American Sociological Review
2015, Vol. 80(3) 626–653

DOI: 10.1177/0003122415583649
http://asr.sagepub.com

Collective Labor Rights and Income Inequality

Jasmine Kerrissey[a]

Abstract

This article examines the relationship between income inequality and collective labor rights, conceptualized as workers' legal and practical ability to engage in collective activity. Although worker organization is central to explaining income inequality in industrialized democracies, worldwide comparative studies have neglected the role of class-based actors. I argue that the repression of labor rights reduces the capacity of worker organizations to effectively challenge income inequality through market and political processes in capitalist societies. Labor rights, however, are unlikely to have uniform effects across regions. This study uses unbalanced panel data for 100 developed and less developed countries from 1985 through 2002. Random- and fixed-effects models find that strong labor rights are tightly linked to lower inequality across a large range of countries, including in the Global South. Interactions between regions and labor rights suggest that the broader context in which class-based actors are embedded shapes worker organizations' ability to reduce inequality. During the period of this study, labor rights were particularly important for mitigating inequality in the West but less so in Eastern Europe.

Keywords

income inequality, labor, collective action

How does the repression—or support—of collective labor rights affect income inequality? In industrialized democracies, worker organization is central to explaining income inequality. Scholars in variations of the power resource tradition argue that class-based collective actors shape the distribution of economic resources through market and political forces (Brady, Baker, and Finnigan 2013; Brady 2009; Bradley et al. 2003; Jacobs and Myers 2014; Korpi 1989; Kristal 2010). Through markets, unions bargain collectively to increase wages for broad groups of workers. Through politics, worker organizations mobilize around politicians and policies that promote wealth redistribution. Empirically, an enormous body of research finds that strong working-class organizational power, typically measured as union density, is linked to lower inequality in the West (Kenworthy and Pontusson 2005; Lin and Tomaskovic-Devey 2013; Moller et al. 2003; Western and Rosenfeld 2011).

In sharp contrast to the literature based in industrialized democracies, inequality research with a worldwide focus—including developed and less developed countries—largely neglects the role of class-based collective actors. Instead, three veins of research dominate the worldwide literature: early research examines how internal characteristics, such as population growth,

[a]University of Massachusetts-Amherst

Corresponding Author:
Jasmine Kerrissey, 200 Hicks Way, Thompson Hall, Department of Sociology, University of Massachusetts, Amherst, MA 01003-9277
E-mail: jasmine@soc.umass.edu

create shifts in supply and demand (Kuznets 1955; Nielsen and Alderson 1995); scholars in the dependency tradition analyze foreign direct investment (FDI) to consider how power relations between countries affect inequality (Bornschier, Chase-Dunn, and Rubinson 1978; Evans and Timberlake 1980; Kentor 2001; Tsai 1995); and still others stress state institutional aspects, like democracy and social spending (Huber et al. 2006; Lee 2005; Lee, Nielsen, and Alderson 2007). While these contributions help account for inequality, including worker organization in worldwide analyses is critical to expand our understanding of how actors—specifically collective actors—affect the distribution of economic resources. In doing so, this study emphasizes the social and political dimensions of income inequality, departing from perspectives that emphasize shifts in supply and demand generated by technological and demographic change (DiPrete 2007).

Adopting a worldwide, comparative approach, this research examines the relationship between collective labor rights and income inequality. Collective labor rights represent workers' legal and practical ability to organize unions, bargain collectively, and engage in protest. The concept of collective labor rights is useful for several reasons. For one, it draws attention to the *collective,* unlike studies that emphasize the existence of individual labor rights. Collective rights also serve as an advantageous alternative to union density data for studies that include less developed countries (LDCs), where definitions and measurements of union membership are inconsistent. I argue that collective labor rights create a framework for worker organizations to emerge and to shape market and political dynamics of inequality. From this perspective, worker organization is central to understanding inequality not only in industrialized nations, but also in the Global South.

At the same time, labor rights might affect inequality unevenly across political and economic contexts. The worldwide literature increasingly stresses that mechanisms of inequality operate differently depending on country context (Lee 2005; Lee et al. 2007; Tsai 1995), and studies of specific regions often find different effects of internal demographic and economic factors (Bandelj and Mahutga 2010; Huber et al. 2006). Extending this imagery, I argue that the broader political context in which class-based actors are embedded shapes worker organizations' ability to reduce inequality. Building on prior literature, I identify two regions in which the effects of labor rights might be mitigated or intensified. First, collective labor rights are likely particularly important for inequality reduction in the West. Industrialized democracies hold a privileged position in the production cycle, creating the potential for unions to access "windfall" profits (Silver 2003). These countries also have long democratic histories, which Huber and colleagues (2006) identify as important for lowering inequality, as well as large formal economies, which are traditionally a stronghold of unions. Second, I argue that collective labor rights likely have no effect on inequality in Eastern Europe during the period of this study, when the region had recently transitioned to capitalism. I expect the relatively low levels of inequality in the region reflect legacies of socialist-led equality projects rather than nascent independent union movements.

To examine the relationship between inequality and collective labor rights, this study analyzes a sample of 100 developed and less developed countries from 1985 to 2002. Two issues plague measures of collective labor rights: measures often consider laws but not actual practices and many rely on only one, potentially biased, source. To address these shortcomings, I draw from the *Collective Labor Rights Dataset* (Mosley and Uno 2007), which uses three annual sources to construct an index that accounts for legal and practical collective labor rights for nearly every sovereign nation. To test the robustness of models, I use three different statistical techniques, random effects, fixed effects, and OLS with robust clustering, as well as two variations of the Gini coefficient. To account for the possibility of omitted variable bias—like left-party rule and democratic history—I replicate analyses using the Latin American and Caribbean region, which has greater data

availability. I then assess heterogeneity of effects by examining interactions between labor rights and regions.

In addition to its empirical contributions, this research addresses policy debates on how to reduce inequality. For instance, international organizations aiming to lessen inequality in the Global South often disagree over the effects of collective labor rights. The International Labour Organization (ILO) views workers' collective rights as a central mechanism of inequality reduction (ILO 2011). Some development agencies disagree, arguing that flexible labor markets are critical to economic growth because they increase employment and eventually wages (e.g., Morley 1994). To speak to these debates, this study presents the first systematic assessment of the relationship between labor rights and inequality with a worldwide lens.

INCOME INEQUALITY IN COMPARATIVE PERSPECTIVE

Understanding income inequality has long been a core concern of social scientists, and a rich literature stresses the importance of worker organization in industrialized democracies. Studies with a worldwide purview, however, neglect class-based actors. Instead, various traditions of the worldwide literature emphasize issues such as demographic shifts, foreign direct investment (FDI), and state institutions. I review the worldwide research on inequality to consider how the ability to organize collectively reduces inequality in LDCs as well as in industrialized democracies. Then, I attend to how regional context accounts for the relative impact of collective labor rights on inequality.

Demographics, Dependency, and the State

A long tradition in the worldwide inequality literature examines how internal economic and demographic factors affect inequality. Building off Kuznets's (1955) inquiry into the relationship between development and inequality, Nielsen and Alderson (1995) propose a "core model" of internal characteristics to explain cross-national variation in inequality; these characteristics include population growth, percent of the labor force in agriculture, sector dualism, and school enrollment. Supply and demand accounts play a prominent role in explaining variation in this research vein. For example, population growth affects the supply of unskilled labor, and the spread of education increases the supply of skilled, highly paid workers; these shifts affect the extent of income inequality. Similar to this depiction, labor economists often stress the effects of skill-biased technological change on inequality in the West (e.g., Bound and Johnson 1992; Katz and Murphy 1992). From this standpoint, waves of new technology create an increased demand for skilled workers that results in greater wage inequality.

A second research vein considers how the social organization of production shapes inequality. In contrast to internal models, this research calls for increased attention to external environments, particularly power dynamics between countries. Developed by scholars in the dependency tradition, empirical analyses in this vein focus on effects of FDI. These scholars argue that FDI affects the occupational structure of LDCs, resulting in large groups of marginalized workers, highly paid elites, and thus higher levels of inequality. A large literature finds that FDI generally exacerbates inequality, especially in LDCs (Alderson and Nielsen 1999; Bandelj and Mahutga 2010; Bornschier et al. 1978; Evans and Timberlake 1980; Kentor 2001). However, the effects of FDI are not uniform. Lee and colleagues (2007) observe that the impact of FDI on inequality is positive when public sector size is small or medium, because high levels of FDI likely contribute to a bifurcated occupational structure. This relationship is reversed in countries with the largest public sectors, where FDI is associated with lower inequality. For example, many small European countries with large public sectors tend to have high levels of human capital

investment and attract multinational firms engaged in high technology industries, which results in high employment and low wage differentials. In emphasizing the role of the state, Lee and colleagues (2007) and others (Bandelj and Mahutga 2010; Tsai 1995) draw attention to the importance of political and economic context in mediating the impact of FDI on inequality.

A third approach emphasizes the political and institutional forces that drive inequality. Led by sociologists and political scientists, this research shifts attention from economic and demographic forces to politics and institutions (DiPrete 2007). Research in industrialized democracies shows that states reduce income inequality through taxes and transfers. Leftist parties, which are often backed by unions, support policies that redistribute wealth through social security, health, education, and other social safety nets (Bradley et al. 2003; Kenworthy and Pontusson 2005; Moller et al. 2003). This state-centric explanation of inequality variation has been tested extensively in affluent democracies and increasingly outside the West (Huber et al. 2006; Lee 2005).

The worldwide literature calls attention to several other institutional features. For one, unlike research focused on industrialized democracies, worldwide studies include countries with a large variation in democracy levels. Operationalizing democracy as a continuum, studies find mixed results for the direct effect of democracy: a negative effect (Muller 1988), a curvilinear effect (Simpson 1990), and no effect (Bollen and Jackman 1985; Weede 1989). Others argue that the length of a country's democratic experience is a more appropriate measure, because parties are better able to affect change in stable democratic conditions (Huber et al. 2006).

Worldwide studies also find that effects of social spending are more conditional than in the West. In industrialized democracies, social spending is tightly linked to lower inequality. In a global context, however, democracy moderates the impact of social spending (Lee 2005). For example, based on Latin American and Caribbean countries, Huber and colleagues (2006) observe that social security and welfare spending reduce inequality only under democratic regimes. Moreover, some types of social spending have a greater impact on inequality. Rudra (2004) finds that all categories of social spending translate to less inequality in the industrialized economies. However, the effects of social spending are smaller in LDCs, and only spending on education is associated with lower inequality.

Scholarship also increasingly links neoliberal reforms to diminished social spending and higher poverty rates. For example, Huber and Stephens (2012) contend that neoliberal reforms in Latin America and the Caribbean have increased poverty levels. Specifically, policies that privatize or reduce social security benefits, healthcare expenditures, and education spending drive poverty and high levels of inequality.

Worker Organization

Class-based collective actors are central to understanding income inequality in industrialized democracies. Strong working-class organizational power, usually measured as union density, reduces inequality (Brady et al. 2013; Jacobs and Myers 2014; Western and Rosenfeld 2011). Moreover, the share of the national income that goes to labor relative to capital increases when workers' relative bargaining power is strong (Kristal 2010; Lin and Tomaskovic-Devey 2013). Scholars in the power resource tradition argue that class-based collective actors affect the distributive process at two points: directly through reducing pre-tax and transfer income inequality (market mechanisms) and indirectly through supporting state policies that bolster taxes and transfers (political mechanisms).

