# Bilateral Investment Treaties (BITs):

# The Global Investment Regime and Income Inequality in Developing Countries\*

Cristina Bodea Michigan State University

Fangjin Ye Shanghai University of Finance and Economics

### Abstract

Does globalization create welfare gains or is it accompanied by low accountability, reduced welfare provision, labor standards or human rights? Foreign direct investment (FDI) is a key economic flow in the global economy and investor rights have been strongly protected since the 1960s by a large number of bilateral investment treaties (BITs). Do bilateral investment treaties (BITs) and the asymmetric rights afforded by these treaties to investors have an impact on income inequality in developing countries? We argue that BITs increase income inequality in developing countries. Directly, BITs are able to deter capital-hosting governments from implementing redistributive policies. Indirectly, BITs can lock-in initial investment-attractive policies in the fields of taxes, welfare spending, and labor standards and constrain future improvement in those policy fields, resulting in decreasing government revenue/spending and worsening labor practice. The limits on available redistributive resources and workers' rights are likely to increase the level of income inequality in developing countries. Evidence from 114 developing countries from 1971 to 2010 supports our hypothesis: BITs increase income inequality. Furthermore, we also find evidence for our causal mechanisms that BITs are associated with a reduction in fiscal revenue and spending, and worse labor practices. The finding draws attention to the unintended consequence of concluding BITs for developing countries and backs the recent movement of BITs by incorporating domestic sustainable/social development clauses in the BITs language.

The findings in this paper are preliminary. Consult the authors before citing at bodeaana@msu.edu and ve.fangjin@mail.shufe.edu.cn

<sup>\*</sup>Paper proposed for the 2017 Political Economy of International Organizations Conference.

# 1. Introduction

In the absence of multilateral institutions, Bilateral Investment Treaties (BITs) are the most visible and powerful legal instruments that are generally signed between two states to facilitate the flow of cross-border foreign direct investment (FDI). By guaranteeing standards of strong investment protections, BITs prompt capital-hosting states to live up to their commitment of protecting the property rights of foreign investors, providing a solution to the time-inconsistency problem that plagues the promotion of FDI. Therefore, it is not surprising that the overwhelming majority of the BIT literature studies the effect of these treaties on FDI flows. The most methodologically sophisticated recent evidence shows that countries signing more BITs see a greater inflow of foreign direct investment (Buthe and Milner 2009, Kerner 2009, Allee and Peinhardt 2011, Haftel 2010).

Yet, recent work also shows that host states may have not fully anticipated the constraining effects and costs of such investment treaties (Jandhyala et al. 2011, Poulsen and Aisbett 2013), and started to overtly push back against the constraining effect of BITs on their domestic policy space (Simmons 2014, Poulsen and Aisbett 2013). In addition, domestic opposition groups have charged that the hands of capital importing states are tied by investment treaties, generating important grievances. For example, the UK – Colombia BIT was signed in 2010 but is not yet ratified. Human rights and anti-poverty groups<sup>1</sup> are concerned that this BIT containing an international arbitration clause will expose the Colombian government to costly lawsuits, impact Colombian land reform programs, and threaten the return of 5 million internally displaced people.

<sup>&</sup>lt;sup>1</sup> E.g., Colombian NGO Cedetrabajo or British NGO Traidcraft.

Similarly, NGOs<sup>2</sup> have reservations about the ongoing negotiations on a US-India BIT, including about how the investor-state dispute mechanism can undermine the domestic policy space and domestic justice system.

The potential negative externalities of the "broad and asymmetrical" (Simmons 2014, p. 12) investment-protective rights have received, however, much less attention and systematic investigation. In this paper we theorize that BITs can be directly linked to a country's level of income inequality, and indirectly through an effect on fiscal revenues and spending, as well as on labor practices. In particular, we posit that BITs increase income inequality in developing countries. Our evidence from 114 developing countries from the early1970s to late 2000s, depending on the model, broadly supports our hypotheses.

# 2. Literature Review

Direct investment in a foreign country implies important sunk cost and BITs are designed to address investors' concern about the future behavior of host states (Elkins et al. 2006). Common policy reversals that are adverse to investors include expropriation of foreign-owned assets and discriminatory changes to performance requirements, capital taxation and regulation, tariffs or social contributions. BITs then aim to guarantee standards of protections for investors such as compensation for expropriation, national treatment of foreign investors or most favored nation treatment. Even more, investors can enforce their rights in a timely manner and through investor chosen venues that are unlikely to favor host states: Early BITs provided investor protection through state to state dispute resolution, via the establishment of tribunals or submission to the

<sup>&</sup>lt;sup>2</sup> E.g., the Indian NGO "Forum against Free Trade Agreements", a coalition of over 75 organizations.

