

# ARE DEVELOPING COUNTRIES REALLY DEFYING THE EMBEDDED LIBERALISM COMPACT?

By IRFAN NOORUDDIN and NITA RUDRA\*

CAN developing economies pursue deeper global integration without ensuring their public's continuing support? A core tenet of embedded liberalism (EL) is that governments cannot and will not continue on the path toward openness without expanding safety nets to establish the political consent of their populations and maintain domestic stability.<sup>1</sup> Yet, as less developed countries (LDCs) embrace greater openness, numerous studies find that they are retrenching programs traditionally thought to protect citizens from the risks and uncertainties associated with market expansion (for example, social security). The implications of these studies—that LDC governments appear insensitive to the destabilizing effects that global markets can have on domestic political and social stability—are difficult to reconcile with the imperatives of EL.

We argue in this article that, far from being immune to the political pressures stemming from economic openness, LDC governments have responded with a distinct strategy that responds to their desire to increase economic openness while maintaining political support. In this very real sense, they have behaved similarly to their counterparts in the Organization for Economic Cooperation and Development (OECD). The difference is that the LDC compensation approach, alongside the

\* We thank Daniel Tirone and Ida Bastiaens for invaluable research assistance. Sarah Bermeo, Sarah Brooks, Jon Hanson, Jude Hays, Amaney Jamal, Marcus Kurtz, Clint Peinhardt, Scott Powell, Stephanie Rickard, Heidi Sherman, and audiences at the 2008 annual meeting of the American Political Science Association, Boston, Mass., the 2008 meeting of the International Political Economy Society, Philadelphia, Pa., the Georgetown Political Economy Workshop (March 2009), and the Duke Comparative Politics Workshop (May 2010) provided useful feedback on earlier drafts of this article. All errors are our own.

<sup>1</sup> We use the phrase “EL compact” to refer to the complex bargain between the state and its citizens exchanging social investments and safety nets for the increased vulnerability of citizens caused by exposure to global competition, and all the while pushing international liberalization. For the original statement of how this bargain was reached in Western Europe, see Ruggie 1982.

*World Politics* 66, no. 4 (October 2014), 603–40

Copyright © 2014 Trustees of Princeton University

doi: 10.1017/S0043887114000203

probusiness, progrowth strategy these countries have employed, risks exacerbating economic inequality amidst economic growth.<sup>2</sup>

Our theoretical framework predicts that LDC policymakers respond to openness by targeting politically sensitive constituencies with a compensation strategy that reflects their country's politico-economic history: expanding public employment and the promise of job security.<sup>3</sup> This public-employment-based EL compact pursued by LDCs successfully limits public concerns about neoliberalism and reduces their *perceived* risks of openness, while still disproportionately targeting the better-off. We develop this argument by building on Dani Rodrik's and Marcus Kurtz and Sarah Brooks's contentions that many developing economies are expanding state intervention alongside deep economic liberalization.<sup>4</sup> Theoretically, we advance earlier analyses by emphasizing how and why *the type* of compensation strategy in LDCs is both historically contingent *and* critical to sustaining liberalization strategies. The approach to EL by governments in poorer economies that we identify, building on Rodrik,<sup>5</sup> is generalizable across most of the developing world—and particularly outside richer economies in Latin America—given these countries' relatively late entry into global markets, weak labor movements, and still nascent (or absent) social security systems.

Empirically, we utilize micro- and macrolevel data to conduct the first complete test of the embedded liberalism hypothesis in a large, cross-national sample of LDCs. One previous study by Rodrik employs a cross-sectional data set that ends in the mid-1980s to analyze the relationship between trade and public employment.<sup>6</sup> Using this time frame to assess EL is problematic, however, since most developing countries did not liberalize until after the debt crisis in the late 1980s; and Rodrik does not consider why or how this compensation strategy might soften adverse reactions to trade.<sup>7</sup> We overcome these problems by compiling a data set that offers cross-national and longitudinal coverage from 1985 to 2004, alongside microlevel data to assess determinants of individual support for trade. After controlling for other determinants of public employment, we find that more open LDC economies are associated with expanding numbers of public sector jobs. It is crucial to the EL

<sup>2</sup> Kohli 2012.

<sup>3</sup> As Bates, Brock, and Tiefenthaler 1991, 5, put it, "governments, seeking to maximize the social welfare, implement policies to reduce risk but are constrained in the policies they choose by the policy instruments at their command."

<sup>4</sup> See Rodrik 2008; and Kurtz and Brooks 2008.

<sup>5</sup> Rodrik 2000.

<sup>6</sup> See Rodrik 2000.

<sup>7</sup> See, for example, Rodrik 1997; Rodrik 1998; and Rodrik 2000.

hypothesis that the government's chosen compensation strategy, in turn, increases support for openness, and, indeed, we find that higher public employment is correlated with greater support for trade in developing economies.<sup>8</sup> Even more tellingly, we theoretically predict and also present suggestive evidence that governments emphasize employment in civilian central government (both permanent and temporary) in particular, and not state-owned enterprises (SOE), primarily because they can more easily defend the expansion of the former as economically desirable in an era of global market expansion.

Overall, our analysis suggests that free traders have valid reasons to be encouraged about LDC governments' commitments to openness, though caution is warranted. LDCs have yet to overcome the development community's criticisms of their public sectors: that they are overstaffed, inefficient, and unaffordable. The regressive and inefficient nature of public employment raises concerns about the sustainability of EL in developing countries and, consequently, whether public support for trade can be maintained in the long run. Governments of developing countries might understand the importance of building support for trade openness, but their solutions—expanding public employment in particular—benefit society's better-off.<sup>9</sup>

#### TRADE AND SOCIAL SECURITY SPENDING IN DEVELOPING COUNTRIES

The EL bargain has two critical—and interdependent—components.<sup>10</sup> First, governments that liberalize must also implement compensation strategies to contain the social adjustment costs that open markets inevitably produce. Second, these strategies must reduce social instability and bolster public support for free trade.<sup>11</sup> Jude Hays, Sean Ehrlich, and Clint Peinhardt summarize John Ruggie's argument well:

The idea that there is a more or less universal expectation held by citizens [. . .] that governments will limit the costs and distribute the benefits of open markets through some kind of government intervention and spending, and that public

<sup>8</sup> Baker 2003 argues that citizens in the developing world might support trade openness because of its consumption benefits and suggests that concerns about needing to bolster such support through government support programs are overstated. We respectfully disagree and consider concerns about backlash to free trade as a result of rising insecurity as valid even while concurring that some citizens do benefit from increased consumption options. Our data analysis, as well as the statements of policymakers worldwide, suggest that concerns about job security and import competition are high in the developing world.