Through markets, unions directly reduce inequality by securing better wages and benefits for large groups of workers (Bradley et al. 2003; Western and Rosenfeld 2011). Unions' ability to raise wages for substantial numbers of workers is partially affected by the existence of

centralized bargaining structures (Kristal and Cohen 2007; Wallerstein 1999; but see Scheve and Stasavage 2009). However, even in decentralized contexts, like the United States, unions have had some success in raising wages for non-union workers through the threat of unionization (Freeman and Medoff 1984). Although unions typically aim to increase wages, their ability to do so varies. For instance, beginning in the 1940s in the United States, unions had high density and were relatively successful in increasing wages across entire industries (Freeman and Medoff 1984). As union density fell at the end of the twentieth century, strikes declined and were less effective in achieving higher wages (Rhomberg 2012; Rosenfeld 2006). Moreover, the rise of financialization in the United States has shifted power away from workers and resulted in increased inequality (Lin and Tomaskovic-Devey 2013). However, even in this weak position, workers are less impoverished in highly unionized states (Brady et al. 2013).

Worker organizations also affect inequality through political processes. Labor movements often support left parties and rally around policies that redistribute income. Unions influence elections and policies by mobilizing members to vote, protest, and work on political campaigns (Kerrissey and Schofer 2013; Norris 2002; Wood 2000). Through this collective political action, worker organizations aligned with social-democratic parties have been able to shift the relative bargaining power from capital toward labor (Bradley et al. 2003; Esping-Andersen 1985; Korpi 1989; Kristal 2010).

The connection between worker organization and inequality has been well documented in industrialized democracies, but no scholarship systematically examines this relationship outside the West. I first review the characteristics of union membership in LDCs and then draw on case-based literature to consider the role of worker organizations in reducing inequality via market and political forces.

Little systematic union data are available in LDCs. In one of the few cross-national studies, Martin and Brady (2007) show that union membership in LDCs is driven by both country context and individuals' characteristics. They find that unionization is undermined by the influence of International Monetary Fund (IMF) agreements, strengthened by legacies of state socialism, and not affected by factors like levels of industrialization, democratization, state size, and trade. At the individual level, they find class is a strong predictor of union membership, arguing that "death of class" propositions forwarded in the affluent democracies are not accurate in LDCs. Overall, Martin and Brady's study suggests that worker organization is ongoing in LDCs, largely based on class, and more a result of political forces, such as the IMF, than internal economic characteristics.

Do these class-based movements affect inequality in LDCs, similar to their role in industrialized democracies? Case studies suggest that worker organizations have been key *political* forces for lowering income inequality in LDCs. For example, roughly 87 percent of workers in Ghana work in the informal economy, where traditional unions have had little standing (ILO 2011). In 1989, workers in Ghana formed a new worker organization for self-employed informal traders. By 2011, it had roughly 1.8 million members. A key strategy of the organization is to identify avenues for policy input. Through their organization, the state now recognizes informal traders as key stakeholders in the policy-making system, and traders have worked with state officials on trade and taxation issues. The organization has pushed for state policies to improve informal workers' livelihoods and helped stabilize their work (ILO 2011).

The example of Ghana is not isolated: numerous case studies based in LDCs find that collective worker organizations actively aim to influence political parties and policy development (e.g., in Latin America [Anner 2011; Cook 2007; Huber and Stephens 2012; Wood 2000], Africa [Buhlungu 2010; Kraus 2007; Raftopoulos and Phimister 1997], and Asia [Agarwala 2013; Heller 1999]). Although these sorts of movements may not always look like traditional unions (i.e.,

workers in the formal sector with collective bargaining agreements), they still organize to influence the distribution of economic resources—and they often face similar repression as unions.

Less research documents the extent to which labor movements affect inequality through market mechanisms in LDCs. Reliable, longitudinal micro survey data in LDCs are rare, and most studies of union effects on wages use small samples. Of the existing studies, findings suggest that unions are linked to higher wages (Fairris 2003; Freeman 2009). Unions' ability to affect inequality through market forces is likely particularly relevant to industrialized democracies, which have large formal sectors, relatively high unionization rates, and in some cases centralized bargaining structures that cover large groups of workers. In LDCs with large informal economies, worker organization is more likely to operate through political mechanisms (Freeman 2009).

COLLECTIVE LABOR RIGHTS

Integrating theories of state institutions and worker organization, this study analyzes the relationship between inequality and the regulation of collective labor rights. Collective labor rights govern workers' legal and practical ability to organize, protest, bargain, and form unions. This concept draws an analytic eye to the importance of *collective* rights. Individual rights protect workers from discrimination based on race, age, sex, and so forth. Collective rights, on the other hand, establish a framework for the emergence of political and economic organizations. The *collective* aspect of this research distinguishes this study from prior research examining individual rights or state labor policies (e.g., minimum wage) (Calderon and Chong 2009).

Collective labor rights are useful for examining inequality in LDCs because they capture dynamics that union density data obscure. For instance, some countries may have high union density because unions are dominated by the state (e.g., China). Compounding this issue, data on union density in many LDCs are unreliable due to inconsistent methodologies and sources over time. Although the ILO provides rough estimates of union density for some LDCs, it cautions that these data are unreliable within countries and "not directly comparable between countries" (Hayter and Stoevska 2011:3).

Due to the problems with union density data, scholars have aimed to construct measures that capture workers' rights in LDCs. These efforts reflect a growing concern about the disjuncture between labor laws and actual practices, and the related question of which sources are most appropriate for capturing practices. Both labor laws and practices on the ground contribute to worker organizations' ability to influence the distribution of resources. Labor laws regulate the formation and activities of worker organizations, including what types of workers may form unions, how unions are financed and governed, and how collective bargaining occurs. Multiple factors contribute to the strength of worker organizations (Clawson 2003; Luce 2014; Martin and Brady 2007), but favorable legal climates help facilitate growth through institutionalizing unions and providing legal avenues for making claims. In the United States, for instance, after passage of the National Labor Relations Act (NLRA) allowed for union elections in the private sector, hundreds of thousands of workers used this federal-regulated system to form unions (Murolo and Chitty 2001). Similarly, labor law reform in Latin America toward the end of the twentieth century corresponded with increased union activity (Cook 2007), and unions were relatively more successful at organizing and bargaining in countries with favorable laws (Anner 2011). Moreover, legal scholars argue that laws affect informal norms and culture. Laws create a legal environment that includes both the formal laws and the informal norms and culture that develop with the law. Over time, this adoption diffuses across organizations and becomes institutionalized (Edelman 1990).

Despite the potential for favorable labor laws to bolster labor movements, laws may not always adequately capture practices on the ground. Organizational research points to the decoupling between organizational structures and activities (Meyer and Rowan 1977), particularly when there are few enforcement mechanisms (Stainback and Tomaskovic-Devey 2012). States vary substantially in their propensity and capacity to enforce labor laws, resulting in routine violations of the law (Hewison and Chiu 2009; Mosley 2011; Tilly 1995). In practice, activists may be fired, arrested, or murdered. Moreover, the state or employers may dominate unions, forbidding free elections or independent financing. Labor repression may occur through official state channels (e.g., suppressing protests), employers (e.g., firing activist workers), or paramilitary groups (e.g., murdering union leaders). Repressive labor practices create an enormously challenging atmosphere for labor movements (Anner 2011; Buhlungu 2010; Drake 1996). Violence against worker organizations makes union participation high-risk, potentially curtailing activism and limiting unions' capacity to effectively press for greater income equality. As I discuss in the data section, the index I use in this study, developed by the ILO, is the most comprehensive attempt to address both legal rights and the practical climate.

Recognizing that labor rights must attend to both legal frameworks and actual practices, I argue that the repression of collective labor rights weakens worker organizations, which, in turn, limits the capacity of labor movements to effectively challenge income inequality. With little ability to form collectivities that can pressure employers for higher wages, elect labor-friendly politicians, or support redistributive political policies, there are fewer safeguards to mitigate income inequality. I expect that, in general, *strong collective labor rights will have a negative relationship to income inequality,* including in the context of less developed countries.

However, the relative role of labor rights may depend on political and economic context. Worldwide literature increasingly examines how institutional context affects the mechanisms of inequality reduction (Lee 2005; Lee et al. 2007; Tsai 1995). Are labor rights useful in explaining inequality in all regions? If so, are labor rights especially effective at reducing inequality in some regions? Prior literature suggests that the impact of labor rights may differ between industrialized democracies, less developed countries, and the ex-socialist countries of Eastern Europe. In the West, collective labor rights likely play a comparatively large role in inequality reduction for several reasons. First, Huber and colleagues (2006) argue that long periods of democratic stability provide collective actors the time to use their organization to gain entry into political life. The West has a long history of democracy, as well as generations of union building. This longevity provides the time and institutional stability for worker organizations to challenge inequality. Second, the West holds a privileged position in the world system. Silver (2003) argues that workers in industrialized nations occupy an especially strong position to secure gains. Businesses in the West are at the front end of the production cycle and more likely to make windfall profits. In addition, protectionism has helped maintain high-wage sites of production in industrialized democracies. Because the overall pie is larger in the West, workers have a chance at a larger slice. In contrast, LDCs are more often at the tail end of the production cycle and rarely share in exorbitant profits. Third, compared to the West, LDCs have larger informal economies, which traditionally are not primary sites of union organizing (Agarwala 2013). It is difficult to test these mechanisms separately because they often develop together. Data constraints also exist: reliable informal economy statistics are scarce (ILO 2012). Considering these mechanisms together, collective labor rights in the West are likely to be particularly effective at generating greater equality.

The ex-socialist countries also call for closer consideration. While labor unions are useful in explaining inequality in capitalist

relations, this dynamic does not extend to other economic arrangements—or, as I argue here, to countries that recently transitioned from socialism. Under capitalism, worker organizations are relatively independent organizations that push for concessions from the state or employers. In contrast, labor unions are part of the state machinery under socialism, rather than independent organizations seeking to affect the distribution of economic resources. With economic equality as a founding principle, socialist states lead projects to redistribute wealth. Indeed, although some inequality persisted during socialism, inequality was much lower during socialist regimes than in comparable capitalist countries, even accounting for levels of industrial development and other demographic characteristics (Nielsen and Alderson 1995).

After the collapse of socialism in Eastern Europe, collective rights for independent unions were greatly strengthened: workers could generally elect their own leaders and the state tolerated collective labor action (Ost 2000). At the same time, inequality, which had been extremely low under socialism, began to rise. The average Gini coefficient increased from 22 in 1989 to 34 in 2001 in Eastern Europe. Bandelj and Mahutga (2010) attribute much of this increase in inequality to features of capitalist economies, such as the expansion of the private sector, penetration of FDI, and retrenchment from the redistributive state. Despite the increase in inequality in the dozen years after socialism, inequality in the region was still well below the average of the rest of the world in 2001, with a Gini coefficient of 34 versus the rest of the world at 40. The relatively low levels of inequality observed in Eastern Europe in this period were largely due to the legacies of socialist-led equality projects. Since these countries have become more entrenched in capitalist arrangements, inequality has increased (Bandelj and Mahutga 2010). As socialist legacies become more distant over time, I expect labor rights will better account for inequality levels in the region.

RESEARCH DESIGN

I begin by examining the relationship between inequality and labor rights in 100 developed and less developed countries.[1] Concerns over omitted variable bias, modeling techniques, and the Gini coefficient prompt me to present several corollary analyses in Table A1 in the Appendix. Finally, to better understand how context moderates labor rights, I examine interactions between labor rights and regions.