International Court of Justice. More recent BITs grant foreign investors the right to adjudicate alleged violation of rights in international tribunals, without the need to exhaust local remedies, and, in case of non-compliance with the arbitration decisions, broad rights to request the confiscation of host government's property from around the world.

By the late 1980s most BITs include such dispute settlement mechanisms and between 1990 and in 2012 there were at least 564 international arbitrations filed by investors against at least 110 host states (Wellhausen forthcoming). These investment arbitrations are directly related to the number of BITs ratified by states (Simmons 2014) and have important consequences. A first implication is for the budgets of host states: The size of monetary awards have been significant including recent decisions against the governments of the Czech Republic (\$350 million in 2001), Lebanon (\$266 million in 2005) (Elkins et al. 2006), or Ecuador (\$2.3 billion in 2012). Second, future direct investment inflows decrease when investors allege violation of rights by the host government even at the moment of filing of an international arbitration (Allee and Peinhardt 2011). Third, because arbitration is a high-risk, high-cost option, the threat of arbitration on the side of investors can be effective in extracting concessions, even when governments may expect to win in front of a tribunal. While most such threats remain confidential, several examples have emerged and experts estimate that the practice is not uncommon.<sup>3</sup>

Not only do foreign investors have favorable choices to enforce their rights, but host states

<sup>&</sup>lt;sup>3</sup> Recent examples include investor arbitration threats from open pit mining companies in Indonesia and Costa Rica regarding regulation changes; telecom operators in Zimbabwe over the cancellation of their license; or an energy company in India over changes to taxation policy. Also, Luke Eric Peterson, publisher of the Investment Law Reporter notes that "I would not be the least bit surprised if there were dozens upon dozens of such informal treaty-uses for every claim that actually gets arbitrated" (Gallagher and Shrestha 2011, p.5).

may be disadvantaged over investors in the litigation process. Most BITs are signed by developing and middle income states, which lack the legal capacity and experience to effectively counter the investor-states claims. Even more, in actual litigations, there is some degree of legal asymmetry towards foreign investors. For example, Van Harten (2012) examines jurisdiction issues that by definition could be interpreted either way and litigated precisely because parties cannot readily anticipate the outcome. He finds a bias towards expanding investor' rights of interpreting jurisdictions that applies to 76 percent of the cases (out of 140 cases as of 2010). Simmons (2014) uses Van Harten's data and finds that the poorer the state, the more likely an arbitration panel will rule expansively in favor of investors' rights. In contrast to strong investor protection, very few, if any, BITs mention labor rights, human rights or associated fields (Jacob 2010) and many developing countries would like to see BITs include more obligations for investors (Milner 2014).

# 3. Theory

Bilateral investment treaties include broad investment-protective clauses such as national treatment, most-favored-nation treatment, fair and equitable treatment, and compensation for expropriation. Even more, investors can enforce their rights in a timely manner and through investor chosen venues such as the International Centre for Settlement of Investment Disputes (ICSID)<sup>4</sup> that are unlikely to favor host states. In case of non-compliance with the arbitration decisions, BITs allow broad rights to request the confiscation of host government's property from

<sup>&</sup>lt;sup>4</sup> ICSID is a heavily used and widely observed international arbitral institution that is part of the World Bank. 156 countries have signed the ICSID Conventions (Allee and Peinhardt 2010). It is perceived as the most legally binding international arbitration venue.

around the world.<sup>5</sup> The number of investment arbitrations has increased rapidly after mid 1990s (Wellhausen forthcoming). These investment arbitrations tend to restrict the budgets of host states and reduce future FDI inflows (Allee and Peinhardt 2011). Furthermore, the mere threat of arbitration on the side of investors can be effective in extracting concessions from host governments.

We contend that BITs increases income inequality in developing countries. Directly, BITs reduce host governments' incentive and ability to implement redistributive policies that specifically aim at reducing domestic income inequality. For example, in 2007 investors from Luxembourg and Italy brought an ICSID claim against South Africa arguing that the 2002 Mining and Petroleum Resources Development Act (MPRDA) expropriated their mineral rights. MPRDA is part of South Africa's redistributive policy in favor of historically oppressed domestic social groups (the Black Economic Empowerment Policy), requiring that mining companies be partly owned by 'historically disadvantaged persons'.

Indirectly, BITs tend to lock-in initial favorable policies attractive to foreign investors in the fields of taxes, welfare spending, and labor practices, and constrain the future policy improvements in these fields. These two mechanisms should result in (i) a reduction in the revenue that governments have at their disposal to redistribute; and (ii) a worsening of de facto labor rights which has the potential to reduce labor's ability to press for wage increases. The net result of limits on available redistributive resources and workers' rights should be an increased

<sup>&</sup>lt;sup>5</sup> BITs typically also have grandfather clauses that ensure treaty obligations apply to FDI for 10 to 15 years after a treaty expires or is abrogated by a host government.

level of income inequality.