<sup>9</sup> Kohli 2012.

<sup>10</sup> Ruggie 1982; Ruggie 1994; Ruggie 2002.

<sup>11</sup> See Polanyi 1944; and Pitruzzello 2004.

support for liberalism depends on the willingness and ability of governments to do this successfully, is the core of the embedded liberalism thesis. This is what distinguishes the embedded liberalism of the postwar period from the ideology of pure laissez-faire that guided economic policy under the gold standard.<sup>12</sup>

Although Hays, Ehrlich, and Peinhardt and other recent studies of EL's development focus on advanced industrial countries, pressures on policymakers to enforce the EL compact are surely not limited to this small group of countries.<sup>13</sup> As Timothy Geithner, then president of the Federal Reserve Bank of New York, made clear: "[A] common feature of the political context in economies around the world is the fragility or weakness of public support for openness and integration."<sup>14</sup>

Yet surprisingly, considerable research implies that developing countries are brazenly flouting the principles of the EL compact, retrenching safety nets as their exposure to international markets and competition grows.<sup>15</sup> These findings are even more striking given that LDC citizens expect governments to assume responsibility for the social welfare of their citizens. If anything, such progovernment attitudes are growing. Data from the last four waves of the World Values Survey indicate that such progovernment attitudes have significantly increased: in the 1980s, 52 percent of non-OECD respondents believed governments were responsible for providing for their citizens; by the 2000s, that proportion had risen to 65 percent.<sup>16</sup>

Our principal criticism of existing research is that it fails to consider the type of state intervention that is germane to the political-economic histories of developing countries. Applying the OECD experience as a baseline, scholars investigate how economic openness affects (old-age) income support programs, particularly "social security and welfare." Yet, as Erik Wibbels and John Ahlquist demonstrate, "the emergence of social insurance [in the developing world] had nothing to do with the demands of losers from trade."<sup>17</sup> And even if they were responding to societal pressure, these programs are thoroughly incapable of fulfill-

<sup>12</sup> Hays, Ehrlich, and Peinhardt 2005, 474.

<sup>13</sup> See Hays, Ehrlich, and Peinhardt 2005; Allan and Scruggs 2004; Ha 2007; Hansson 2007; Walter 2010; Cao, Prakash, and Ward 2007; Brooks and Manza 2006; and Korpi and Palme 2003.

<sup>14</sup> Geithner 2007.

<sup>15</sup> For example, see Kaufman and Segura-Ubiergo 2001; Garrett 2001; Cao 2009; Greenhill, Mosley, and Prakash 2009; Mosley 2003; Nooruddin and Simmons 2009; Rudra 2002; Rudra 2008; Wibbels 2006; and Wibbels and Arce 2003. But see also Avelino, Brown, and Hunter 2005; Brooks and Kurtz 2007; and Kurtz and Brooks 2008, all of whom conduct their studies in the Latin American context, which is arguably exceptional in the developing world for its relatively sophisticated welfare state.

<sup>16</sup> Data are from non-OECD respondents to the second through fifth waves of the World Values Survey 2009. The question utilized asks respondents to state their level of agreement with the statement, "The Government should take more responsibility to ensure everyone is provided for."

<sup>17</sup> See Wibbels and Ahlquist 2011, 126.

ing the government's end of the EL bargain in LDCs (that is, serving as compensation for worker insecurities generated by globalization) because the bulk of public spending on "social security and welfare" in LDCs is based on a pension system that is employment based and, as such, covers workers who represent only a small subset of the working population.<sup>18</sup> Further, these data reflect pensions provided to private sector workers only. As a result, developing country pensions cover, on average, 10 percent or less of the working population. Several African countries have coverage rates as low as 1 percent.<sup>19</sup>

A select few countries in Latin America are striking exceptions because many have long implemented occupationally based welfare systems modeled after West European systems, with defined-benefit pension plans, health services, and family allowances.<sup>20</sup> Pension coverage in several of these nations (Argentina, Chile, Uruguay, and Brazil) is estimated to reach 60 percent or higher of the economically active population.<sup>21</sup> Not surprisingly, the social security budgets in these nations are comparable to many OECD countries. Unlike in the rest of the developing world, then, it is plausible that social security constitutes an important part of the social contract in many richer Latin American countries (LACs).<sup>22</sup> Labor organizations and viable leftist parties in this region, which are strong in comparison to what they are in the rest of the developing world, further help support these programs.<sup>23</sup>

It is thus understandable how and why George Avelino, David Brown, and Wendy Hunter find that trade openness is positively associated with social security expenditures in LACs; and, in an innovative study, Kurtz and Brooks confirm that many Latin American countries pursue broad forms of EL.<sup>24</sup> These studies stop short, however, of identifying how and why governments across the global South pursue particular forms of compensation and of asking if and why governments are motivated to mitigate adverse reactions to liberalization. The latter

<sup>18</sup> The "social security and welfare" variable is composed primarily of pension benefits. It is compiled by the International Monetary Fund's *Government Finance Statistics*. A few scholars (for example, Kaufman and Segura-Ubiergo 2001; Nooruddin and Simmons 2009; Rudra 2008; and Wibbels 2006) consider health and education spending as part of the social contract as well, but trade appears to have the most significant (and negative) impact on the social security variable. Unemployment benefits, another common income transfer in OECD countries and captured in the IMF's social security and welfare variable, are extremely rare in LDCs; see Acemoglu 2003.

<sup>19</sup> See Hall and Midgley 2004; Mesa-Lago 1989.

<sup>20</sup> See Brooks 2008.

<sup>21</sup> See Mesa-Lago 1989; Rofman, Lucchetti, and Ourens 2006.

<sup>22</sup> See Avelino, Brown, and Hunter 2005; Brooks 2008; Kaufman and Segura-Ubiergo 2001; and Segura-Ubiergo 2007.

<sup>23</sup> See Avelino, Brown, and Hunter 2005; and Kurtz and Brooks 2008.

<sup>24</sup> Avelino, Brown, and Hunter 2005; and see Kurtz and Brooks 2008.



question, as Hays, Ehrlich, and Peinhardt persuasively argue, requires scholars to utilize microlevel data to test whether individual support for trade increases with the expansion of such programs.<sup>25</sup> Surprisingly no studies have tested this critical component of EL in the developing world.<sup>26</sup>

The critical questions raised by this discussion are whether and how countries in the rest of the developing world (including low-income Latin American countries), with their fragmented and dispersed labor movements, weak partisanship, and nascent or virtually nonexistent income-transfer programs, pursue EL, and whether their attempts to do so succeed in building public support for trade. These are precisely the questions we seek to answer.