Dependent Variable: The Gini Coefficient

Income inequality is measured by the Gini coefficient, with 0 representing perfect equality and 100 representing perfect inequality. Gini datasets offer trade-offs between coverage and comparability. For the worldwide scope of this project, two options exist: the World Income Inequality Dataset (WIID) (United Nations University 2008) and the Standardized World Income Inequality Database (SWIID) (Solt 2009), which uses multiple imputation to extend the coverage and comparability of the WIID.

The WIID, which improves on the formerly used World Bank dataset developed by Deininger and Squire (1996), is a dataset of inequality statistics that includes information on the source, income definition, population covered, and reference unit for each observation. Because high quality, comparable data are unavailable for many LDCs, worldwide scholars control for the type and quality of observations (e.g., Lee 2005; Lee et al. 2007). Using this strategy, models presented in Table A1 in the Appendix include 12 technical indicators as dummy variables: quality of rating (quality 2, 3, 4, with quality 1 as the reference category), income sharing unit (household, individual, and missing as the reference category), unit of analysis (family, household, individual, and person as the reference category), income definition (earning, expenditure, income, and consumption as the reference category), and equivalence scale (family, household, and no adjustment as the reference category).

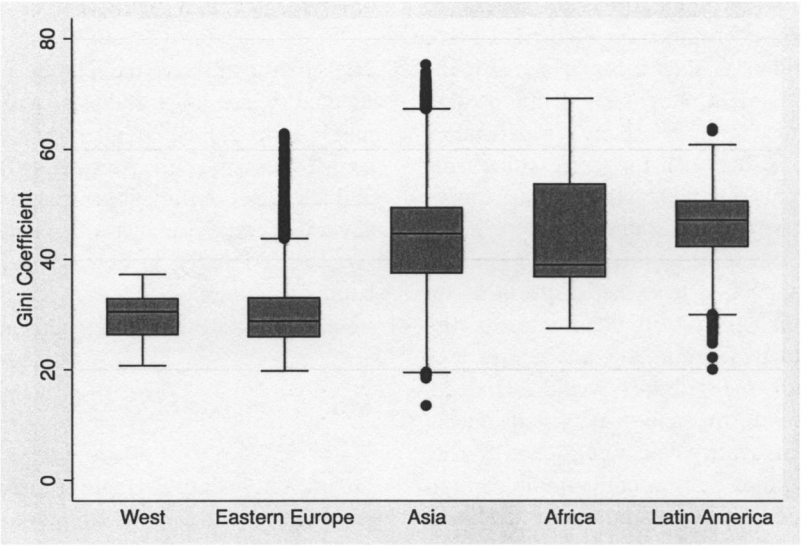

Figure 1. Gini Coefficient by Region, 1985 to 2002

A recent alternative to the WIID is the SWIID. Cross-national research on income inequality has been limited by missing data and lack of comparability (Neckerman and Torche 2007). The SWIID aims to address these issues by maximizing comparability across a large sample of countries and years. Based on data from the WIID, the Luxembourg Income Study, and other sources, the SWIID uses a missing-data multiple-imputation algorithm to provide a comparable Gini coefficient of net income inequality, along with estimates of uncertainty with these statistics. To address issues of incomparability, the SWIID provides 100 separate imputations of the inequality estimates and their standard errors. Multiple imputation is preferable to excluding observations with missing inequality data (Rubin 2004). The dataset has been tested for reliability and validity (for extended documentation, see Solt 2009). Because the SWIID offers greater coverage and comparability between countries, I use the SWIID for the main tables and figures and the WIID for Table A1 in the Appendix.

One drawback to the Gini coefficient is that as a summary statistic it does not reveal changes in the shape of the income distribution. Strong labor rights might augment the share of income held by the poorest, the middle class, or both. Unfortunately, World Bank data on income share by quintiles are not strictly comparable across countries due to variation in definitions of income and measurements of household size.[2]

Figure 1 presents box plots of the Gini coefficient by region from 1985 to 2002. Box plots are interpreted as follows: the top of the solid box represents the start of the upper quartile, the top line represents the greatest value, excluding outliers, and dots represent data greater than 1.5 times the upper quartile. The industrialized democracies (labeled "West") and Eastern Europe have relatively lower levels of inequality in this period compared to countries located in Asia, Africa, and Latin America.

Independent Variable of Interest: Collective Labor Rights

Freedom of association and collective bargaining rights facilitate workers' ability to act collectively. Early attempts to measure these rights focused on laws and conventions, most often the adoption of ILO conventions (Rodrik 1996). Studies find that ratification of ILO conventions on freedom of association

and collective bargaining is unrelated to income inequality (Calderon and Chong 2009; Freeman 2009). This lack of significance is likely due to the decoupling of ILO ratification and rights on the ground (Sari and Kucera 2011). Noting the potential for decoupling, various scholars amended indices of legal violations to include expert assessments of actual labor practices (e.g., Böhning 2005). Adopting a different approach, the Cingranelli-Richards (2010) dataset uses textual analysis of the U.S. State Department's *Country Reports on Human Rights Practices,* combined with measures of minimum wages and other benefits, to develop a three-point ordinal score of general workers' rights. These efforts improved on the earlier measures, but drawbacks remain: use of a single, U.S.-based source with potential for bias; a three-point scale that may not capture full temporal and cross national differences; and a measure that mixes freedom of association with wages and benefits.

To address these shortcomings, the ILO developed a two-pronged approach: it uses multiple sources to reduce bias and it codes for a large range of specific legal and practical aspects of collective organization (Kucera 2004). To limit bias the dataset draws on yearly reports from the U.S. State Department, the ILO, and a labor organization: the U.S. State Department's *Country Reports on Human Rights Practices,* the ILO's *Committee of Experts on the Applications of Conventions* and *Recommendations and the Committee on Freedom of Association,* and the International Confederation of Free Trade Unions' *Annual Survey of Violations of Trade Union Rights.*

The coding scheme measures 37 aspects of freedom of association and collective bargaining by textual analyses. Specifically, it includes components of the following categories: freedom of association and collective bargaining-related liberties; the right to establish and join worker organizations and unions; other union activities; the right to bargain collectively; the right to strike; and rights in export processing zones. Countries receive a score of 1 if any of the three textual sources reports a violation. Each of the 37 violations is weighted based on expert assessments of the severity of the violation. The coding scheme accounts for laws and practices. Labor laws include a range of legally supported collective acts. For example, questions include what types of workers may form unions (e.g., public sector workers), if independent unions are legal, and whether strikes are allowed. It also accounts for labor rights that capture the climate in practice, including the following: do unions control their own finances; do employers dismiss workers because of their union membership; do authorities interfere with union rights of assembly; and is there evidence of the murder or disappearance of union activists. While practices may sometimes reflect the enforcement of laws, expert assessors did not design the index for a one-to-one comparison, but rather to capture the overall climate of labor rights. Teitelbaum (2010:461) assesses the quality of this index using item response theory and finds the component items in the index relate to the same latent variable, which he identifies as "the propensity to violate labor rights."[3]

This index provides a useful yearly snapshot of labor rights by country, independent of country-level reporting bias or divergent definitions of unionism. This dataset is also preferable because it captures *collective* labor rights only, rather than issues like minimum wage, sex discrimination, and so forth, which are tangential to theories of collective organization. Mosley and Uno adopted the ILO's coding scheme to extend coverage yearly from 1985 to 2002, available through the *Collective Labor Rights Dataset* (for a detailed description of the survey, see Mosley and Uno 2007).

Figure 2 reports box plots of labor rights by region. Low scores represent more violations, and the index is standardized for ease of interpretation.[4] The West has the strongest labor rights, as well as the least variation.[5] Other regions have lower mean labor rights, as well as greater variation within regions.

Countries vary in the extent to which labor rights change over time. On average, rights

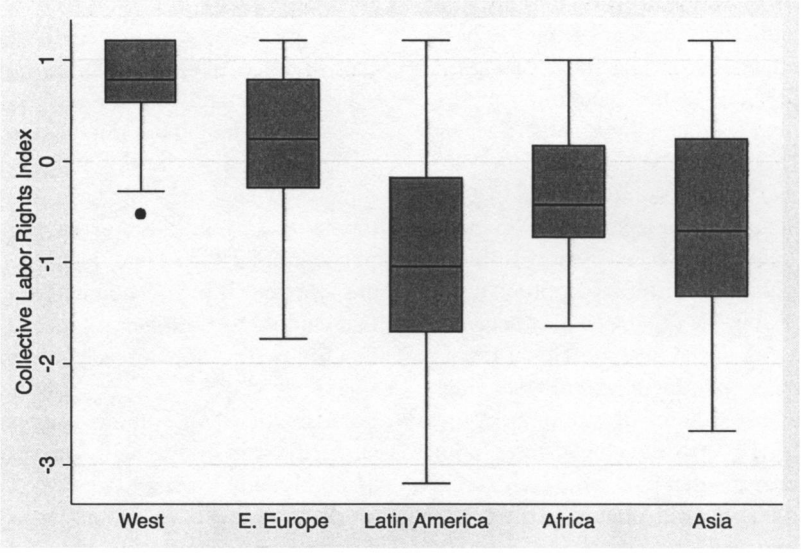

Figure 2. Collective Labor Rights by Region, 1985 to 2002

were worse in 2002 compared to 1985: the index averages .17 in 1985 and declines to –.33 by 2002. However, this is not the case for ex-socialist countries, which had greater restrictions on independent unions and tight control of state-sanctioned union activities in the early period. LDCs generally experienced more violations than the industrialized democracies, and this gap grew over time. One reason for declining labor standards is pressure from expanding exports (Mosley 2011). Despite these general trends, some countries experienced an increase in rights, such as South Africa after the collapse of apartheid.

Independent Variables

Table 1 reports descriptive statistics for all variables. Demographic and economic data are drawn from the World Bank's World Development Indicators (2012). Following Kuznets's (1955) theory on the U-shape relationship between development and inequality, I include GDP per capita (log base 10) and its squared term to account for level of economic development. Nielsen (1994) and colleagues (Nielsen and Alderson 1995) developed a "core internal" development model of demographic and economic factors, which aims to capture the effects of the polynomial of GDP, and includes population growth, labor force in agriculture, sector dualism, and secondary schooling. Population growth, measured as a percentage, is associated with increased inequality (Bollen and Jackman 1985; Simpson 1990; but see Bandelj and Mahutga 2010; Huber et al. 2006). Alderson and Nielsen (1999) argue that this finding stems from an oversupply of young, unskilled workers.[6]

Kuznets (1955) hypothesized that inequality is lower in societies with large shares of agriculture. Some empirical studies support this contention (Nielsen and Alderson 1995), others find no relationship (Bandelj and Mahutga 2010; Lee 2005), and still others find that agriculture is positively related to inequality in some regions, such as Latin America (Huber et al. 2006). Huber and colleagues (2006) emphasize that inequality is driven by social and political relationships and agriculture is not inherently linked to lower inequality.