Scholars find that investment inflows into developing countries tend to be vertical or efficiency seeking FDI (Hanson et al. 2003, Buthe and Milner 2008). This type of FDI is attracted to locations where production costs are low. We suggest that developing countries may engage in "race to the bottom" to attract vertical foreign investment by implementing policies that would reduce the production costs for investors including lowering the tax rates, labor practice, and reducing welfare spending. Several studies provide plausible evidence: Klemm and Parys (2012) show that developing countries compete for foreign investment with other countries in the same region by lowering corporate income tax rate, as well as offering corporate income tax holidays. Davies and Vadlamannati (2013) find that developing countries compete for FDI by relaxing de facto labor practices. Rudra (2002) reveals that globalization tend to lower welfare spending in countries where labor enjoys little bargaining power vis-à-vis the government. We argue that BIT provisions act to lock-in those initial investment-attractive policies. Furthermore, BITs also constrain the future choices of governments in developing countries in improving conditions in those policy areas because investors can perceive changes to policies would affect their profits and then ask BITs for protection. In addition, because developing countries may serve as export platforms for multi-national corporations (Frieden 1991, Ruane and Ugur 2005), export promoting policies are very attractive to foreign direct investors. Evidence exists that there are conditions when trade competition leads to lower labor standards (Mosley and Uno 2007), or that trade competition induced by network position similarity induces convergence of countries' fiscal and regulatory policies (Cao 2010, 2012). BITs are able to lock in those export

promoting policies.

In addition, we argue that the reduction in fiscal revenue/spending as well as labor standards would result in increasing income inequality. When fiscal revenue/spending are shrinking or not growing, host governments have limited resources to invest in social programs (i.e., education, health, and social security and welfare) that are suggested to reduce inequality. Kerrissey (2015) also finds that strong labor standards reduce income inequality in the Global South. Therefore, BITs can indirectly increase income inequality via the two distinct mechanisms of reductions in fiscal revenue/spending and labor standards.

FDI flows themselves may affect income distribution in developing countries, as well as labor rights themselves. Yet, the direction of the FDI-inequality relationship is not clear depending on whether it is skilled or unskilled labors experiencing wage increases (Jensen and Rosas 2007), while the effect on labor rights may depends on labor organization (Rudra 2008) or the mode of production (Mosley 2011). While FDI may be linked to income inequality through various mechanisms, our focus on BITs can directly capture one specific aspect of foreign direct investment, namely the favorable treatment afforded to investors by BITs. The consequence of the fact that these treaties tie the hands of host governments and restrict fiscal spending and de facto labor practices is likely to result, as we argue, in an increasing level of income inequality in developing countries. In the empirical models, we directly control of FDI inflow which appears to have no impact on income inequality.

We have three hypotheses. The first one is our general contention about the relationship between BITs and inequality, and the next two refer to the posited causal mechanisms:

Hypothesis 1: Bilateral investment treaties are associated with higher income inequality in developing countries.

Hypothesis 2: Bilateral investment treaties are associated with lower fiscal revenue and expenditure in developing countries.

Hypothesis 3: Bilateral investment treaties are associated with worse labor practices in developing countries.

# 4. Data, measurement and research design

We test the hypotheses using data for 114 developing countries from the early 1970s to the late 2000s. The actual size of the sample is dictated by the availability of variables. The sample includes only developing countries because rich countries have a different position in the global economy. Also, unlike developed countries, most developing countries are likely to be capital importers, making it an appropriate sample to test our theoretical arguments that investment treaties have constraining effect on domestic politics in capital-importing countries.

# 4.1 BITs and income inequality

We use two indexes to capture income inequality – the Gini index from Solt (2016)<sup>6</sup> and industrial pay inequality in manufacturing sectors from UTIP-UNIDO database<sup>7</sup>. Since the measure of income inequality suffers from low degree of comparability and availability in a time-series cross-country context, Solt (2016) constructs the Standardizing the World Income Inequality Database (SWIID) by taking into account existing measures of Gini indexes and

9

<sup>&</sup>lt;sup>6</sup> We use the latest version 5.1: http://fsolt.org/swiid/

<sup>&</sup>lt;sup>7</sup> http://utip.lbj.utexas.edu/data.html

imputing missing values. SWIID provides a mean value of Gini coefficient along with an underlying uncertainty for each country-year observation. Specifically, we use two separate Gini indexes from SWIID – pre-tax, pre-transfer Gini index and post-tax, post-transfer Gini index. In addition, we employ industrial pay inequality in manufacturing sectors. This global dataset covers 167 countries from 1963 to 2008. Utilizing UNIDO Industrial Statistics on wages, earnings and employment by industrial classification, this measure is calculated with the application of the between-group component of the Theil index.

