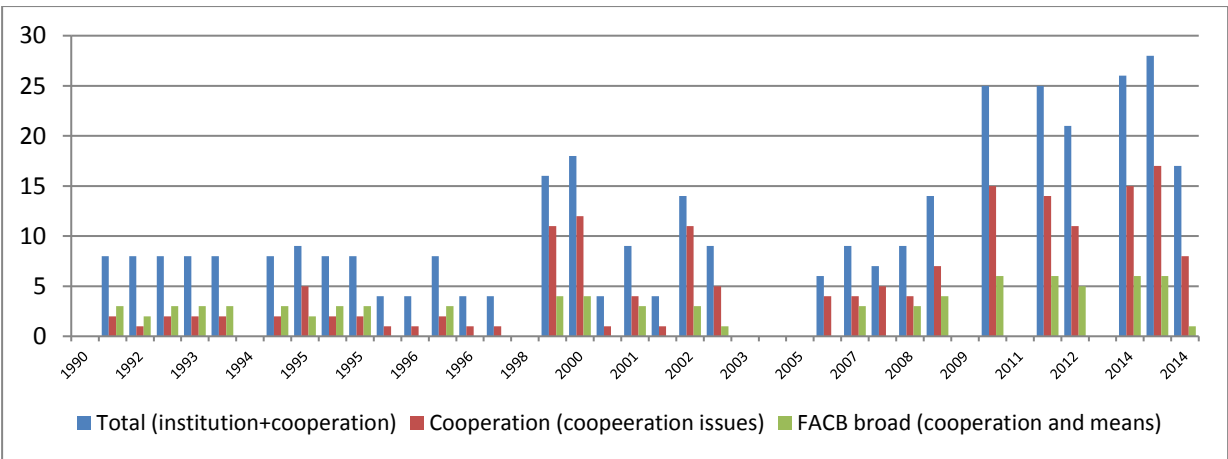
A) US



B) Canada



C) EU



Appendix A1: Variable definition of *Enforcement FACB*

Our enforcement variable (*Enforcement FACB*) is constructed as a dummy variable where the dummy takes the value 1 if a country belongs to a PTA with DSM that allows the parties to resort to quasi-judicial, arbitration based DSM over FACB rights with the possibility of sanctions, including both ‘other appropriate measures’ or trade and monetary sanctions (0 otherwise). *Enforcement FACB* is the sum of the various enforcement commitments across PTAs measured as described above over the period 1990-2012.

Appendix A2: Summary statistics

| Variable | Obs | Mean | Std. Dev. | Min | Max |
|-----------------------------|-----|--------|-----------|--------|---------|
| In law FACB violations | 737 | 2.948 | 2.696 | 0 | 10 |
| In practice FACB violations | 737 | 2.678 | 2.996 | 0 | 10 |
| Worker's rights (CIRI) | 706 | .838 | .636 | 0 | 2 |
| Cooperation FACB | 772 | 1.225 | 1.729 | 0 | 12 |
| Institution FACB | 772 | 3.880 | 6.150 | 0 | 60.5 |
| Cooperation all | 772 | 2.655 | 4.556 | 0 | 22.667 |
| Institution all | 772 | 5.361 | 7.718 | 0 | 60.5 |
| ILO8798 | 852 | 1.414 | .839 | 0 | 2 |
| Autocracy | 745 | 3.413 | 2.144 | 1 | 7 |
| Trade | 671 | 91.940 | 53.716 | 18.554 | 418.284 |
| GDP per capita (log) | 775 | 8.123 | 1.609 | 4.890 | 11.660 |
| FDI | 734 | .00005 | .00010 | 0 | .0017 |
| Urban | 836 | 55.787 | 24.220 | 8.037 | 100 |
| Industry | 717 | 28.491 | 12.377 | 4.710 | 77.308 |
| GSP | 772 | .111 | .303 | 0 | 1 |