Kuznets (1955) also argued that the coexistence of a high-productivity modern sector and a low-productivity traditional sector

Table 1. Descriptive Statistics

	Description	Mean	Std. Dev.
Dependent Variables			
Gini: SWID	Gini coefficient from Standardized World Income Inequality Database	39.50	9.95
Gini: WIID	Gini coefficient from United Nations University World Income Inequality Dataset	38.30	10.40
Independent Variables			
GDP	Gross domestic product per capita, PPP (purchasing power parity), log base 10	3.46	.53
GDP Squared	Gross domestic product per capita, PPP, squared	12.28	3.72
Population Growth	The exponential rate of growth of midyear population from year $t-1$ to t, expressed as a percentage	1.19	1.11
Agriculture, Percent of Labor Force	The percentage of labor force in agriculture	23.20	18.76
School Enrollment	The total enrollment in secondary education, regardless of age, expressed as a percentage of the population of official secondary-education age	73.34	25.43
School Enrollment Squared	Secondary-school enrollment, squared	6025.79	3887.47
FDI Stock	Inward investment of stock, per capita, log base 10	1.658	.76
Democracy	Freedom House's combined scores of political rights and civil liberties	10.45	3.12
Democracy Squared	Freedom House score, squared	118.99	58.65
Government Expenditures	General government final consumption expenditure, as a percent of GDP	14.94	5.38
Labor Rights Index	Index of collective rights, standardized	−.24	1.04
Appendix Variables			
Years of Democracy	Regime type: non-democracy = 0, restricted democracy = .5, full democracy = 1, score cumulative from 1945 to date of observation	−.08	.22
Repressive Authoritarianism	Regime type: repressive authoritarian = 1, all others = 0, score cumulated for 15 years preceding year of observation	.04	.18
Partisan Balance	Left-right balance of seats in the lower house of the legislature	130.8	39.6
Ethnic Diversity	Dummy variable coded 1 when at least 20 percent and not more than 80 percent of the population is ethnically diverse	.27	.44
Sector Dualism	The absolute difference between the percent of the labor force in agriculture and agriculture as a share of GDP, log base 10	.91	.53

increases inequality. Called "sector dualism," this dynamic captures inequality due to average income differences between agricultural and other workers. Sector dualism is positively related to inequality (Nielsen 1994; Nielsen and Alderson 1995). It is measured as the absolute value of the difference between the percentage of the labor force in

agriculture and agriculture as a share of GDP. Because sector dualism is calculated from the percentage of labor force in agriculture, the two measures are highly correlated (.85). Due to data limitations, models that include sector dualism analyze a smaller number of countries. Because of these issues, I examine models that include both measures together, as well as individually. The effects of labor rights remain strong across the various analyses and sector dualism is not significant (see Model 4, Table A1 in the Appendix). To maximize the sample size and avoid multicollinearity, I present models that control for percent of the labor force in agriculture in the main tables.

Many studies also control for the effects of education expansion. Some researchers find that net secondary-school enrollment is associated with lower inequality (Alderson and Nielsen 1999; Lee et al. 2007; Nielsen and Alderson 1995) and use economic arguments based on supply and demand to explain these findings: the greater availability of skilled workers due to education expansion increases competition and creates a relative decrease in the higher wages of skilled workers. Regional studies of LDCs, however, often find no significant relationship between education and inequality, including in Eastern Europe (Bandelj and Mahutga 2010), Latin America and the Caribbean (Huber et al. 2006), and the BRICs (Brazil, Russia, India, and China) (Carnoy 2011).

Other studies suggest that the relationship between education expansion and inequality is curvilinear: nations with very high or low education levels have lower income inequality, whereas countries with intermediate levels of education have higher inequality (Crenshaw 1992; Simpson 1990). Early education expansion propels the elite into high-paying jobs while most remain in low-paying jobs. Further expansion of education dampens the comparative value of education for the elite. Following this work, this study models secondary education and its squared term. Because net secondary education is unavailable for many LDCs, I opt to use gross secondary-school enrollments. The correlation between net and gross enrollments is .95 and the impact of labor rights remains robust using either measure. Gross enrollments are the total enrollment in secondary education, regardless of age, expressed as a percentage of the population of official secondary-education age. Because students may have late school entrance or grade repetition, this measure can exceed 100 percent.

Scholars from the dependency tradition argue that FDI typically involves capital-intensive production, which creates well-paying jobs but not on a large scale. Prior research finds that the stock of FDI is associated with increased inequality, although its effects vary by region and state context (Alderson and Nielsen 1999; Bornschier and Chase-Dunn 1985; Kentor 2001; Lee et al. 2007). Following these studies, I control for the net stock of FDI per capita, log base 10.

Past research identifies social expenditures, such as social security and welfare spending, as important for lessening inequality. Because detailed measures of social spending are largely unavailable for LDCs, global scholarship focuses on a related issue, public sector size. Public sector size can be measured using current tax revenue or total government expenditure. The two are highly correlated, and I adopt Lee's (2005) approach and use total government expenditures.

Scholars disagree over the relationship between democracy and inequality, with findings suggesting a linear relationship, a curvilinear relationship, and no significant relationship. I model democracy and democracy squared. Democracy measures are drawn from the Freedom House index of political rights and civil liberties. Democracy scores measure between 1 and 14, with 14 representing highly democratic societies. The correlation between democracy and collective labor rights is .41. Models using the democracy measure from the Polity IV dataset (Marshall, Jaggers, and Gurr 2011) yield similar results.

I also include dummy variables for regions to account for unexplained regional variation: the West, Eastern Europe, Africa, Latin

America, and Asia. The African region has the fewest data points and represents only 4 percent of the sample. Other regions have similar levels of representation in the sample, ranging from 21 to 29 percent.

Finally, in their study of Latin America, Huber and colleagues (2006) argue for the importance of cumulative democracy, repressive authoritarian regimes, left-party rule, and ethnic diversity—data that are unavailable for many LDCs. In corollary analyses of Latin America, I examine the impact of collective labor rights with these four additional variables, which I draw from two datasets constructed by Huber and colleagues (2008, 2012). Huber and colleagues (2008) coded data for cumulative democracy since 1945 and repressive authoritarian regimes. Partisan data come from Coppedge's (1997) party classification and was expanded by Huber and colleagues (2008). This variable codes for 12 possible political ideologies based on socioeconomic agenda as expressed in partisan appeals and policy initiatives. Ethnic diversity measures are based on data presented in de Ferranti and colleagues (2004).

Methods

Worldwide analyses include 100 countries and 832 country-year observations. These data are unbalanced, with countries reporting different numbers of observations across irregular time periods. With this data structure, errors in both measurement and omitted variables may be correlated with inequality. OLS is inappropriate for this type of data, because basic assumptions about uncorrelated errors are likely violated. Two modeling techniques address this problem: fixed-effects models (FEM) and random-effects models (REM). Each technique has benefits and limitations.

FEM accounts for a specific kind of omitted variable bias by controlling for time-invariant omitted variables. This technique captures changes within countries, ignoring between-country variations in the data. FEM is less efficient than REM, but it is conservative in that it accounts for unobserved, or time-invariant, features of each case. One drawback to FEM is that it is best suited to temporally dominated datasets, or datasets with relatively large amounts of time points and few countries (Beck and Katz 1995). Scholars who are primarily interested in inequality changes within countries use FEM.

REM addresses the issue of clustering produced by panel designs where observations may be correlated. This technique captures the differences between countries. With REM, the error term includes a unit-specific component that varies across units but is constant over time. This can be problematic if unmeasured unit-specific factors affect income inequality the same way over time. Much recent inequality work uses REM (e.g., Bandelj and Mahutga 2010; Lee et al. 2007).

A third approach is to use OLS estimation with robust clustering of standard errors (e.g., Huber et al. 2006; Moller et al. 2003). These studies note that the robust-cluster variance estimator remains valid even with serial correlation and correlation due to unit-specific components.

There is no consensus among sociologists about the best estimation technique for modeling income inequality. I find that effects of labor rights on income inequality are negative and significant across models, suggesting these results are not a function of model specification. Hausman tests indicate that within- and between-cluster effects differ between FEM and REM models. I present REM in the main tables and FEM and robust clusters in Table A1 in the Appendix. I use prefix commands for multiple imputation estimates for all models using the SWIID (Solt 2009).

To test the extent of regional heterogeneity—or the possibility that labor rights have a greater impact on inequality in some contexts—I examine a series of interactions between regions and labor rights. To check whether labor rights are statistically significant in the various regions, I sum the coefficients for the labor rights index and the interaction term. I conduct F-tests to assess whether the resulting sums are significantly different from zero.

RESULTS

The analyses show consistent evidence that strong collective labor rights are linked to lower inequality. Models in Table 2 use random effects and include 100 developed and less developed countries.[7] Model 1 reports the effects of demographic and economic factors on inequality. Consistent with prior work, GDP is positive and its squared term is negative, suggesting a curvilinear relationship between economic development and inequality.

Model 2 replaces GDP and its squared term with the core internal development model of inequality proposed by Nielsen (1994; see also Lee et al. 2007; Nielsen and Alderson 1995). Neither population growth nor the percentage of the labor force in agriculture is significant in Model 2. Both controls have had mixed results in prior literature. Studies have found that population growth has a negative (Bandelj and Mahutga 2010; Huber et al. 2006) and a positive (Lee et al. 2007; Nielsen and Alderson 1995) effect on inequality. Similarly, studies find mixed results regarding the percentage of the labor force in agriculture (Bandelj and Mahutga 2010; Hubert et al. 2006; Lee 2005; Nielsen and Alderson 1995). Model 2 also controls for gross secondary-school enrollment and its second-order term. Prior studies have found a curvilinear relationship between education expansion and inequality (Crenshaw 1992; Simpson 1990), with early expansion of education accelerating inequality, and higher levels of education reducing the comparative value of education for the elite. Model 2 reports coefficient signs in the direction that support a curvilinear relationship between education and inequality: school enrollment is positive and its squared term is negative. Because school enrollment is correlated with GDP (.75), I do not include them together until the final model (following Nielsen and Alderson [1995] and others who model internal demographic factors separately from GDP).

Model 3 introduces the main concept of this study: collective labor rights. Labor rights have a significant, negative relationship to inequality. This negative relationship means that weak collective labor rights are associated with higher income inequality; strong labor rights are related to lower inequality. While the labor rights coefficient remains negative and significant across models, the coefficient size depends on the data and methods. In general, the coefficient hovers around −1.0, which suggests that countries that score one standard deviation above the mean on the labor rights index have a lower average Gini coefficient by about 1 point. To put this in perspective, 50 percent of country-year observations in the sample fall between a 15-point spread, which suggests this change is substantive.

Model 4 incorporates FDI and characteristics of the state, both of which have been central to worldwide inequality studies. A large literature finds that FDI exacerbates inequality in certain contexts, especially in LDCs (Alderson and Nielsen 1999; Bornschier et al. 1978; Evans and Timberlake 1980; Kentor 2001; Tsai 1995). In support of this argument, I observe strong and consistent effects of FDI across models: FDI is associated with increased inequality. Model 4 also includes state characteristics. Consistent with prior research, democracy, democracy squared, and government expenditures are not significantly associated with inequality. With the addition of these factors, the effects of labor rights remain significant and negative.

Finally, Model 5 includes the polynomial of GDP and other internal economic and demographic factors. Some prior work does not include these factors together, arguing that these demographic and economic factors account for the effects of GDP and its polynomial (Lee et al. 2007; Nielsen 1994; Nielsen and Alderson 1995). One concern here is that education and GDP are fairly highly correlated. However, the main findings observed in previous models remain intact, although the size of several coefficients shrink. I replicate these findings using WIID data in Table A1 in the Appendix and the impact of labor rights is consistently negative and significant.