Regarding our key independent variables, we use cumulative number of ratified BITs for a country in a given year. A cumulative measure of BITs captures our theoretical conjecture of the total leverage that foreign investors have on the host states via the conclusion of BITs. We also use the ratified BITs rather than merely signed ones because BITs are legally binding and enforceable only when they are mutually ratified by both states. In addition to a simple count of all ratified BITs, we also explore the stringency of BITs by focusing on BITs in which International Centre for Settlement of Investment Disputes (ICSID) mechanism is available for investor-state dispute settlements (either as one of many option or as the only option), and North-South BITs that govern de facto investment flows. The availability of ICSID mechanism enables foreign investors to bring host government to international arbitration body for investor-state dispute resolutions. Those types of BITs give foreign investors additional leverage over capital-hosting developing countries as ICSID is affiliated with the World Bank, offers very limited grounds for appeal, and has very strong enforcement mechanism that carries the same effect as the judgments in national courts (Blake 2013, Allee and Peinhardt 2010). Consistent

with Allee and Peinhardt (2010), we originally code 420 additional BITs. In addition, our theory indicates that BITs that regulate de facto investment are likely to have constraining effect on domestic policies and hence income inequality in host countries given that there would be real investors. We, thus, only include the BITs ratified between developed countries and developing nations as those dyads are likely to have de facto flows of capital. Furthermore, following Poulsen and Aisbett (2013), we also consider BITs between major capital exporting developing countries and other developing countries as North-South BITs (Adjusted North-South BITs). Those major capital exporting developing nations include Brazil, Russia, South Africa, China, Argentina, Panama, Mexico, Malaysia, Saudi Arabia, Indonesia, Hungary, Chile, and India.

Since there is not a clear baseline model to explain income inequality, we include a parsimonious set of control variables: the level of democracy (Polity2 score from Polity IV dataset), foreign investment measured as the net FDI inflows as percentage of GDP (UNCTAD), trade openness - the sum of a state's total exports and imports as a share of gross domestic product (logged) (World Bank World Development Indicators - WDI), GDP per capita in constant US dollars (logged) (WDI), and per capita GDP growth (WDI).

We use ordinary least squares (OLS) models and include country fixed effect<sup>8</sup> to capture time invariant country-specific unobserved heterogeneity. We also include half-decade period dummy variables to account for time-specific shocks or time trends that may affect both income inequality and BIT ratification. All independent variables are lagged one year.

<sup>8</sup> Hausman tests suggest a fixed effect specification more appropriate than a random effect specification. We also exclude the lagged dependent variable from OLS models with country fixed effects due to the concern of the Nickell bias (Wooldridge 2002).

# 4.2 BITs and fiscal revenue and expenditure

Bodea and Higashijima (forthcoming) update Brender and Drazen (2005)'s original data on fiscal balance by using the International Monetary Fund (IMF) International Financial Statistics (IFS 2002), the IMF Government Financial Statistics (GFS 2010) and the European Bank for Reconstruction and Development (EBRD) transition reports (2011). They construct two separate indexes for fiscal revenue and fiscal expenditure, which is scaled to the level of GDP<sup>9</sup>. The dataset covers 158 countries from 1948 to 2015. We use an additional measure to capture fiscal revenue in developing countries – tax revenues as percentage of GDP, available from World Bank's World Development Indicators database.

As with the income inequality models, our key independent variables are three different measures of BITs – the number of ratified BITs, the number of ratified BITs in which ICSID venue is available, and the number of ratified North-South BITs. Following previous studies on fiscal balance (Bodea and Higashijima forthcoming), we also incorporate several control variables: level of democracy (Polity2 score), GDP per capita, population density (WDI), oil rent as percentage of GDP (WDI), net FDI inflows, capital openness (Chinn and Ito 2008), trade openness, and per capita GDP growth (WDI).

Following Bodea and Higashijima (forthcoming), we use an OLS regression with panel-corrected standard errors to address panel heterogeneity and contemporaneous correlation of errors (Beck and Katz 1995). We also account for first-order auto-correlation by specifying an

<sup>&</sup>lt;sup>9</sup> Fiscal revenue is operationalized as the total central governments' revenue plus grants relative to GDP while fiscal expenditure is measured as the total central government expenditure to GDP.

AR (1) process. Country dummy variables and half-decade period dummy variables are included to control for country and time specific factors. All independent variables are lagged one year.