#### PUBLIC EMPLOYMENT AND SUPPORT FOR FREE TRADE IN DEVELOPING COUNTRIES

We argue that the structure of the EL compact in LDCs will be very different than it is in OECD countries, although the overall goals are the same (that is, support for openness). Conventional EL arguments assume citizens of *developed democracies* can and do hold governments accountable for failing to limit the costs of openness upon all those adversely affected.<sup>27</sup> According to Ruggie, the grand bargain of EL in rich economies “formed the basis of the longest and most *equitable* economic expansion in human history.”<sup>28</sup> Rodrik argues that this principle has also been adopted by developing countries.<sup>29</sup>

But developing countries are often unresponsive to the needs and demands of the poor, who are the majority in a great many of these nations.<sup>30</sup> Rather, LDC governments rationally focus on compensation strategies that disproportionately benefit business interests and historically powerful groups of workers that are experiencing increased economic insecurity due to neoliberal economic reforms. This urban formal-sector group, which we label “privileged labor,” generally includes managers and workers from import-competing sectors and state-owned

<sup>25</sup> See Hays, Ehrlich, and Peinhardt 2005.

<sup>26</sup> Note that Hays, Ehrlich, and Peinhardt 2005 and Walter 2010 provide such tests in the OECD context.

<sup>27</sup> Hays, Ehrlich, and Peinhardt 2005.

<sup>28</sup> See Ruggie 2003, 93, emphasis added.

<sup>29</sup> Note that although Rodrik 1998 provides empirical evidence to support his claim, his analysis employs cross-sectional data that ends in the 1980s. This is problematic because most LDCs did not liberalize until after the debt crisis in the early 1990s. Rodrik also focuses on government consumption as the primary compensation strategy for liberalization; we argue that this is not the way developing country governments best mitigate risk and build support for globalization. For empirical evidence supporting our position, see Table A1 in the supplementary material; Nooruddin and Rudra 2014.

<sup>30</sup> See Kohli 2012; and Ross 2006.

enterprises, government workers, civil servants, and, in some countries, workers in the export sector as well.<sup>31</sup> As it turns out, this compensation strategy is a win-win strategy (in the short run, at least) for both government and privileged labor groups, and in the process it ensures that both groups remain strong.

#### THE TARGET: URBAN FORMAL-SECTOR GROUPS

This class of privileged labor was originally sustained by heavy state involvement in the economy and owes its origins and relative power to the political-economic legacy of earlier development models: import-substitution industrialization (ISI) and export-oriented industrialization (EOI). While these two models are often presented as contrasts, a major commonality is that they eventually provided major advantages to *this particular group of formal sector urban workers*. Not only were both economic strategies successful in creating jobs and providing economic security for this select group, but both models also helped ensure that members of these groups eventually came to have more political muscle relative to other social groups. Consequently, an important implication is that even when the most vulnerable members of society are experiencing negative impacts from trade, they are less likely to be the primary beneficiaries of the EL compact.<sup>32</sup>

During the early industrialization period, members of privileged labor were part of the key sectors that governments prioritized for development. It was common for politicians to offer these workers job security in exchange for labor peace and political support. In ISI countries job security was offered through strong labor market regulations. In EOI countries where governments did not impose employment regulations, workers in key sectors often benefited from the (unofficial) practice of lifetime employment (for example, *chaebols* in Korea).<sup>33</sup> Additionally, governments participated in maintaining this low-risk environment for workers in EOI and ISI countries by subsidizing particular firms in both high-skilled and low-skilled sectors.<sup>34</sup>

<sup>31</sup> In a similar spirit, Kohli 2012, 129, refers to this group of workers as “labor aristocracy.”

<sup>32</sup> There are several reasons why marginalized groups might plausibly experience increased risks from openness. First, as retrenched low-skilled workers add to the existing pools of surplus labor, informal sector workers are confronted with greater competition for nonstandard jobs. Scores of regional and country-specific studies confirm that the size of this group has been expanding since liberalization. For examples, see Agarwala 2012; Carr and Chen 2001; Currie and Harrision 1997; Devey, Skinner, and Valodia 2003; and Hasan 2002. Second, in the rural sector, trade liberalization increases risks for small producers of traditional crops as they struggle to meet the costs associated with the growing demand for new commercial products that require new storage and transport infrastructure, large set-up costs, monetized inputs, and marketing connections; see Bardhan 2006.

<sup>33</sup> See Kwon 1997.

<sup>34</sup> See Lall 1998.

OPENNESS AND RISING INSECURITY OF PRIVILEGED URBAN  
FORMAL-SECTOR GROUPS

Traditional trade models set a baseline for identifying how and why liberalization fundamentally alters the sense of job security long experienced by these workers. The Ricardo-Viner model, for instance, predicts workers and managers in the import-competing sectors—including notoriously inefficient (and overstaffed) SOEs that thrived during the ISI period—face great uncertainty with increasing trade. This occurs as exporting sectors expand production and demand for labor, while import-competing sectors reduce production and lay off workers. Skilled labor groups may also face increased insecurity with trade liberalization. According to the Stolper-Samuelson theorem, such groups in developing economies will lose out as nations endowed with abundant labor specialize in the production of low-skill goods. The relative price of high-skill goods thereby decreases with trade. Taken together, these models help determine that higher-skilled workers in previously protected sectors might be the most vulnerable in an open economy and therefore most resistant to free trade.<sup>35</sup>

One limitation of these models is that they assume full employment and are not concerned with the restructuring process that is particularly pronounced in developing economies. As such, we anticipate that even workers associated with export sectors might face risk, at least in the short run. It is no wonder that Mayda and Rodrik find that workers in export sectors are not as protrade as existing models predict.<sup>36</sup> They do confirm, however, that individuals in import-competing sectors are the most resistant to trade in developing countries. Those made vulnerable by trade are more likely to expend resources lobbying the state for protection.<sup>37</sup> Given that this group was relatively privileged prior to trade reform, governments have a strong incentive to find ways to mollify them.