Table 2. Random Effects: Effects of Labor Rights on Income Inequality Worldwide, 1985 to 2002

	Model 1	Model 2	Model 3	Model 4	Model 5
Economic and Demographic Factors					
GDP[a]	54.928***		54.718***	54.720***	43.218***
	(11.15)		(11.04)	(10.82)	(11.99)
GDP Squared	−7.040***		−7.167***	−7.771***	−6.750***
	(1.62)		(1.60)	(1.59)	(1.73)
Population Growth		−.383			.002
		(.33)			(.33)
Percent Agriculture		−.006			.001
		(.02)			(.02)
School Enrollment		.326***			.258***
		(.04)			(.05)
School Enrollment Squared		−.001***			−.001***
		(.00)			(.00)
Dependency					
FDI Stock[a]				1.326***	.902**
				(.32)	(.32)
State Factors					
Democracy				.138	.183
				(.63)	(.62)
Democracy Squared				−.003	−.006
				(.03)	(.03)
Government Expenditures				.068	−.061
				(.06)	(.06)
Collective Labor Rights					
Labor Rights Index			−1.070***	−.931***	−.605*
			(.27)	(.26)	(.26)
Regional Controls					
Latin America	18.369***	22.093***	15.984***	13.643***	13.619***
	(2.94)	(2.31)	(2.95)	(2.96)	(2.95)
Africa	26.649***	29.030***	23.995***	20.216***	21.538***
	(3.80)	(2.97)	(3.75)	(3.71)	(3.66)
Asia	21.752***	21.844***	18.804***	16.075***	14.784***
	(3.43)	(2.63)	(3.40)	(3.35)	(3.29)
Eastern Europe	6.010+	3.353	4.169	.640	−3.022
	(3.12)	(2.37)	(3.09)	(3.08)	(3.06)
Constant	−77.152***	10.146***	−73.056***	−67.626***	−49.971*
	(19.16)	(2.84)	(18.90)	(18.32)	(20.24)
Observations	832	832	832	832	832
Countries	100	100	100	100	100

Note: Standard errors in parentheses.
[a]Log base 10.
*$p < .05$; **$p < .01$; ***$p < .001$; +$p < .1$ (two-tailed tests).

Figure 3 provides a snapshot of countries' positions on labor rights and inequality in 2002. A fitted value shows their negative relationship. Because these data are unbalanced, not all countries appear in the 2002 snapshot. Other yearly snapshots show similar patterns. Note that several ex-socialist countries detract from this trend, with low inequality and

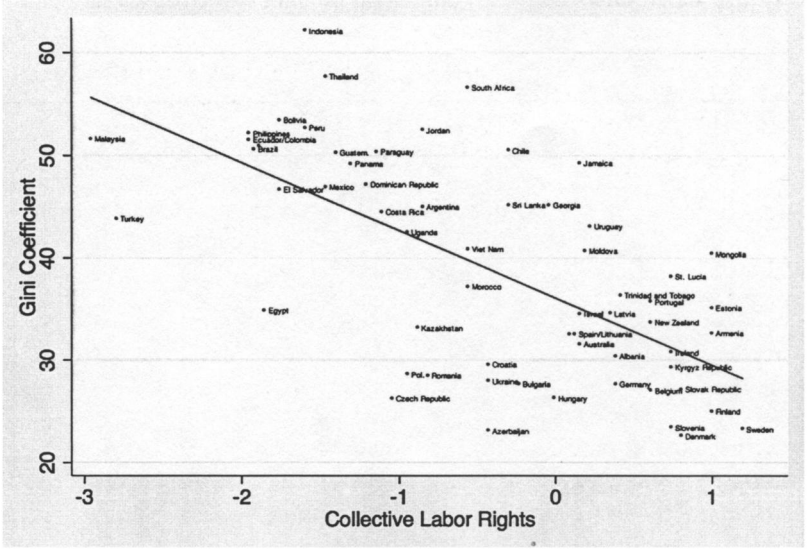

Figure 3. Bivariate Association: Inequality and Labor Rights, 2002

moderately weak labor rights (e.g., the Czech Republic, Poland, Ukraine, Romania, and Bulgaria).

Corollary Analyses: Modeling Techniques, the Gini Coefficient, and Omitted Variable Bias

Corollary analyses help evaluate the robustness of results. To speak to prior studies that use the WIID, Table A1 in the Appendix reports the effects of labor rights using the WIID and various statistical techniques. Because the WIID is not standardized like the SWIID, WIID models include 12 technical Gini indicators (Lee 2005). The only significant technical indicator is one of the income definitions: *expenditures* is positively correlated with inequality (not presented for brevity, available from the author).

All corollary analyses confirm the role of labor rights observed in Table 2. Fixed-effects models (FEM) report that the role of labor rights remains negative and significant. Robust clusters and random-effects models (REM) also show a strong relationship between inequality and labor rights. The coefficient sizes for labor rights are similar between the SWIID and the WIID, but slightly higher and more significant with the WIID. For instance, using REM, the labor rights coefficient is –.605 for the SWIID (Table 2) and –1.373 for the WIID (Model 2, Table A1 in the Appendix). Combined, these results suggest that labor rights are useful in explaining inequality both *between* and *within* countries.

The potential for omitted variable bias also merits corollary analyses, including the effects of sector dualism. Sector dualism is the absolute value of the difference between the percentage of the labor force in agriculture and agriculture as a share of GDP. This calculation aims to capture inequality due to average income differences between agricultural and other workers. It is highly correlated with the percentage of the labor force in agriculture and does not reach significance, including when controls for GDP are included. The effects of collective labor rights remain robust.

Finally, I analyze the role of labor rights using models developed by Huber and colleagues (2006) for Latin America. Recall, research in industrialized democracies finds that left political parties reduce income

inequality. Worldwide studies rarely account for political parties because of data limitations. In one of the few studies to account for partisan politics, Huber and colleagues (2006) examine inequality in the Latin American and Caribbean region. They argue that additional variables are also important for the Latin American context: cumulative years of democracy, presence of repressive authoritarian regimes, and ethnic diversity—none of which I can control for in the worldwide models due to data constraints. To account for the possibility that omitted variables bias the main findings, Model 5 presents corollary analyses of the Latin American region using additional variables collected by Huber and colleagues. As in the worldwide sample, substantial evidence shows that strong labor rights are linked to lower inequality in Latin America. The labor rights coefficient is highly significant ($p < .001$) and negative (–2.253), even with the additional controls of cumulative years of democracy, repressive authoritarianism, left partisan control, and ethnic diversity.[8]

Regional Context

How does context mediate the effects of labor rights? Table 3 reports interactions between labor rights and regions. These interactions illuminate regional dynamics in two ways: whether labor rights are significantly associated with inequality in specific regions and, if so, whether labor rights are especially effective at reducing inequality in some regions.

To assess whether labor rights have significant effects on inequality in specific regions, I sum the labor rights coefficient with the interaction coefficient reported in Table 3. For instance, for the West (Model 1), the labor rights term (–.764) plus the interaction term (–1.546) is –2.31. Similarly, these sums are negative for all regions except Eastern Europe. These negative terms provide an initial indication that labor rights are linked to lower inequality in most regions. I then conduct F-tests to assess whether these relationships are significant. As expected, F-tests are significant for the West, Asia, and Latin America, suggesting that labor rights are associated with less inequality in each region. However, F-tests are not significant in Africa. African countries comprise only 4 percent of the sample, so this non-significance is likely due to the small sample size. It could also reflect different mechanisms of inequality in Africa, but more data are necessary to draw conclusions.

F-tests report that labor rights are *not* significant predictors of inequality in Eastern Europe. Earlier, I argued that labor rights are useful in accounting for inequality in capitalist societies. Socialist societies have low levels of inequality, and I expect the legacy of socialist-led equality projects better accounts for low inequality than does the emergent independent union climate in Eastern Europe, at least in the time period examined here. Supporting this argument, I find no evidence that labor rights are related to lower inequality in Eastern Europe through 2002. Although the sum of the interaction and the labor rights coefficient is positive, an F-test indicates it is not significantly different from zero.

Figure 4 graphically displays the summed terms and whether they are significant for each region. Note that the interaction is largest for the West, suggesting labor rights may have a relatively large impact in that region, compared to other areas. Prior research finds that in affluent western countries, worker organizational power and high levels of equality are tightly linked. Silver (2003) theorizes that due to their position in the production cycle, workers in the West may be particularly well situated to make economic gains. Moreover, the West has a long history of democratic stability as well as a large formal sector. For these reasons, it seems plausible that labor rights are especially important for inequality reduction in the West. Model 1 offers some support for this relationship. The interaction between labor rights and the West is negative and marginally significant ($p < .10$). To be clear: labor rights are generally important for inequality reduction, but their effects are relatively greater in the West.

Table 3. Random Effects: Effects of Interactions between Labor Rights and Region on Income Inequality, 1985 to 2002

	Model 1	Model 2	Model 3	Model 4	Model 5
Collective Labor Rights					
Labor Rights Index	−.764**	−1.084**	−.902***	−.657*	−1.132***
	(.27)	(.38)	(.26)	(.27)	(.28)
Regions					
West	−1.275				
	(3.10)				
Latin America	12.603***	13.829***	14.018***	14.204***	13.715***
	(2.07)	(2.63)	(2.65)	(2.64)	(2.66)
Africa	20.216***	20.665***	21.346***	20.985***	21.224***
	(2.60)	(3.41)	(3.43)	(3.40)	(3.41)
Asia	19.768***	20.062***	20.719***	19.987***	20.490***
	(2.56)	(3.40)	(3.40)	(3.41)	(3.40)
Eastern Europe		.731	1.125	.975	.720
		(2.75)	(2.77)	(2.76)	(2.77)
Interactions					
West x Labor Rights	−1.546+				
	(.87)				
Latin America x Labor Rights		.420			
		(.51)			
Africa x Labor Rights			.559		
			(1.58)		
Asia x Labor Rights				−.912	
				(.70)	
Eastern Europe x Labor Rights					1.807**
					(.67)
Constant	−77.116***	−72.319***	−74.197***	−69.812***	−74.423***
	(18.86)	(17.98)	(18.09)	(17.93)	(18.05)
Observations	832	832	832	832	832
Countries	100	100	100	100	100

Note: Standard errors in parentheses. Models include the same control variables as Table 2, Model 4, but are not presented for brevity.
*$p < .05$; **$p < .01$; ***$p < .001$; +$p < .1$ (two-tailed tests).

Finally, as expected, the interaction between labor rights and Eastern Europe is positive and significant, suggesting that labor rights are less important for inequality there than in other regions.

DISCUSSION AND CONCLUSIONS

Prior worldwide research on income inequality focuses on the impact of demographic shifts, foreign direct investment, and state institutions. These factors are important to understanding inequality, but they neglect the pivotal role of class-based actors in the distribution of economic resources. In the first worldwide study to attend to worker organization, my findings show that strong labor rights are tightly linked to lower inequality across a large range of developed and less developed countries. Random- and fixed-effects models indicate that labor rights are useful in understanding inequality between and within countries over time.

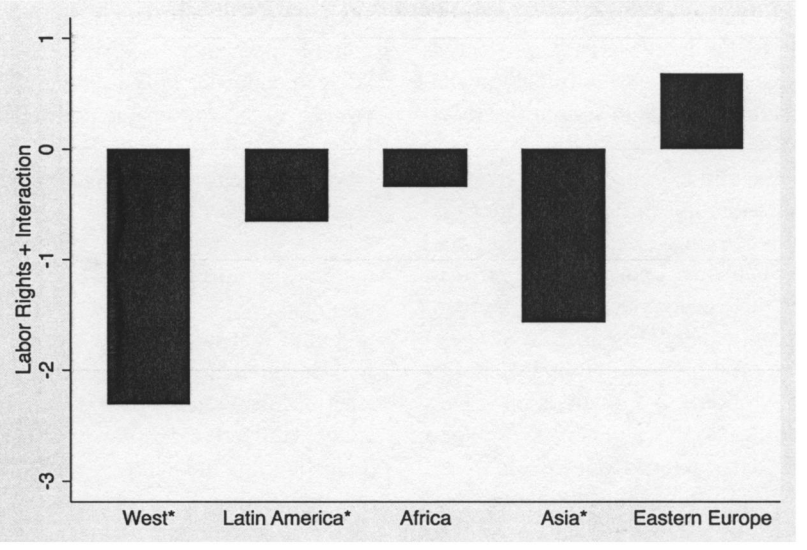

Figure 4. Impact of Labor Rights on Inequality by Region
*F-test significant: labor rights have a significant association with inequality in the region.