4.3 BITs and collective labor practices

We use one of the most fine-grained and widely used collective labor rights dataset constructed by Mosley (2011) that captures the freedom of association and collective bargaining rights. It covers almost all countries from 1985 through 2002. This dataset records thirty-seven types of violations in the six broad categories; freedom of association, the right to form and join unions, rights to other union activities (e.g., to elect union leaders, enact union laws, control union finances), the right to bargain collectively, the right to strike, and the rights of workers in export-processing zones. For ease of interpretation, the scale of this index has been reversed, so that higher (lower) values indicate better (worse) collective labor rights. Many times, especially in developing countries, there are discrepancies between the extent of worker rights' protection offered by labor laws on paper and the degree to which worker's rights are violated in practice. Mosley (2011) therefore codes collective labor law (legal provision of labor law) and collective labor practices (de facto labor practices on the ground) and creates two labor rights indexes. We employ the de facto collective labor practice index in our analysis as our sample is developing countries. Similarly, we also use the three measures of BITs as our core independent variables.

Following previous studies on labor rights in developing countries (e.g., Mosley and Uno 2007; Greenhill, Mosley, and Prakash 2009), we include a battery of standard economic and political controls: the level of democracy (Polity2 score), net FDI inflows, trade openness, GDP per capita, per capita GDP growth, population density and civil wars (Peace Research Institute

Oslo's (PRIO) Armed Conflict Database). In addition, we control for the ratification of the two core ILO conventions pertaining to freedom of association and collective bargaining rights (C87 and C98). We construct a ILO variable that counts the number of these two core ILO conventions ratified by a state in a given year (ILO's NORMLEX database). Similar to the model specification of fiscal revenue and expenditure models, we use an OLS regression with panel-corrected standard errors along with an AR (1) process. We also include country dummy and half-decade period dummy variables. All independent variables are lagged one year.

# 5. Empirical results

# 5.1 The impact of BITs on income inequality

Table 1 shows our main results. Models 1-3 use Solt (2016)'s post-tax, post-transfer income inequality while models 4-6 use pre-tax, pre-transfer inequality as dependent variables. Models 7-9 use industrial pay inequality in manufacturing sectors. We find that BITs tend to increase the level of income inequality (Solt data and industrial pay data) in developing countries when using ratified BITs and ratified North-South BITs that adjust for major capital-exporting developing countries <sup>10</sup>. However, the variable of BITs with ICSID clause only achieves statistical significance at 90 percent level when industrial pay inequality is used as the dependent variable.

# [Table 1 about here]

Regarding the control variables: In our sample of developing countries, we find that democracy has a negative effect on inequality (reduces inequality), while trade openness is

<sup>&</sup>lt;sup>10</sup> When we use conventionally defined North-South BITs rather than the adjusted North-South BITs, our results are similar.

positively associated with income inequality when using Solt (2016)'s inequality as the dependent variable. GDP per capita is negatively related with inequality when the dependent variable is measured as industrial pay inequality, indicating that the level of economic development tends to reduce income inequality. None of the other control variables has a consistent effect on inequality.

# 5.2 The impact of BITs on fiscal revenue and expenditure

Table 2 presents the empirical results. We largely find support for our claim that BITs have the potential to reduce fiscal revenue and spending. The coefficients for the key independent variable (all BITs / types of BITs) are negative and significant in eight out of all nine models. It does not achieve statistical significance in model 14 although it takes on an expected negative sign. Regarding the control variables, we find that the level of democracy, oil rents, and economic growth are positively associated with fiscal spending while the size of population is positively related with fiscal expenditure. Also trade openness has a consistent positive impact on fiscal spending, expenditure, and tax revenue.

# [Table 2 about here]

# 5.3 The impact of BITs on collective labor practices

Table 3 shows the results of the impact of BITs on labor practices. We find consistent evidence that BITs reduce collective labor practices in developing countries (all BITs/types of BITs)<sup>11</sup>. For the control variables, we find that the level of democracy is positively correlated with labor practices while trade openness, population and civil war are negatively associated

15

<sup>11</sup> The results are similar if we use conventionally defined North-South BITs.

with labor practices.

# [Table 3 about here]

# 6. Conclusion

While the vast majority of BITs literature investigates the link between BITs and FDI, this paper explores the potential negative externalities of concluding BITs by examining their impact on income inequality in capital-hosting developing countries. We argue that BITs tend to increase income inequality in developing countries. Directly, BITs are able to deter host governments from implementing redistributive policies. Indirectly, BITs tend to lock-in initial favorable policies that are attractive to foreign investors in the fields of taxes, welfare spending, and labor practices, resulting in a reduction in government revenue/spending and worse labor practices. The limits on available redistributive resources and constrains on workers' rights are likely to increase the level of income inequality in developing countries. Using a sample of 114 developing countries from 1971 to 2010, we find support for our main claim that BITs lead to higher level of income inequality. Furthermore, we also find the evidence for our causal mechanisms that BITs are associated with reductions in fiscal spending/expenditure and worse labor practices.