To elaborate, previously secure workers in once-protected sectors now face greater uncertainty because they risk losing privileges (for example, job security and subsidies) associated with being part of favored sectors. Additionally, given the preexisting levels of surplus labor in these nations, now coupled with employer emphasis on minimizing costs and labor-market flexibility, the share of temporary contract employment is rapidly increasing and further threatening job security in both import-competing and exporting sectors.<sup>38</sup> Numerous empirical

<sup>35</sup> See Rogowski 1987.

<sup>36</sup> See Mayda and Rodrik 2005.

<sup>37</sup> See Grossman and Helpman 1994.

<sup>38</sup> See Rama 2003.



studies document rising job uncertainty in recent times, especially since trade openness in LDCs has not been accompanied by the predicted gains in employment.<sup>39</sup> Although marginalized populations are also affected by these uncertainties from trade, the rising insecurity of privileged labor is what is critical for reform-oriented LDC governments; the legacy of ISI and EOI developmental strategies has all but ensured they can exercise some political muscle.<sup>40</sup>

Perceptions of job risk in the current economic environment are thus higher in LDCs than they were during the periods of ISI and EOI, particularly among privileged workers who, above all others, enjoyed relatively more job security in the preopenness era. Indeed, surveys confirm that LDC citizens, particularly members of the middle class of which privileged labor is a part, feel greater economic insecurity because of trade liberalization. Our analysis of the third wave (1995–97) of the World Values Survey, for example, reveals that a majority (63.6 percent) of respondents in developing countries sampled favor limiting imports. Among the middle class, this percentage rises to almost 70 percent. Likewise, an analysis of the fourth wave (2002–4) of the World Values Survey demonstrates our central proposition amply: in the fifty-three developing countries in the WVS sample for which data are available, 74 percent of the respondents stated that job security is their most important consideration.

#### PUBLIC EMPLOYMENT AS COMPENSATION FOR OPENNESS

How are governments compensating these workers for rising job risk and insecurity? We argue that governments in LDCs use public employment as the primary compensation strategy: it maintains support for the incumbent and, in turn, reduces negative reactions to openness. Our approach builds on the logic of Kurtz and Brooks that, postliberalization, the state uses supply-side interventions to promote economic production.<sup>41</sup> Historically, it has been common practice for governments of developing countries to use public employment to placate insecure workers and reduce social tension, especially when this group is confronted with inadequate levels of private sector employment.<sup>42</sup> Governments have long encouraged public sector employment growth,

<sup>39</sup> See, for example, Rama 1994; Rama 2003; Currie and Harrison 1997; Revenga 1997; Seddon and Wacziarg 2001; Levinsohn 1999; Inter-American Development Bank 1997; Stallings and Peres 2000.

<sup>40</sup> See Chibber 2003; McGuire 2010; and Teitelbaum 2010.

<sup>41</sup> Kurtz and Brooks 2008 assert that Latin American governments used public employment as part of what they term “embedded neoliberalism.” However, they discuss public employment as just one of several state interventions into the economy and do not focus on or collect data on compensation strategies per se, such as public employment. Rather, they concentrate on government consumption.

<sup>42</sup> See Assad 1997; Marinakis 1994; Lindauer and Nunberg 1996; and Rama and MacIsaac 1999.

even when confronted with mounting resource constraint.<sup>43</sup> Both John Nelson and Andrés Marinakis discuss several instances of governments hiring countercyclically in developing countries.<sup>44</sup> We have little doubt that the expansion of public-sector employment is based on politics, particularly since most such jobs throughout the developing world tend to benefit privileged labor disproportionately.<sup>45</sup>

With trade liberalization, increasing public employment—in contrast to pensions—can directly mitigate the heightened job risk perceptions of privileged formal-sector workers in several ways. First and most obvious, government jobs are geared toward providing alternative employment opportunities for this group of privileged workers.<sup>46</sup> Second, maintaining high public employment levels can lower perceptions of risk by increasing aggregate employment figures. Since employment conditions are fundamentally important criteria by which citizens evaluate governments, workers' confidence will be upheld when governments can manipulate the levels of public employment to help ensure that total employment figures are not drastically affected by trade liberalization.<sup>47</sup> Individuals in import-competing sectors, for example, will feel more secure believing they might find employment as a government worker or midlevel government bureaucrat. Indeed, despite pressures for reform postliberalization, many developing countries maintain public employment levels that are over 60 percent of total employment in the formal sector (for example, Belarus, Egypt, Gabon, India, Myanmar, and Suriname).

Perhaps more importantly, however, LDC politicians might find manipulating public employment levels particularly desirable in globalizing economies. The extent of their control over economic policymaking and performance has become increasingly constrained concomitant with market expansion. LDC governments have been forced to deal with trade liberalization as a result of both international economic and domestic political pressures. This new policy turn is threatening to many government officials who were once responsible for selecting winners and losers in the economy in *EOI* and *ISI* countries, albeit to different degrees. Policymakers are thus grappling with reduced control over the economy and growing uncertainty about their ability to maintain a lucrative source of rents and patronage.

<sup>43</sup> See Lindauer and Nunberg 1996.

<sup>44</sup> See Nelson 1991; and Marinakis 1994.

<sup>45</sup> See Rama and MacIsaac 1999; and Marinakis 1994.

<sup>46</sup> See Rama and MacIsaac 1999; and Marinakis 1994.

<sup>47</sup> See MacKuen, Erikson, and Stimson 1992; and Singer 2013.

Serving as employers of last resort in the liberalizing environment can help maintain support for incumbents and, by default, their economic policies, all the while allowing them continued access to rents. The use of government jobs as patronage has long been one of the most frequent complaints made by scholars and policy advisers about the public sector in developing countries.<sup>48</sup> Individual politicians often use the allocation of jobs to continue to build independent power bases, reward supporters, co-opt politically threatening groups, and establish networks connected to greater personal wealth.<sup>49</sup> James Robinson and Thierry Verdier argue that public employment has the advantage of being simultaneously visible and targetable, unlike broader promises of improved education and health care.<sup>50</sup> Politicians can offer these policies in exchange for political support from specific groups of citizens at risk from increased openness. By targeting employment to benefit these groups disproportionately, their commitments to protecting these voters from the pressures of globalization become credible.<sup>51</sup> In return, these groups of citizens reward politicians—and their policies—with their political support.