This study draws attention to the importance of *collective* rights. Collective rights allow for the building of political and economic organizations, and organizations' ability to exert pressure via protest and political engagement without severe repression. Through this organization, worker groups have the potential to leverage power over political processes and employers. The collective aspect of this research distinguishes this study from prior inequality research examining state labor policies (e.g., minimum wage or bans on child labor), individual rights (e.g., no discrimination based on sex), and adoption of ILO conventions. Previous work has struggled to capture the role of collective rights because they are difficult to measure. While several datasets measure legal aspects of collective rights, especially the adoption of ILO conventions, they do not simultaneously account for many specific domestic laws and other practices that shape worker organizations. This omission is problematic. After all, the right to strike, for example, has little meaning if strikers are routinely fired, jailed, or murdered. Similarly, the legal "right to organize" is undermined if laws exclude large groups of workers. To attend to these issues, this study uses an index developed by the ILO that accounts for a wide range of domestic labor laws on the books and labor practices on the ground.

By bringing collective labor rights into global analyses of income inequality, this study speaks to scholars in the power resource tradition. The power resource perspective offers a framework for understanding how class-based collective actors shape the distribution of economic resources. Studies find that class-based actors have affected income inequality, poverty, and labor's share of the national income (Brady 2009; Jacobs and Myers 2014; Kristal 2010). However, these analyses focus exclusively on industrialized democracies. The findings of this study suggest that the power resource perspective is useful in understanding inequality generally, including in contexts outside industrialized democracies. More generally, this study emphasizes the importance of power and politics as central to inequality. In doing so, it departs from inequality research that focuses on how internal demographic and economic factors affect inequality through shifts in supply and demand.

In industrialized democracies, class-based actors shape the distribution of economic resources through market and political

mechanisms. Market mechanisms reflect the role of unions in increasing wages across broad groups of workers. Political mechanisms reflect unions' role in supporting redistributive policies, pro-labor politicians, and institutions that aim to improve workers' market position. Although this study cannot distinguish between the roles of market and political mechanisms, I suspect that *political* mechanisms are particularly important for reducing income inequality in LDCs. Case-based studies often point to the highly political role of worker organizations in LDCs (e.g., Agarwala 2013; Kraus 2007; Wood 2000). This is particularly relevant in countries with large informal economies. For instance, informal traders in Ghana organized to change state policies because raising incomes through traditional union tactics was not feasible in the informal economy (ILO 2011).

While I find *general* evidence that labor rights reduce inequality, labor rights matter more in some political and economic contexts than others. I argue that the political and economic context of two regions calls for closer attention: the West and Eastern Europe. Drawing from multiple scholarly traditions, I argue that labor rights are particularly important for reducing inequality in the West. Workers in the West hold a privileged position in the world system, which gives them greater potential than their counterparts in the Global South to extract large gains. In addition, the industrialized democracies have a long history of democratic stability and unionization, which translates into the time and organization to push for economic redistribution. In support of this argument, I find that the interaction between the West and labor rights is negative: labor rights generally reduce inequality, but they are particularly effective at mitigating inequality in the industrialized democracies—although this finding is only marginally significant.

In addition to the West, other regions show strong links between inequality and labor rights, including Asia and Latin America. Unexpectedly, models report that labor rights are not statistically significant in explaining income inequality in Africa. Case studies of African countries highlight the importance of worker organizations in political life (Buhlungu 2010; Kraus 2007; Wood 2000). While labor relations may be fundamentally different in Africa, I suspect the lack of significance is due to the low sample size—African nations comprise only 4 percent of the sample.

I find that labor rights are *not* associated with lower inequality in Eastern Europe—at least not in the time period examined in this study. Collective labor rights are useful in understanding inequality in *capitalist* arrangements. A main aim of socialist and communist regimes is to generate greater equality. Indeed, inequality was extremely low in Eastern Europe under socialism. After the collapse of socialism, inequality began to grow, although it remained low compared to other countries during the time period of this study. Bandelj and Mahutga (2010) attribute this surge in inequality to features related to capitalism, such as the expansion of the private sector and FDI. At the same time, these countries were beginning to amend labor rights to allow for independent labor movements, although the emergence of independent labor organizations occurred unevenly (Ost 2000). The relatively low levels of inequality through 2002 are best understood as the legacy of state-led projects to reduce inequality, rather than stemming from the political pressure and collective bargaining of nascent independent labor unions. Thus, I argue that labor rights are useful in understanding inequality in entrenched capitalist economies. I expect labor rights to play a more prominent role in shaping inequality in the region as the ties to socialism become more distant. As data become more available, it would be useful to reexamine how the relationship between labor rights and inequality evolves as political and economic contexts shift over time and by region.

Despite these general trends, it is important to note that unions could exacerbate inequality in some circumstances. This situation

could occur in countries with low union density or where unions advocate for a narrow group of highly skilled workers (Haggard and Kaufman 2008).[9] Even in this scenario, unions' political orientation matters. Some labor movements aim to improve conditions generally for the working poor; others are more narrowly oriented (Anner 2011; Clawson 2003; Luce 2014; Stepan-Norris and Zeitlin 2003; Tilly 2013).

It is also worthwhile to note the potential relational mechanisms of labor rights (Korzeniewicz and Moran 2005). Labor rights affect inequality within countries, but they simultaneously affect income inequality trajectories across countries. Silver's (2003) work documents these dynamics: the auto industry relocated from the Global North, characterized by strong labor laws and high wages, to the Global South, characterized by lax laws and low wages. However, over time, workers in these LDCs organized and demanded wage increases. As labor costs grew, business relocated, and the process of labor struggle and the relocation of capital continued.

Indeed, the regulation of labor rights is increasingly intertwined with economic globalization. Mosley (2011) shows that countries with greater volumes of trade are more likely to have weak labor rights, concluding that the production of inexpensive goods through subcontracting creates pressure to dismantle labor standards. At the same time, the spread of economic globalization also corresponds with the rise of internationally oriented labor organizations, such as factory monitoring groups (Esbenshade 2009; Haggard and Kaufman 2008; McCallum 2013). Further research that systematically assesses how economic and cultural globalization affects labor rights would help scholars better assess processes of globalization, labor issues, and inequality.

How might the findings of this study speak to causal relationships? I argue that labor rights enable worker organizations to press for redistribution. An alternative imagery would be that situations of high inequality are more likely to spur greater state repression. It is difficult to untangle these two perspectives with this study's quantitative data, and it is possible they could coexist. However, some historical examples suggest that opposition to labor rights is *not* exogenous to preexisting levels of inequality. I briefly draw on the case of Chile in the 1980s and 1990s to illustrate that repressive labor rights are not necessarily contingent on high levels of inequality.

Prior to the military coup led by General Pinochet in 1973, Chile had relatively average inequality, with a Gini coefficient of 42.8 in 1971 (Solt 2009). Chile also had one of the strongest labor movements in Latin America, and this movement had recently been instrumental in electing a socialist president, Salvador Allende (Drake 1996). Upon seizing power, Pinochet immediately sought to eradicate worker organizations, as they were his main political opposition. On the day of the coup, one of the first buildings seized was the headquarters of the main union federation (Drake and Frank 2004). In the following months and years, the military raided factories and union offices, arresting, detaining, and murdering thousands of union supporters. The regime also used legal tactics to render unions ineffective, banning strikes, collective bargaining, and union elections. Unions were crushed: union density fell from 31 percent in 1964 to 8 percent in 1983 (Drake 1996). The repression of worker organizations contributed to inequality by limiting labor's ability to fight regressive distributive policies or to increase workers' wages. In the early 1980s, the Pinochet regime proposed profound changes in social policies, effectively privatizing portions of healthcare and social security. As Huber and Stephens (2012:161) note, the politics of implementing these reforms were relatively simple as "organized opposition was all but nonexistent." Inequality soared: by 1980, the Gini coefficient had risen to 48.8—six points in just nine years (Solt 2009). Thus, the initial repression of the Chilean labor movement did not occur due to high levels of inequality. When Pinochet seized power, he immediately outlawed

unions and severely repressed activists. *After* the labor movement was decapitated, inequality grew. This sequence of events suggests that high inequality contexts do not necessarily drive repression. With more years of labor rights data, future research could attempt to unpack causal sequences over multiple decades and countries.

The causal relationship between labor rights, party politics, and inequality is also complex. Prior work identifies state structures and policies—from social spending to left parties—as important to understanding inequality. I argue that a particularly important feature of the state is how it regulates collective labor rights. Left parties often aim to create and enforce strong labor rights, especially when they are supported by worker organizations (Cook 2007; Huber and Stephens 2012; Mosley 2011). At the same time that left parties strengthen labor rights, they may simultaneously enact policies aimed at lessening inequality. I suspect that both processes occur, with left parties reducing inequality through policy changes and by strengthening labor rights. As the corollary analyses of Latin America demonstrate, collective labor rights are associated with lower inequality even when controlling for partisan balance.

In addition to the main findings on labor rights, this study speaks to prior worldwide comparative work. Supporting a large body of literature, I find consistent evidence that FDI is related to high inequality, even when controlling for labor rights. It is still possible that FDI does not exacerbate inequality in all settings, as Lee and colleagues (2007) observe occurs in countries with the largest public sectors. Also echoing prior work, state institutional factors have little direct relationship to inequality, with the exception of partisan balance. Supporting previous work, sub-analyses of Latin America show that left political balance is associated with lower inequality.

Finally, this study speaks to broader discussions on inequality. Organizations have staked out competing positions over how to address inequality. Economic growth and market-driven mechanisms dominate one perspective on inequality reduction. Under a framework of neo-liberalism, there has been a rise in policies that prioritize the expansion of markets and individual property rights and undermine more collective institutions, such as unions (Huber and Stephens 2012; Luce 2014). In Latin America, for instance, the Washington Consensus of the late twentieth century advocated the idea that economic growth would lead to less inequality through job creation, greater productivity, and eventually higher wages (Morley 1994). As Korzeniewicz and Smith (2000) note, these hopes were not realized in the 1990s—inequality grew in most of the region despite market reforms and economic growth. On the other hand, some organizations, such as the International Labour Organization, labor unions, and other worker collectivities, argue that collective rights are crucial to reduce poverty and income inequality in the Global South (ILO 2011). Informing the debate on how labor rights affect inequality, this study presents the first empirical evidence that collective rights are strongly linked to greater equality in entrenched capitalist economies.