Our research draws the unintended consequence of concluding BITs and contributes to understanding the unintended negative externalities of economic globalization more broadly. BITs tie the hands of host governments and constrain the governments' capability of implementing domestic policies. The findings back the recent backlash against BITs and the effort in developing countries to balance the protection of foreign investors with the goal of

domestic sustainable social and environmental development in the BITs language. For instance, our results back the recent movement to have the main text of BITs incorporate labor-related and social development clauses.

### References

- Allee, Todd, and Clint Peinhardt. 2010. "Delegating differences." *International Studies Quarterly* 54(1): 1-26.
- Allee, Todd, and Clint Peinhardt. 2011. "Contingent Credibility." *International Organization* 65(3): 401-432.
- Beck, Nathaniel, and Jonathan Katz. 1995. "What to do (and not to do) with Time-series—cross-section data in comparative politics." *The American Political Science Review* 89(3): 634-647.
- Blake, Daniel. 2013. "Thinking Ahead." International Organization 67(4): 797-827.
- Bodea, Cristina, and Masaaki Higashijima. "Central Bank Independence and Fiscal Policy: Can the Central Bank Restrain Deficit Spending?" *British Journal of Political Science*. Forthcoming.
- Brender, Adi and Allan Drazen. 2005. "Political Budget Cycles in New versus Established Democracies." *Journal of Monetary Economics* 52(7):1271-1295.
- Büthe, Tim, and Helen Milner. 2008. "The politics of foreign direct investment into developing countries." *American Journal of Political Science* 52(4):741–762.
- Büthe, Tim, and Helen Milner. 2009. "Bilateral Investment Treaties and Foreign Direct Investment." In *The Effect of Treaties on Foreign Direct Investment: Bilateral Investment Treaties, Double Taxation Treaties, and Investment Flows* Ed. Karl Sauvant and Lisa Sachs. New York: Oxford University Press, 171-224.
- Cao, Xun. 2010. "Networks as channels of policy diffusion: Explaining worldwide changes in capital taxation, 1998–2006." *International Studies Quarterly* 54(3): 823-854.

- Cao, Xun. 2012. "Global networks and domestic policy convergence: A network explanation of policy changes." *World Politics* 64(3): 375-425.
- Chin, Menzie, and Hiro Ito. 2008. "A New Measure of Financial Openness." *Journal of Comparative Policy Analysis* 10(3): 309-322.
- Davies, Ronald, and Krishna Vadlamannati. 2013. "A race to the bottom in labor standards? An empirical investigation." *Journal of Development Economics* 103:1–14.
- Elkins, Zachary, Andrew Guzman and Beth Simmons. 2006. "Competing for Capital." *International Organization* 60(4): 811-846.
- Frieden, Jeffry. 1991. "Invested interests." International Organization 45(4): 425–451.
- Gallagher, Kevin, and Elen Shrestha. 2011. "Investment Treaty Arbitration and Developing Countries." *Global Development and Environment Institute Working Paper* No. 11-01.
- Greenhill, Brian, Layna, Mosley, and Aseem Prakash. 2009. "Trade-based diffusion of labor rights." *American Political Science Review* 103(4): 669-690.
- Haftel, Yoram. 2010. "Ratification Counts." *Review of International Political Economy* 17 (2): 348-377.
- Hanson, Gordon, Raymond Mataloni, and Matthew Slaughter. 2003. "Vertical Production Networks in Multinational Firms." *NBER Working Paper* No.9723.
- Jacob, Marc. 2010. "International investment agreements and human rights." *INEF Research Paper Series on Human Rights, Corporate Responsibility and Sustainable Development* 03/2010.
- Jandhyala, Srividya, Witold Henisz, and Edward Mansfield. 2011. "Three waves of BITs." *Journal of Conflict Resolution* 55(6): 1047-1073.
- Jensen, Nathan, and Guillermo Rosas. 2007. "Foreign Direct Investment and Income Inequality in Mexico, 1990-2000." *International Organization*. 61(3): 467-487.
- Kerner, Andrew. 2009. "Why Should I Believe You." *International Studies Quarterly* 53(1): 73–102.
- Kerrissey, Jasmine. 2015. "Collective labor rights and income inequality." American