Another great advantage for LDC policymakers is that this compensation strategy, somewhat ironically, can still help increase overall public confidence in government economic liberalization policies by offering a potential safety net for the poor. In other words, though public employment disproportionately provides benefits to privileged workers, public sector job opportunities also win favor with workers who may not end up as direct beneficiaries of this compensation effort. To begin, if public employment postopenness aids some members of an underrepresented group (for example, associated with religion, ethnicity, village dweller, and/or caste) in a given locality, it is likely that the entire group in that location will view the liberalization in a more positive light.<sup>52</sup> Rodrik adds that the risk-reducing benefits of public sector jobs can spread throughout the economy by way of informal risk-sharing arrangements with extended families.<sup>53</sup> Finally, LDC governments are also known to extract rents from poorer groups using public sector jobs, such as public works projects. Although most often temporary, such projects send signals that there is the prospect of improvement in one's economic situation. Cramer and Kaufman convincingly demonstrate that "perceptions

<sup>48</sup> For instance, see Kohli 2012; and Rodrik 2000.

<sup>49</sup> See Chandra 2004; Chew 1992; Rama 1999; and Lindauer 1996.

<sup>50</sup> See Robinson and Verdier 2003.

<sup>51</sup> See Robinson and Verdier 2003, 2.

<sup>52</sup> See Chandra 2007.

<sup>53</sup> See Rodrik 2000.

of fairness” can reduce the dissatisfaction of the poor with rising inequality, and thereby maintain social stability.<sup>54</sup> Despite potential rent seeking, then, public sector jobs in many LDCs are welcomed by the broader public and cast government in a positive light.<sup>55</sup>

In sum, we propose that the EL compact in developing nations is maintained through employment generation by the state. As public employment helps maintain a sense of job opportunity among direct and indirect beneficiaries, citizens—and privileged labor in particular—*will be more likely to reduce skepticism about trade openness*. LDC policy-makers are keenly aware that as trade liberalization affects job security, they risk the ire of politically vocal groups if they do not engage in some type of compensation effort. They then naturally respond to increasing trade with a compensation strategy that they have historically used to ameliorate job insecurities, namely, public employment.

#### WITH TRADE LIBERALIZATION, THE TYPE OF PUBLIC EMPLOYMENT MATTERS

What about the costs of this redistribution strategy? The globalization literature is rife with concerns that business groups are increasingly opposed to compensation strategies because of the upward pressure this places on their production costs and their ability to compete in global markets (the race to the bottom). We hypothesize that, to ameliorate likely business opposition, the offer of public sector employment post-liberalization comes in the form of jobs in civilian central government broadly defined, rather than in state-owned enterprises.<sup>56</sup> In countries that pursued ISI in particular, it was common for LDC governments to create (unproductive) jobs in public enterprises as a way of addressing rising economic insecurities.<sup>57</sup> SOE employment is much more difficult to justify, however, in the current globalizing environment. The privatization of public sector units is portrayed as inevitable and desirable because of the inefficient, labor-redundant enterprises that they have

<sup>54</sup> See Cramer and Kaufman 2011.

<sup>55</sup> See Gregory 1996.

<sup>56</sup> According to the World Bank, civil service constitutes a distinct body of staff within the public sector, which can include numerous groups of public employees in addition to civil servants. The public sector comprises a range of employment regimes, and arrangements vary between countries. The essence of civil servant status is that the legal basis for employment, as defined by general labor law, is different from that found elsewhere in the economy. Applying these criteria generally reveals employees in civilian central government and in subnational government who are widely recognized to be civil servants. At <http://go.worldbank.org/85TXV8WGX0>, accessed December 16, 2013.

<sup>57</sup> See Gelb, Knight, and Sabot 1991. See also Shirley and Nellis 1991, 17, for an excellent discussion of “taking on or maintaining redundant workers” as one of the primary “noncommercial” objectives of the creation and maintenance of SOEs.

purportedly become (that is, “white elephants and sick industries”).<sup>58</sup> Business welcomes such privatization as a way of reducing the state’s role in the economy. Both foreign investors and domestic businesses are likely to prefer the increase in entrepreneurial opportunities that SOE privatization brings. Further, in many LDCs, business allies of the government anticipate obtaining the SOEs through privatization proceedings.<sup>59</sup>

We expect, therefore, that expanding public sector employment in civil services and administration will face the least amount of political resistance from domestic and foreign investors. As Alberto Alesina and colleagues argue, politicians can conveniently use public employment as a redistributive policy because it can avoid the opposition that would occur in response to explicit tax-transfer schemes.<sup>60</sup> Alesina, Reza Baqir, and William Easterly argue that it is easier for politicians to justify public projects in the name of economic efficiency. Certainly, as developing countries prime themselves to compete in the global economy, LDC politicians can persuasively argue for the expansion of departments in the civil services and administration (for example, infrastructure, education, and finance).

India’s Maharashtra’s Employment Guarantee Scheme (EGS), one of the world’s largest public employment guarantee schemes, is a good example of how advocates gained political support by convincing richer groups that potentially useful outputs (for example, better maintained roads) would be generated.<sup>61</sup> Official reports further suggest that the Indian government responded to trade liberalization reforms in 1991 by significantly increasing the level of central government employment. Since the early 1970s, the highest annual percentage increase in public employment occurred in the mid-1990s, not long after its new openness policies were adopted.<sup>62</sup> Strikingly, the numbers of *permanent* government employees as a percentage of total government employment in India have steadily increased since liberalization, peaking in 2001 at 93.6 percent. Likewise, the Indian government documented its highest level of employment increase in its major ministries postliberalization.<sup>63</sup>

<sup>58</sup> See Rama 1999.

<sup>59</sup> Kong 2006; Schmidt 1995.

<sup>60</sup> Alesina, Baqir, and Easterly 2000.

<sup>61</sup> Herring and Edwards 1983.

<sup>62</sup> See Government of India 2009. In 1995 public employment increased by 4.43 percent. This phase of liberalization began with Rajiv Gandhi’s policy reforms in the mid-1980s; see Denoon 1998. The previous highest increase occurred in 1980, when central government employment increased by 4.73 percent. This earlier increase followed liberalization reforms necessitated by an economic crisis in the late 1970s.

<sup>63</sup> The Government of India publishes the employment trends in its major ministries (railways, communications and information technology, defense [civilian], and others). The latest documentation reveals a 22 percent increase of employment in “other” ministries since 1991, which is the highest increase documented during the reported 1971–2006 time period. See Government of India 2009.



## SUMMARY OF HYPOTHESES

To summarize our argument, the EL argument is composed of two core propositions: (1) increased trade leads to greater government compensation of “insecure” formal-sector urban labor groups, which we identify as “privilege” for historical reasons; (2) this compensation assuages fears about the negative impacts of openness and mitigates adverse political reactions. Thus, while public sector jobs have long helped improve the sense of job security and decrease the perception of risk, we argue that, as global markets expand, employment in civil services and administration has become the “sensible” compensation strategy used by governments to construct an EL bargain in developing economies.