APPENDIX

Table A1. Effects of Labor Rights with Alternative Data and Methods

	WIID: FEM	WIID: REM[b]	WIID: Robust Clusters[b]	WIID: REM[b] and Sec. Dual.	WIID: REM, Latin America
	Model 1	Model 2	Model 3	Model 4	Model 5
Collective Labor Rights					
Labor Rights Index	−.996*	−1.373**	−1.373**	−1.496***	−2.253***
	(.49)	(.43)	(.48)	(.45)	(.54)
Main Controls					
GDP[a]	42.883+	6.541	6.541		39.835
	(22.99)	(13.36)	(26.15)		(34.77)
GDP Squared	−4.916	−1.286	−1.286		−6.061
	(3.38)	(2.00)	(3.76)		(5.14)
Population Growth	−1.662*	−.141	−.141	−.327	.005
	(.74)	(.61)	(.71)	(.65)	(.81)
Percent Agriculture	.142*	.155***	.155*	.179***	.127***
	(.06)	(.05)	(.06)	(.04)	(.04)
Sector Dualism[a]				.483	
				(.94)	
School Enrollment	.061	.272***	.272*	.252***	.390*
	(.10)	(.07)	(.12)	(.07)	(.16)
School Enrollment Squared	−.000	−.001***	−.001*	−.001**	−.002*
	(.00)	(.00)	(.00)	(.00)	(.00)
FDI Stock[a]	1.383**	1.674***	1.674**	1.507**	.187
	(.52)	(.49)	(.55)	(.50)	(.88)
Democracy	−1.275	.871	.871	.815	
	(.93)	(.76)	(.58)	(.78)	
Democracy Squared	.069	−.051	−.051	−.052	
	(.05)	(.04)	(.04)	(.04)	
Government Exp.	.145	.060	.060	−.005	.275*
	(.12)	(.09)	(.09)	(.10)	(.12)
Latin American Controls					
Cumulative Dem.					−.007
					(.01)
Left-Party Rule					−7.085***
					(2.07)
Authoritarianism					1.037
					(2.29)
Ethnic Diversity					1.274
					(1.10)
Constant	−53.609	4.219	4.219	12.612*	−40.038
	(39.62)	(22.03)	(46.48)	(5.90)	(58.91)
Observations	432	432	432	410	130
Countries	66	66	66	63	19

Note: Standard errors in parentheses.
[a]Log base 10.
[b]Models include regional controls; not presented for brevity.
*$p < .05$; **$p < .01$; ***$p < .001$; +$p < .1$ (two-tailed tests).

Acknowledgments

The author would like to thank the following people for their thoughtful comments: Beth Berry, Steve Boutcher, Dan Clawson, Joya Misra, Evan Schofer, Kristen Shorette, and Don Tomaskovic-Devey, as well as the Five College Social Movement Group and the UMass Labor Center.

Notes

1. This sample includes all countries with available data. Data constraints prevent analyses of Eastern Europe prior to 1989.
2. Despite these data issues, some studies examine income shares (e.g., Nielsen and Alderson 1995; Simpson 1990). For comparison with these studies, I consider the relationship between labor rights and the share of national income by each quintile, from the top 20 percent to the bottom 20 percent, for 61 low and middle-income countries. A clear pattern emerges: strong labor rights are significantly associated with reduced income shares for the top 20 percent and with increased income shares for *each* quintile in the bottom 80 percent. While these results should be interpreted with caution, they present preliminary evidence that strong labor rights increase equality through constraining the income shares of the rich and augmenting the income shares of all others. Results available from the author.
3. Countries that lack unions deserve additional attention. If unions are prohibited or absent due to general socioeconomic breakdown, rights may not "have the chance" to be violated. The arrest of union activists, for example, is less likely if unions are prohibited. ILO expert assessments heavily weight these general components to compensate for the resulting fewer violations of other measures. To make sure the few countries that prohibited unions were not driving results, I conducted analyses with them omitted. Results were consistent.
4. Figure 2 shows that labor rights scores are left skewed. I explored various transformations and also omitted countries with low scores. Results remain consistent throughout. Because transforming variables comes with costs (von Hippel 2011) and prior research uses a standardized index, I present the standardized index.
5. Perhaps of interest to a U.S. audience, the United States tends to have weaker labor rights than other industrialized democracies, and these violations grew between 1985 and 2002.
6. Some scholars who examine worldwide inequality over time weight data by population size to address demographic change (e.g., Firebaugh 1999; Korzeniewicz and Moran 1997). Because my main interests are labor rights within and between countries, I follow other mechanism-based approaches and opt not to weight data by population size.
7. The following countries are in the dataset: Albania, Argentina*, Armenia, Australia, Austria, Azerbaijan, Bangladesh, Barbados+, Belarus, Belgium+, Belize+, Bolivia*, Botswana, Brazil*, Bulgaria, Cambodia+, Cameroon, Canada, Chile*, China, Colombia*, Costa Rica*, Croatia, Cyprus, Czech Republic, Denmark, Dominican Republic*, Ecuador+, Egypt, El Salvador*, Estonia, Finland, France, Gambia+, Georgia, Germany, Ghana, Greece+, Guatemala*, Guinea, Honduras*, Hungary, Iceland+, India, Indonesia, Ireland, Israel+, Italy, Jamaica*, Jordan, Kazakhstan, Kyrgyz Republic, Latvia, Lesotho, Lithuania, Macedonia, Malaysia, Maldives+, Malta, Mexico*, Moldova, Mongolia, Morocco, Namibia+, Nepal+, Netherlands, New Zealand, Nicaragua*, Nigeria+, Norway, Pakistan, Panama*, Paraguay*, Peru*, Philippines, Poland, Portugal, Romania, Rwanda+, Senegal, Slovak Republic, Slovenia, South Africa, Spain, Sri Lanka, St. Lucia+, Sweden, Switzerland, Thailand, Trinidad and Tobago*, Tunisia+, Turkey, Uganda, Ukraine, United Kingdom, United States, Uruguay*, Venezuela*, Vietnam, and Zambia+. + denotes country not in WIID analyses (Table A1 in the Appendix); * denotes country in Latin American analyses (Table A1 in the Appendix).
8. Results with these additional variables are generally consistent with Huber and colleagues' (2006) analyses: cumulative democracy and repressive authoritarianism are not significant; left partisan rule is significant and negative. However, ethnic diversity is not significant, which I expect stems from the greater number of Caribbean nations in Huber and colleagues' sample.
9. This dynamic is partially controlled for with the measure for sector dualism, which captures the coexistence of high and low productivity sectors.

References

Agarwala, Rina. 2013. *Informal Labor, Formal Politics, and Dignified Discontent in India*. Cambridge, UK: Cambridge University Press.

Alderson, Arthur S., and Francois Nielsen. 1999. "Income Inequality, Development, and Dependence: A Reconsideration." *American Sociological Review* 64(4):606–631.

Anner, Mark S. 2011. *Solidarity Transformed: Labor Responses to Globalization and Crisis in Latin America*. Ithaca, NY: ILR Press.

Bandelj, Nina, and Matthew C. Mahutga. 2010. "How Socio-Economic Change Shapes Income Inequality in Post-Socialist Europe." *Social Forces* 88(5):2133–61.

Beck, Nathaniel, and Jonathan N. Katz. 1995. "What to Do (and Not to Do) with Time-Series Cross-Section Data." *American Political Science Review* 89(3):634–47.

Böhning, Wolf-Rüdiger. 2005. *Labour Rights in Crisis: Measuring the Achievement of Human Rights in the World of Work*. New York: Palgrave Macmillan.

Bollen, Kenneth A., and Robert W. Jackman. 1985. "Political Democracy and the Size Distribution of Income." *American Sociological Review* 50(4):438–57.

Bornschier, Volker, and Christopher Chase-Dunn. 1985. *Transnational Corporations and Underdevelopment*. New York: Praeger.

Bornschier, Volker, Christopher Chase-Dunn, and Richard Rubinson. 1978. "Cross-National Evidence of the Effects of Foreign Investment and Aid on Economic Growth and Inequality: A Survey of Findings and a Reanalysis." *American Journal of Sociology* 84(3):651–83.

Bound, John, and George Johnson. 1992. "Changes in the Structure of Wages in the 1980s: An Evaluation of Alternative Explanations." *American Economic Review* 82(3):371–92.

Bradley, David, Evelyne Huber, Stephanie Moller, François Nielsen, and John D. Stephens. 2003. "Distribution and Redistribution in Post-Industrial Democracies." *World Politics* 55:193–228.

Brady, David. 2009. *Rich Democracies, Poor People: How Politics Explain Poverty*. New York: Oxford University Press.

Brady, David, Regina S. Baker, and Ryan Finnigan. 2013. "When Unionization Disappears: State-Level Unionization and Working Poverty in the United States." *American Sociological Review* 78(5):872–96.

Buhlungu, Sakhela. 2010. *A Paradox of Victory: COSATU and the Democratic Transition in South Africa*. Durban, South Africa: University of KwaZulu-Natal Press.

Calderon, Cesar, and Alberto Chong. 2009. "Labor Market Institutions and Income Inequality: An Empirical Exploration." *Public Choice* 138(1–2):65–81.

Carnoy, Martin. 2011. "As Higher Education Expands, Is it Contributing to Greater Inequality?" *National Institute Economic Review* 215(s1):34–47.

Cingranelli, David L., and David L. Richards. 2010. "The Cingranelli and Richards (CIRI) Human Rights Data Project." *Human Rights Quarterly* 32(2):401–424.

Clawson, Dan. 2003. *The Next Upsurge: Labor and the New Social Movements*. Ithaca, NY: Cornell University Press.

Cook, Maria Lorena. 2007. *The Politics of Labor Reform in Latin America: Between Flexibility and Rights*. University Park: The Pennsylvania State University Press.

Coppedge, Michael. 1997. *A Classification of Latin American Political Parties*. Helen Kellogg Institute for International Studies, University of Notre Dame, Notre Dame, IN.

Crenshaw, Edward. 1992. "Cross-National Determinants of Income Inequality: A Replication and Extension using Ecological-Evolutionary Theory." *Social Forces* 71(2):339–63.

de Ferranti, David, Guillermo E. Perry, Francisco H. G. Ferreira, and Michael Walton. 2004. *Inequality in Latin America: Breaking with History?* Washington, DC: The World Bank.

Deininger, Klaus, and Lyn Squire. 1996. "A New Data Set Measuring Income Inequality." *World Bank Economic Review* 10(3):565–91.

DiPrete, Thomas A. 2007. "What Has Sociology to Contribute to the Study of Inequality Trends? A Historical and Comparative Perspective." *American Behavioral Scientist* 50(5):603–618.

Drake, Paul W. 1996. *Labor Movements and Dictatorships: The Southern Cone in Comparative Perspective*. Baltimore, MD: The John Hopkins University Press.

Drake, Paul W., and Volker K. Frank. 2004. *Victims of the Chilean Miracle: Workers and Neoliberalism in the Pinochet Era, 1973–2002*, edited by P. Winn. Durham, NC: Duke University Press.

Edelman, Lauren B. 1990. "Legal Environments and Organizational Governance: The Expansion of Due Process in the American Workplace." *American Journal of Sociology* 95(6):1401–1440.

Esbenshade, Jill Louise. 2009. *Monitoring Sweatshops: Workers, Consumers, and the Global Apparel Industry*. Philadelphia: Temple University Press.

Esping-Andersen, Gøsta. 1985. *Politics against Markets: The Social Democratic Road to Power*. Princeton, NJ: Princeton University Press.

Evans, Peter B., and Michael Timberlake. 1980. "Dependence, Inequality, and the Growth of the Tertiary: A Comparative Analysis of Less Developed Countries." *American Sociological Review* 45(4):531–52.

Fairris, David. 2003. "Unions and Wage Inequality in Mexico." *Industrial and Labor Relations Review* 56(3):481–97.

Firebaugh, Glenn. 1999. "Empirics of World Income Inequality." *American Journal of Sociology* 104(6):1597–1630.

Freeman, Richard B. 2009. "Labor Regulations, Unions, and Social Protection in Developing Countries: Market Distortions or Efficient Institutions?" National Bureau of Economic Research, Working Paper 14789.