- Sociological Review 80(3): 626-653.
- Klemm, Alexander, and Stefan Parys. 2012. "Empirical evidence on the effects of tax incentives." *International Tax and Public Finance* 19 (3): 393–423.
- Milner, Helen. 2014. "Introduction The global economy, FDI, and the regime for investment." *World Politics* 66(1): 1-11.
- Mosley, Layna, and Saika Uno. 2007. "Racing to the Bottom or Climbing to the Top? Economic Globalization and Collective Labor Rights." *Comparative Political Studies* 40 (8): 923–48.
- Mosley, Layna. 2011. Working globally? Multinational production and labor rights. Cambridge University Press.
- Poulsen, Lauge, and Emma Aisbett. 2013. "When the Claim Hits." *World Politics* 65(2): 273–313.
- Ruane, Frances and Ali Ugur. 2005. "Export Platform FDI and Dualistic Development." Transnational Corporations 15(1): 75-111.
- Rudra, Nita. 2002. "Globalization and the decline of the welfare state in less developed countries." *International Organization* 56(2): 411-445.
- Rudra, Nita. 2008. Who really gets hurt? Globalization and the race to the bottom in developing countries. Cambridge University Press.
- Simmons, Beth. 2014. "Bargaining over BITs, arbitrating awards." World Politics 66(1): 12-46.
- Solt, Frederick. 2016. "Standardizing the World Income Inequality Database." *Social Science Quarterly* 97.
- Van Harten, Gus. 2012. "Arbitrator Behavior in Asymmetrical Adjudication." *Osgoode Hall Law Journal* 50(1): 211–68.
- Wellhausen, Rachel. "Bondholders vs. Direct Investors? Competing Responses to Expropriation." International Studies Quarterly. Forthcoming.

# **Tables**

Table 1: The impact of BITs on income inequality in developing countries

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9
All BITs	0.0622*			0.0726**			0.0006**		
	(0.033)			(0.035)			(0.000)		
BITs with ICSID		0.0313			0.0340			0.0008*	
		(0.040)			(0.043)			(0.000)	
Adjust N-S BITs			0.1358**			0.1645***			0.0012**
			(0.061)			(0.059)			(0.001)
Polity2	-0.1428**	-0.1566**	-0.1383**	-0.1499**	-0.1665**	-0.1436**	0.0000	0.0000	0.0000
	(0.062)	(0.064)	(0.061)	(0.071)	(0.073)	(0.070)	(0.000)	(0.000)	(0.000)
FDI inflow/GDP	0.0447	0.0509	0.0502	0.0425	0.0499	0.0489	0.0003	0.0004	0.0004
	(0.052)	(0.052)	(0.052)	(0.066)	(0.066)	(0.067)	(0.000)	(0.000)	(0.000)
Trade openness	2.1448***	2.5114***	2.0602***	2.3978***	2.8416***	2.2701***	0.0032	0.0030	0.0024
	(0.703)	(0.847)	(0.689)	(0.790)	(0.911)	(0.774)	(0.009)	(0.008)	(0.008)
GDP per capita	0.8850	1.8291	0.5145	0.8302	1.9495	0.3295	-0.0325**	-0.0293**	-0.0346**
	(1.533)	(2.095)	(1.335)	(1.534)	(2.061)	(1.371)	(0.014)	(0.014)	(0.016)
Growth	0.0084	0.0095	0.0109	0.0108	0.0120	0.0139	-0.0000	0.0000	-0.0000
	(0.031)	(0.031)	(0.030)	(0.038)	(0.038)	(0.038)	(0.000)	(0.000)	(0.000)
$R^2$	0.127	0.113	0.134	0.110	0.094	0.119	0.165	0.166	0.170
Countries	114	114	114	114	114	114	97	97	97
N	2,131	2,131	2,131	2,131	2,131	2,131	1,802	1,802	1,802

Note: All models are OLS with fixed effect, intercepts, and half-decade dummies. Models 1-3 use post-tax, post-transfer income inequality (Solt 2015), models 4-6 use pre-tax, pre-transfer inequality (Solt 2015), and models 7-9 use industrial pay inequality in manufacturing sectors from UTIP-UNIDO as dependent variables. Numbers in parentheses are country clustered standard error. All independent variables are lagged one year. \*\*\*  $p \le 0.01$ ; \*\*  $p \le 0.05$ ; \*p $\le 0.1$ 