In the next section, we conduct empirical tests of both components of the EL argument and provide macrolevel and microlevel evidence that the form of compensation adopted by developing country governments is (certain types of) public employment. In all, we test four hypotheses:

- H1. Overall public employment in LDCs increases as trade expands.
- H2. Employment in civil service and administration increases as trade expands.
- H3. Employment in SOE decreases as trade expands.
- H4. Public employment increases support for trade.

## ESTIMATION STRATEGY AND EMPIRICAL MODELS

We test our hypotheses using cross-national time-series data for developing countries between 1985 and 2004. However, data limitations on public sector employment limit our sample size considerably, especially once we include control variables. Countries included in each estimation sample are listed in the supplementary material, which also provides descriptive statistics for all variables utilized in any regression model reported below.<sup>64</sup> Our sample is representative of the diversity of developing economies, in that it includes countries from different regions and income levels, alleviating concerns that the results are driven by the richer developing countries.<sup>65</sup>

We offer evidence for the first three hypotheses using country-level observations to understand the determinants of public employment.

<sup>64</sup> Nooruddin and Rudra 2014.

<sup>65</sup> Our data set on public employment is the largest of which we are aware, and yet data on public employment remain sparse. Our largest estimation sample consists of about twenty-five developing countries due to the extensive missing data in our dependent variable. To ameliorate concerns that our results are driven by missing data, we utilized multiple imputation in Amelia II; see Honaker and King 2010. Our results hold and are available in Table A2 in the supplementary material; Nooruddin and Rudra 2014.

The fourth hypothesis necessitates a shift to individual-level observations to model public support for trade. In all models presented below, we control for domestic and international factors suggested by existing theory, include fixed effects for both time periods and countries where appropriate, and estimate standard errors corrected for clustering by country.<sup>66</sup>

#### DEPENDENT VARIABLES

Our primary dependent variable is the *change in total public employment* (as a percentage of total employment) in a country in a given year.<sup>67</sup> The source for these data is the International Labour Organization. We also disaggregate public employment by type to assess our predictions about the differential impact of trade openness for civilian central government employment and state-owned enterprise employment. Civilian central government employment includes all employees who work in executive and legislative administration departments that are dependent on the head of state or parliament, as well as those employed in public works programs.<sup>68</sup>

An encompassing test of the EL argument requires showing that public employment increases support for trade. To do so, we model *support for trade*, which we measure using a question in the World Values Survey asking respondents whether they favor increasing imports to their economy.<sup>69</sup> Our EL argument predicts that public employment should be positively related to support for imports. Even more specifically, our argument suggests that middle-class support should be particularly responsive to public employment (since this class is overrepresented in privileged labor groups and tends to have political clout in LDCs), is relatively vulnerable to job insecurity due to liberalization, and has

<sup>66</sup> Since some of our sample sizes are quite small, we checked the robustness of our results using *hc3* standard errors instead. All the reported results hold. *hc3* standard errors correct for various forms of heteroskedasticity in small samples. In particular, they correct for high variance residuals that can have greater influence in small samples; see Long and Erwin 2000.

<sup>67</sup> The results hold if we use the level of, rather than the change in, public employment as the dependent variable. See model 4 in Table 1. We suppress the overall trade and exports equivalents to preserve space. These results are available upon request.

<sup>68</sup> For a full definition, see fn. 56. Data on local-government employment are very sparse in the developing world, but in most countries the bulk of public employment occurs at higher levels of government; see Heller and Tait 1983.

<sup>69</sup> Hays, Ehrlich, and Peinhardt 2005, 476–77, use a similar question in their analysis of the EL compact in the OECD. Interestingly, while studies such as Baker 2003 and Weyland 1999 argue that Latin American citizens generally support trade, respondents globally are less sanguine when asked more detailed questions about their support for trade (for example, import competition). Importantly, both Baker and Weyland study Latin America, underscoring yet again that region's exceptionalism regarding trade openness.

disproportionately benefited from public employment.<sup>70</sup> Therefore, we conduct our analysis by social class as well.<sup>71</sup>

#### INDEPENDENT VARIABLES

Our principal explanatory variable for the compensation hypotheses is *change in levels of trade openness* as a share of GDP.<sup>72</sup> This analysis focuses on trade rather than financial liberalization, since the former has been the primary engine of international market expansion in developing economies, and it is primarily trade and trade policy that affect income risks.<sup>73</sup> To increase confidence in our results, we also check *lagged levels of trade* and include controls for *financial liberalization*. In separate models, we disaggregate trade and examine the effects of changes and levels of exports and imports, respectively. In addition, we include a measure of *external risk* in the model. The external risk measure accounts for the unexpected fluctuations in terms of trade that might affect a country's revenues due to external markets.<sup>74</sup> Including this measure in addition to the level of trade allows us therefore to differentiate between effects of trade openness and trade volatility. We expect external risk to be positively correlated with public employment if governments use the latter as a mechanism of social insurance.<sup>75</sup>

The EL argument is based on strong microfoundations that are rarely tested.<sup>76</sup> To bolster confidence in our argument, we predict individual-level support for trade cross-nationally as a function of public employment in the respondent's country. If H2 is correct, we expect public employment to increase support for trade and reduce social instability. Further, we expect that public employment's effect on trade support should be greatest among the members of the middle class who dominate the category of "privileged labor" in LDCs.

#### CONTROL VARIABLES

To provide convincing tests of each of our hypotheses, our empirical models include a complete battery of domestic and international control

<sup>70</sup> Chandra 2004, 11–12, puts it best: "For upwardly mobile 'elites,' . . . —urbanized, educated and economically better off than the rest of the population—state employment or political office promises the best prospect of material advancement."

<sup>71</sup> We thank Raj Desai for suggesting this analysis.

<sup>72</sup> The results presented below use a one-year lag of the trade variables. Deeper lags are not statistically significant (see Table A3 in the supplementary material; Nooruddin and Rudra 2014).

<sup>73</sup> Sachs and Warner 1995; Dollar and Kraay 2002; Krebs, Krishna, and Maloney 2010.

<sup>74</sup> For a complete exposition of this measure, see Rodrik 1998, 1014.

<sup>75</sup> Our results are robust to controlling for the country's exchange rate regime, which we operationalize using the Reinhart-Rogoff 2004 data. See Table A4 in the supplementary material; Nooruddin and Rudra 2014.