Appendix A3: List of 132 countries

| | | |
|----------------------------------|----------------------------------|----------------------------------|
| Albania | Georgia | Peru |
| Algeria | Ghana | Philippines |
| Angola | Grenada | Poland |
| Antigua and Barbuda | Guatemala | Qatar |
| Argentina | Haiti | Republic of Korea |
| Armenia | Honduras | Republic of Moldova |
| Azerbaijan | Hungary | Romania |
| Bahamas | India | Russian Federation |
| Bahrain | Indonesia | Saint Kitts and Nevis |
| Bangladesh | Iraq | Saint Lucia |
| Barbados | Jordan | Saint Vincent and the Grenadines |
| Belarus | Kazakhstan | Samoa |
| Belize | Kenya | Sao Tome and Principe |
| Benin | Kiribati | Saudi Arabia |
| Bolivia (Plurinational State of) | Kuwait | Senegal |
| Bosnia and Herzegovina | Lao People's Democratic Republic | Serbia |
| Botswana | Latvia | Seychelles |
| Brazil | Lebanon | Sierra Leone |
| Brunei Darussalam | Lesotho | Singapore |
| Bulgaria | Liberia | Slovakia |
| Burkina Faso | Libya | Slovenia |
| Cabo Verde | Lithuania | Solomon Islands |
| Cambodia | Macedonia | South Africa |
| Cameroon | Madagascar | Sri Lanka |
| Central African Republic | Malawi | Sudan |
| Chile | Malaysia | Swaziland |
| China | Mali | Thailand |
| Colombia | Mauritania | Timor-Leste |
| Comoros | Mauritius | Togo |
| Costa Rica | Mexico | Trinidad and Tobago |
| Côte d'Ivoire | Mongolia | Tunisia |
| Croatia | Montenegro | Turkey |
| Cuba | Morocco | Turkmenistan |
| Czech Republic | Mozambique | Uganda |
| Democratic Republic of the Congo | Namibia | Ukraine |
| Dominica | Nepal | United Arab Emirates |
| Dominican Republic | Nicaragua | United Republic of Tanzania |
| Egypt | Niger | Uruguay |
| El Salvador | Nigeria | Uzbekistan |
| Equatorial Guinea | Oman | Vanuatu |
| Eritrea | Pakistan | Venezuela |
| Estonia | Palau | Viet Nam |
| Ethiopia | Panama | Zambia |
| Fiji | Paraguay | Zimbabwe |

Appendix A4. Enforcement variable

| | (1) | (2) | (3) | (4) | (5) | (6) |
|--------------------|-----------------------|-----------------------|----------------------|----------------------|------------------------|----------------------|
| | in law | in practice | in law | in law | CIRI | GenMatch in law |
| Enforcement | -0.315** | -0.196 | -0.278* | -0.283* | -0.0280 | -0.203 |
| FACB | (0.133) | (0.223) | (0.142) | (0.144) | (0.0592) | (0.170) |
| ILO8798 | | | | -0.431 (0.312) | | |
| Autocracy | 0.103 (0.0793) | 0.238* (0.127) | 0.0677 (0.0646) | 0.0769 (0.0666) | -0.109*** (0.0310) | 0.0504 (0.0592) |
| Trade | 0.000580 (0.00209) | 0.000378 (0.00297) | 0.00137 (0.00250) | 0.00201 (0.00253) | -0.000180 (0.00165) | 0.00179 (0.00307) |
| GDP per capita | 0.362 (0.307) | 1.063* (0.632) | -0.108 (0.339) | 0.00434 (0.368) | 0.129 (0.183) | 0.473 (0.446) |
| FDI | | | -3,974** (1,829) | -3,468* (1,873) | | |
| Urban | | | -0.00904 (0.0237) | -0.0157 (0.0232) | | |
| Industry | | | -0.00713 (0.0126) | -0.00754 (0.0130) | | |
| GSP | | | 0.0716 (0.247) | 0.0779 (0.255) | | |
| EU | | | 0.442 (0.320) | 0.330 (0.326) | | |
| Constant | 0.211 (2.557) | -6.251 (5.245) | 4.722* (2.487) | 4.841* (2.652) | 0.671 (1.373) | -1.033 (3.298) |
| Time fixed effects | yes | yes | yes | yes | yes | yes |
| Observations | 468 | 468 | 429 | 429 | 463 | 302 |
| R-squared | 0.060 | 0.075 | 0.069 | 120 | 0.424 | 0.053 |

Robust standard errors in parentheses *** p<0.01, ** p<0.05, * p<0.1