Table 2: The impact of BITs on fiscal revenue and expenditure, and tax revenue

	Model 10	Model 11	Model 12	Model 13	Model 14	Model 15	Model 16	Model 17	Model 18
Fiscal expen.	0.2198***	0.2222***	0.2227***						
	(0.026)	(0.026)	(0.026)						
Fiscal Revenue				0.4090***	0.4130***	0.4105***			
				(0.038)	(0.038)	(0.038)			
All BITs	-0.0520***			-0.0469**			-0.0447**		
	(0.019)			(0.021)			(0.018)		
BITs with ICSID		-0.0674***			-0.0259			-0.0564***	
		(0.021)			(0.024)			(0.020)	
Adjust N-S BITs			-0.0936***			-0.0739**			-0.0854***
			(0.032)			(0.038)			(0.031)
Polity2	0.0910***	0.0904***	0.0911***	-0.0580	-0.0576	-0.0580	0.0222	0.0234	0.0251
	(0.030)	(0.030)	(0.030)	(0.039)	(0.039)	(0.039)	(0.033)	(0.033)	(0.033)
GDP per capita	1.1644	1.1015	1.1158	-0.4883	-0.8127	-0.5917	1.9411*	1.7873	1.9258*
	(0.906)	(0.884)	(0.897)	(0.814)	(0.791)	(0.805)	(1.168)	(1.136)	(1.128)
Population	0.0040	0.0044	0.0049	0.0196***	0.0198***	0.0204***	-0.0133*	-0.0111	-0.0123
	(0.005)	(0.005)	(0.005)	(0.007)	(0.007)	(0.007)	(0.008)	(0.008)	(0.008)
Oil rent	0.1482***	0.1480***	0.1492***	0.0182	0.0199	0.0189	0.0590	0.0558	0.0567
	(0.032)	(0.032)	(0.031)	(0.030)	(0.030)	(0.030)	(0.040)	(0.041)	(0.041)
FDI/GDP	0.0320	0.0309	0.0303	-0.0660	-0.0686	-0.0682	0.0345	0.0332	0.0328
	(0.034)	(0.034)	(0.034)	(0.044)	(0.044)	(0.044)	(0.035)	(0.035)	(0.035)
Capital open	-0.3212	-0.2978	-0.3340	-1.1542*	-1.2152*	-1.1803*	-0.2722	-0.2787	-0.3131
	(0.465)	(0.465)	(0.462)	(0.637)	(0.638)	(0.636)	(0.534)	(0.527)	(0.528)
Trade open	2.7550***	2.8043***	2.7518***	1.4342***	1.3647**	1.4112***	2.2446***	2.2749***	2.2721***
	(0.446)	(0.448)	(0.446)	(0.541)	(0.545)	(0.540)	(0.499)	(0.505)	(0.500)
Growth	0.0434***	0.0437***	0.0436***	0.0080	0.0090	0.0081	0.0162	0.0168	0.0160
	(0.017)	(0.016)	(0.017)	(0.018)	(0.018)	(0.018)	(0.019)	(0.019)	(0.019)
$R^2$	0.778	0.779	0.780	0.717	0.717	0.717	0.823	0.822	0.823
Countries	105	105	105	105	105	105	103	103	103
N	2,356	2,356	2,356	2,356	2,356	2,356	1,132	1,132	1,132

Note: All models are OLS with panel corrected standard errors and AR (1), intercepts, country and half-decade fixed effects. Models 10-12 use fiscal revenue, models 13-15 use fiscal expenditure, and models 16-18 use tax revenue as dependent variables.

Numbers in parentheses are standard error. All independent variables are lagged one year. \*\*\*  $p \le 0.01$ ; \*\*  $p \le 0.05$ ; \* $p \le 0.1$ 

Table 3: The impact of BITs on collective labor practices

	Model 19	Model 20	Model 21
All BITs	-0.0400***		
	(0.013)		
BITs with ICSID		-0.0441**	
		(0.020)	
Adjust N-S BITs			-0.0649***
			(0.021)
Polity2	0.0502**	0.0515**	0.0508**
	(0.025)	(0.025)	(0.025)
Trade open	-0.6873*	-0.7039**	-0.6913*
	(0.354)	(0.357)	(0.353)
FDI/GDP	-0.0125	-0.0124	-0.0128
	(0.013)	(0.013)	(0.013)
GDP per capita	0.2471	0.1318	0.2321
	(0.470)	(0.457)	(0.475)
Growth	0.0039	0.0034	0.0036
	(0.009)	(0.009)	(0.009)
Civil war	-0.5726**	-0.5720**	-0.5680**
	(0.285)	(0.285)	(0.285)
Population	-0.0210***	-0.0209***	-0.0203***
	(0.005)	(0.005)	(0.005)
ILO	0.1094	0.1251	0.1043
	(0.316)	(0.315)	(0.315)
$R^2$	0.577	0.576	0.576
Countries	120	120	120
N	1,791	1,791	1,791

Note: All models are OLS with panel corrected standard errors and AR (1), intercepts, country and half-decade fixed effects. Numbers in parentheses are standard error. All independent variables are lagged one year. \*\*\*  $p \le 0.01$ ; \*\*  $p \le 0.05$ ; \*p $\le 0.01$