<sup>76</sup> But for important exceptions in the OECD context, see Hays, Ehrlich, and Peinhardt 2005; and Walter 2010.

variables suggested by theory and extant literature as belonging in the model. In the models predicting changes in public employment, we control for the *lagged level of public employment*, a dichotomous indicator for *democracy*, as well as the country's *growth rate of GDP per capita*, and *logged level of GDP per capita*.<sup>77</sup> The latter two are included because we expect rich countries and those that are growing quickly to be less reliant on public employment, since the private economy is likely to be more attractive to workers in such countries.<sup>78</sup> We also include *unemployment rates*, since high joblessness should lead to greater use of public employment as a safety net for displaced workers.<sup>79</sup> Countries with greater *capital account openness* should be more sensitive to international financial actor preferences for smaller government and less able consequently to expand public employment. We use the Chinn-Ito index to measure capital account openness.<sup>80</sup> The historical openness indicator accounts for possible ISI legacy effects, since countries that adopted ISI policies early in their development (that is, *openness legacy*) should have larger levels of public employment and different patterns of exposure to international trade than those that did not adopt ISI.<sup>81</sup> Similarly, states under *International Monetary Fund (IMF) structural adjustment programs* should be forced to trim their payrolls and to reduce inefficient (that is, SOE) public employment. We thus include an indicator for whether the country was under an IMF program in a given year.<sup>82</sup> We also expect that states with larger *age dependency ratios* have smaller working-age populations to compensate and should therefore have smaller public workforces.<sup>83</sup>

To help model individual-level support for trade, we include the respondent's *social class*, *occupational prestige*, and *education level*. Further, to account for the financial stress of the respondent, we include her

<sup>77</sup> The results are robust to dropping the lagged dependent variable. See Table A5 in the supplementary material; Nooruddin and Rudra 2014.

<sup>78</sup> Though, in a telling anecdote about the attractiveness of public sector employment, Assad 1997 reports that Egyptian graduates would stand in lines to apply for government jobs *even after* receiving jobs in the private sector.

<sup>79</sup> We recognize that the unemployment rate is typically underestimated in developing countries, since to be counted as unemployed, workers have to demonstrate actively their attachment to the workforce; see Agarwala 2012.

<sup>80</sup> Chinn and Ito 2006.

<sup>81</sup> See Sachs and Warner 1995; and Kurtz and Brooks 2008.

<sup>82</sup> Vreeland 2003.

<sup>83</sup> In Table A6 in the supplementary material (Nooruddin and Rudra 2014), we add an indicator for the *Latin American region* since previous research has shown that Latin America has a much better developed welfare system than other developing countries; see Avelino, Brown, and Hunter 2005; Brooks 2008; and Kurtz and Brooks 2008. We estimate this model with random effects to allow for the estimation of the Latin American region coefficient. Our results hold. Our results are also robust to excluding the Latin American countries from the estimation sample. See Table A7 in the supplementary material; Nooruddin and Rudra 2014.

*marital status, number of children, and whether the chief wage earner in the family is presently employed.* We also control for the respondent's *age and gender.*<sup>84</sup>

## RESULTS OF THE EMPIRICAL MODELS

### THE EFFECT OF TRADE OPENNESS ON OVERALL PUBLIC EMPLOYMENT

We begin discussion of our results by focusing on H1, which posits a general relationship between the level of trade openness and public employment. Recall that we emphasize this particular type of safety net in LDCs because, contrary to the predictions of trade theorems, it helps alleviate some of the rising uncertainties and anxieties about job security in the current era of globalization.<sup>85</sup> The basic model we estimate by OLS is:

$$\Delta \text{PublicEmployment}_{it} = \beta_0 + \beta_1 \text{TradeOpenness}_{it} + \mathbf{X}_{it} \alpha + \tau_t + \eta_i + \varepsilon_{it}, \quad (1)$$

where  $i$  indexes countries and  $t$  indexes time,  $\beta_0$ ,  $\beta_1$ , and  $\alpha$  are coefficients to be estimated,  $\mathbf{X}$  is a vector of country-level covariates,  $\tau_t$  are year fixed effects,  $\eta_i$  are country fixed effects, and  $\varepsilon_{it}$  is the stochastic term.<sup>86</sup> The specific operationalization of the dependent variable varies across Tables 1–3, since we are interested in knowing whether trade has a different effect on different types of public employment.

The first column in Table 1 provides a baseline model with a limited number of covariates to reduce concerns that our results are being driven by a small sample size.<sup>87</sup> Model 1 in Table 1 thus predicts the changes in public employment in the developing world as a function of trade openness and very basic control variables, while models 2 and 3 disaggregate trade into its components—exports and imports—respectively, and include all controls. Model 4 uses the level of public employment as a dependent variable and shows that our results are robust to that specification too.

The results support the expectation that governments respond to openness by increasing public employment. Trade openness, whether

<sup>84</sup> The list of covariates is based on Ehrlich 2010; Hays, Ehrlich, and Peinhardt 2005; Mayda and Rodrik 2004; O'Rourke and Sinnott 2001; and Walter 2010.

<sup>85</sup> See Nooruddin and Simmons 2009, figure 2.

<sup>86</sup> Our results hold if we use random effects instead; see Table A6 in the supplementary material; Nooruddin and Rudra 2014.

<sup>87</sup> Similar baseline models for the imports and exports models are reported in Table A8 in the supplementary material; Nooruddin and Rudra 2014.