Freeman, Richard B., and James L. Medoff. 1984. *What Do Unions Do?* New York: Basic Books.

Haggard, Stephan, and Robert R. Kaufman. 2008. *Development, Democracy, and Welfare States: Latin America, East Asia, and Eastern Europe*. Princeton, NJ: Princeton University Press.

Hayter, Susan, and Valentina Stoevska. 2011. "Social Dialogue Indicators: International Statistical Inquiry 2008–09." Geneva, Switzerland: International Labour Organization.

Heller, Patrick. 1999. *The Labor of Development: Workers and the Transformation of Capitalism in Kerala, India*. Ithaca, NY: Cornell University Press.

Hewison, Kevin, and Catherine Chiu. 2009. "Hong Kong-Invested Companies in Thailand: Labour Relations and Practices." *Journal of Contemporary Asia* 39(1):1–22.

Huber, Evelyne, Francois Nielsen, Jenny Pribble, and John D. Stephens. 2006. "Politics and Inequality in Latin America and the Caribbean." *American Sociological Review* 71(6):943–65.

Huber, Evelyne, and John D. Stephens. 2012. *Democracy and the Left: Social Policy and Inequality in Latin America*. Chicago: University of Chicago Press.

Huber, Evelyne, John D. Stephens, Thomas Mustillo, and Jennifer Pribble. 2008. *Social Policy in Latin America and the Caribbean Dataset, 1960–2006*. Chapel Hill: University of North Carolina.

Huber, Evelyne, John D. Stephens, Thomas Mustillo, and Jennifer Pribble. 2012. *Latin America and the Caribbean Political Dataset, 1945–2008*. Chapel Hill: University of North Carolina.

International Labour Organization (ILO). 2011. *Statistical Update on Employment in the Informal Economy*. Geneva, Switzerland: International Labour Organization.

International Labour Organization (ILO). 2012. *Freedom of Association and Development*. Geneva, Switzerland: International Labour Organization.

Jacobs, David, and Lindsey Myers. 2014. "Union Strength, Neoliberalism, and Inequality: Contingent Political Analyses of US Income Differences since 1950." *American Sociological Review* 79(4):752–74.

Katz, Lawrence, and Kevin M. Murphy. 1992. "Changes in Relative Wages, 1963–1987: Supply and Demand Factors." *Quarterly Journal of Economics* 107(1):35–78.

Kentor, Jeffrey. 2001. "The Long Term Effects of Globalization on Income Inequality, Population Growth, and Economic Development." *Social Problems* 48(4):435–55.

Kenworthy, Lane, and Jonas Pontusson. 2005. "Rising Inequality and the Politics of Redistribution in Affluent Countries." *Perspectives on Politics* 3(3):449–71.

Kerrissey, Jasmine, and Evan Schofer. 2013. "Union Membership and Political Participation in the United States." *Social Forces* 91(3):895–928.

Korpi, Walter. 1989. "Power, Politics, and State Autonomy in the Development of Social Citizenship." *American Sociological Review* 54(3):309–328.

Korzeniewicz, Roberto Patricio, and Timothy Patrick Moran. 1997. "World-Economic Trends in the Distribution of Income, 1965–1992." *American Journal of Sociology* 102(4):1000–1039.

Korzeniewicz, Roberto Patricio, and Timothy Patrick Moran. 2005. "Theorizing the Relationship between Inequality and Economic Growth." *Theory and Society* 34(3):277–316.

Korzeniewicz, Roberto Patricio, and William C. Smith. 2000. "Poverty, Inequality, and Growth in Latin America: Searching for the High Road to Globalization." *Latin American Research Review* 35(3):7–54.

Kraus, Jon. 2007. *Trade Unions and the Coming of Democracy in Africa,* edited by J. Kraus. New York: Palgrave MacMillan.

Kristal, Tali. 2010. "Good Times, Bad Times: Postwar Labor's Share of National Income in Capitalist Democracies." *American Journal of Sociology* 75(5):729–63.

Kristal, Tali, and Yinon Cohen. 2007. "Decentralization of Collective Agreements and Rising Wage Inequality in Israel." *Industrial Relations* 46(3):613–35.

Kucera, David. 2004. "Measuring Trade Union Rights: A Country-Level Indicator Constructed from Coding Violations Recorded in Textual Sources." Working Paper No. 50. Policy Integration: International Labour Office Department, International Labour Organization.

Kuznets, Simon. 1955. "Economic Growth and Income Inequality." *American Economic Review* 45(1):1–28.

Lee, Cheol-Sung. 2005. "Income Inequality, Democracy, and Public Sector Size." *American Sociological Review* 70(1):151–81.

Lee, Cheol-Sung, Francois Nielsen, and Arthur S. Alderson. 2007. "Income Inequality, Global Economy, and the State." *Social Forces* 86(1):77–111.

Lin, Ken-Hou, and Donald Tomaskovic-Devey. 2013. "Financialization and U.S. Income Inequality, 1970–2008." *American Journal of Sociology* 118(5):1–45.

Luce, Stephanie. 2014. *Labor Movements: Global Perspectives*. New York: John Wiley & Sons.

Marshall, Monty G., Keith Jaggers, and Ted Robert Gurr. 2011. *Polity IV Project*. Center for Systemic Peace: Polity IV Project.

Martin, Nathan D., and David Brady. 2007. "Workers of the Less Developed World Unite? A Multilevel Analysis of Unionization in Less Developed Countries." *American Sociological Review* 72(4):562–84.

McCallum, Jamie K. 2013. *Global Unions, Local Power: The New Spirit of Transnational Labor Organizing*. Ithaca, NY: Cornell University Press.

Meyer, John W., and Brian Rowan. 1977. "Institutionalized Organizations: Formal Structure as Myth and Ceremony." *American Journal of Sociology* 83(2):340–63.

Moller, Stephanie, Evelyne Huber, John D. Stephens, David Bradley, and Francois Nielsen. 2003. "Determinants of Relative Poverty in Advanced Capitalist Democracies." *American Journal of Sociology* 68(1):22–51.

Morley, Samuel. 1994. *Poverty and Inequality in Latin America: Past Evidence, Future Prospects*. Washington, DC: Overseas Development Council.

Mosley, Layna. 2011. *Labor Rights and Multinational Production*. Cambridge, UK: Cambridge University Press.

Mosley, Layna, and Saika Uno. 2007. *Collective Labor Rights Dataset*. University of North Carolina and University of Notre Dame.

Muller, Edward N. 1988. "Democracy, Economic Development, and Income Inequality." *American Sociological Review* 53(1):50–68.

Murolo, Priscilla, and A. B. Chitty. 2001. *From the Folks Who Brought You the Weekend: A Short, Illustrated History of Labor in the United States*. New York: The New Press.

Neckerman, Kathryn M., and Florencia Torche. 2007. "Inequality: Causes and Consequences." *Annual Review of Sociology* 33:335–57.

Nielsen, François. 1994. "Income Inequality and Industrial Development: Dualism Revisited." *American Sociological Review* 59(5):654–77.

Nielsen, François, and Arthur S. Alderson. 1995. "Income Inequality, Development, and Dualism: Results from an Unbalanced Cross-National Panel." *American Sociological Review* 60(5):674–701.

Norris, Pippa. 2002. *Democratic Phoenix: Reinventing Political Activism*. Cambridge, UK: Cambridge University Press.

Ost, David. 2000. "Illusory Corporatism in Eastern Europe: Neoliberal Tripartism and Postcommunist Class Identities." *Politics & Society* 28(4):503–530.

Raftopoulos, Brian, and Ian Phimister. 1997. *Keep on Knocking: A History of the Labour Movement in Zimbabwe, 1900–1997*. Zimbabwe: Baobab Books.

Rhomberg, Chris. 2012. "The Return of Judicial Repression: What Has Happened to the Strike?" *The Forum* 10(1):1–18.

Rodrik, Dani. 1996. *Labor Standards in International Trade: Do They Matter and What Do We Do about Them?* Washington, DC: Overseas Development Council.

Rosenfeld, Jake. 2006. "Desperate Measures: Strikes and Wages in Post-Accord America." *Social Forces* 85(1):235–65.

Rubin, Donald B. 2004. *Multiple Imputation for Nonresponse in Surveys,* Vol. 81. New York: John Wiley & Sons.

Rudra, Nita. 2004. "Openness, Welfare Spending, and Inequality in the Developing World." *International Studies Quarterly* 48(3):683–709.

Sari, Dora, and David Kucera. 2011. "Measuring Progress towards the Application of Freedom of Association and Collective Bargaining Rights: A Tabular Presentation of the Findings of the ILO Supervisory System." Working Paper No. 99. Geneva, Switzerland: International Labour Organization.

Scheve, Kenneth, and David Stasavage. 2009. "Institutions, Partisanship, and Inequality in the Long Run." *World Politics* 61(2):215–53.

Silver, Beverly J. 2003. *Forces of Labor: Workers' Movements and Globalization since 1870*. Cambridge, UK: Cambridge University Press.

Simpson, Miles. 1990. "Political Rights and Income Inequality: A Cross-National Test." *American Sociological Review* 55(5):682–93.

Solt, Frederick. 2009. "Standardizing the World Income Inequality Database." *Social Science Quarterly* 90(2):231–42. SWIID Version 4.0, September 2013.

Stainback, Kevin, and Donald Tomaskovic-Devey. 2012. *Documenting Desegregation: Racial and Gender Segregation in Private Sector Employment since the Civil Rights Act*. New York: Russell Sage Foundation.

Stepan-Norris, Judith, and Maurice Zeitlin. 2003. *Left Out: Reds and America's Industrial Unions*. Cambridge, UK: Cambridge University Press.

Teitelbaum, Emmanuel. 2010. "Measuring Trade Union Rights through Violations Recorded in Textual Sources: An Assessment." *Political Research Quarterly* 63(2):461–74.

Tilly, Charles. 1995. "Globalization Threatens Labour's Rights." *International Labour and Working-Class History* 47(Spring):1–23.

Tilly, Chris. 2013. "Trade Unions, Inequality, and Democracy in the US and Mexico." *Rethinking Development and Inequality* 2(Special Issue):68–83.

Tsai, Pan-Long. 1995. "Foreign Direct Investment and Income Inequality: Further Evidence." *World Development* 23(3):469–83.

United Nations University. 2008, May. *UNU-WIDER World Income Inequality Database*. Version 2.0c.

von Hippel, Paul. 2011. "Skewness." Pp. 1340–42 in *International Encyclopedia of Statistical Science,* edited by M. Lovric. Berlin and Heidelberg: Springer.

Wallerstein, Michael. 1999. "Wage-Setting Institutions and Pay Inequality in Advanced Industrial Societies." *American Journal of Political Science* 43(3):649–80.

Weede, Erich. 1989. "Democracy and Income Inequality Reconsidered." *American Sociological Review* 54(5):865–68.

Western, Bruce, and Jake Rosenfeld. 2011. "Unions, Norms, and the Rise in U.S. Wage Inequality." *American Sociological Review* 76(4):513–37.

Wood, Elisabeth Jean. 2000. *Forging Democracy from Below: Insurgent Transitions in South Africa and El Salvador*. Cambridge, UK: Cambridge University Press.

World Bank. 2012. "World Development Indicators." (http://data.worldbank.org/data-catalog/world-development-indicators).

Jasmine Kerrissey is an Assistant Professor of sociology and labor studies at the University of Massachusetts-Amherst. She holds a PhD in sociology from the University of California-Irvine and a BS in industrial and labor relations from Cornell University. Her research examines the historical and contemporary role of labor movements in shaping working conditions, inequality, and political participation.