TABLE 1  
TRADE OPENNESS AND PUBLIC EMPLOYMENT IN THE DEVELOPING WORLD

<i>DV</i> → <i>Variable</i>	<i>Annual Change in Public Employment</i>				<i>Level of Public Employment</i>
	<i>Baseline</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>
Level of Public Employment <sub><i>t-1</i></sub>	-0.47*** (0.08)	-0.60*** (0.12)	-0.61*** (0.15)	-0.58*** (0.14)	
Δ Trade (% GDP)	0.04* (0.02)	0.06** (0.02)			
Trade (% GDP) <sub><i>t-1</i></sub>	0.01 (0.02)	0.03 (0.02)			
Δ Exports (% GDP)			0.08* (0.04)		
Exports (% GDP) <sub><i>t-1</i></sub>			0.07* (0.04)		
Δ Imports (% GDP)				0.11* (0.06)	0.14*** (0.05)
Imports (% GDP) <sub><i>t-1</i></sub>				0.04 (0.04)	0.10** (0.05)
Growth of GDP per Capita	-0.05 (0.03)	-0.06 (0.04)	-0.04 (0.05)	-0.07* (0.04)	-0.06 (0.04)
GDP per Capita, Log		-0.38 (3.24)	-0.87 (3.12)	-0.39 (3.20)	1.29 (2.84)
Total Unemployment <sub><i>t-1</i></sub>		0.04 (0.09)	0.03 (0.10)	0.06 (0.09)	0.16 (0.13)
Age Dependency Ratio		-0.13 (0.35)	0.04 (0.33)	-0.29 (0.37)	0.22 (0.54)
Capital Account Openness		0.23 (0.26)	0.34 (0.29)	0.07 (0.26)	-0.30 (0.36)
External Risk	0.20** (0.09)	0.13 (0.08)	0.12 (0.08)	0.15* (0.09)	0.17** (0.08)
Democracy (Dichotomous)	0.24 (0.31)	0.69 (0.60)	1.02 (0.69)	0.31 (0.42)	1.53* (0.84)
Openness Legacy (Sachs-Warner)		-29.81** (11.70)	-27.10 (11.78)	-29.68** (11.76)	-1.26 (7.26)
Under IMF Program		0.25 (0.51)	0.14 (0.48)	0.27 (0.54)	0.01 (0.53)
N	129	108	108	108	142
R <sup>2</sup>	0.59	0.73	0.73	0.72	0.99
Country Fixed Effects	yes	yes	yes	yes	yes
Year Fixed Effects	yes	yes	yes	yes	yes*

\*\*\* p<0.01; \*\* p<0.05; \* p<0.10 (two-tailed tests); country and year fixed effects excluded to preserve space; robust standard errors corrected for clustering by country are reported in parentheses

considered in overall terms or separately as exports or imports, has a positive and statistically significant effect on the extent of change in public employment in a country. Using the estimates from the baseline model, for instance, the long-run effect of a one-standard-deviation increase in trade (about 36 percent, which is roughly the equivalent of moving from India's average trade exposure during this period to Egypt's) is a 1.5 percent increase in the annual change in public employment's share of total employment. While this might appear small at first blush, note that public employment is fairly stable from year to year and, if anything, trends downward over time. Therefore this is a substantively significant effect, accounting for almost 100 percent of the unconditional mean of the dependent variable. In the baseline model, most of this change occurs in the first year after the increase in trade, though the error-correction rate is slower once we add additional control variables.

Interestingly, changes in both exports and imports lead to an increase in public employment, which is different from the findings of Hays, Ehrlich, and Peinhardt, who argue that imports are the main cause of increased insecurities in the OECD world.<sup>88</sup> We interpret these findings as supporting our earlier contention that both ISI and EOI countries utilized public employment as a strategy to reduce risks associated with a departure from state control of the economy's engagement with global markets. Importantly, the external risk measure is also positive and statistically significant, bolstering our argument that public employment in the developing world is used to ameliorate insecurity domestically. Given that external risk is correlated with levels of trade openness, it is notable that both trade and external risk are statistically significant in these models.

Turning briefly to the control variables, neither IMF programs nor democracy have statistically significant effects. Public sector employment thus appears to be driven more by the state's exposure to the international economy, which forces it to respond to populations demanding lower risk and greater job security from their government. Interestingly, unemployment is not statistically significant in the models reported in Table 1. We suspect this is because, as we have argued, trends in public employment are countervailing: as civilian central governments grow, state-owned enterprises shrink. When we disaggregate public employment, the unemployment rate is a statistically significant predictor of growth in civilian central government (see Table A9 in the supplementary material).<sup>89</sup>

<sup>88</sup> Hays, Ehrlich, and Peinhardt 2005.

<sup>89</sup> Nooruddin and Rudra 2014.

In sum, the empirical evidence offered thus far identifies an important policy lever used by LDC governments to generate support from their citizens: public employment. We have argued that governments use this strategy in no small part because, although the benefits of public employment are highly visible, the costs of this redistribution strategy are relatively “hidden” and therefore its political costs are muted.<sup>90</sup> Further, our argument implies that increases in employment should principally be in civilian central government (that is, the civil service) rather than in the more visible (and more maligned) state-owned enterprises. We turn now to examining this argument.

#### DISAGGREGATING PUBLIC EMPLOYMENT

It is important to note that downward pressures on public spending and calls for fiscal efficiency create economic incentives for governments to retrench certain types of public employment, while increasing others. Specifically, we expect that increased trade competition should lead to an increase in civilian government employment (H2) but force a reduction in state-owned enterprise (SOE) employment (H3). This is because governments respond to the rise in job insecurity by creating additional jobs primarily in the latter, since investors and business actors are less likely to oppose measures that do not directly impinge on the competitiveness of the private sector; and expanding civil services and administration can arguably result in public projects that help competitiveness. This is, at least, how many governments justify this redistributive device, as noted earlier by the example of India’s employment guarantee scheme.

We collect data from the International Labour Organization (ILO) on disaggregated levels of public employment in the developing world. Such data are available only for 1995 and 2000, and then, too, not all countries report data for both years. Therefore, while we utilize both years where available in our estimation sample, the high loss of observations prevents us from measuring the dependent variable in terms of changes, as we did in Table 1. The limited number of available data points also precludes the inclusion of year or country fixed effects, but the models do include controls for domestic economic and demographic conditions, democracy, and ISI legacy. Tables 2 and 3 report estimates of trade’s effect—overall and exports and imports separately—on employment in civilian government positions and on SOE employment, respectively.<sup>91</sup>

<sup>90</sup> Alesina, Baqir, and Easterly 2000.

<sup>91</sup> Due to very limited degrees of freedom, we report a pared-down model for each of the disaggregated public employment measures in the text. The results hold when we control for age dependency

TABLE 2  
THE EFFECT OF TRADE OPENNESS ON EMPLOYMENT IN CIVILIAN  
CENTRAL GOVERNMENT

<i>Variable</i>	<i>1</i>	<i>2</i>	<i>3</i>
$\Delta$ Trade (% GDP)	-0.01 (0.04)		
Trade (% GDP)	0.01* (0.006)		
$\Delta$ Exports (% GDP)		-0.01 (0.06)	
Exports (% GDP)		0.02* (0.01)	
$\Delta$ Imports (% GDP)			-0.04 (0.07)
Imports (% GDP)			0.02* (0.01)
Growth of GDP per Capita	-0.02 (0.07)	-0.01 (0.07)	-0.01 (0.06)
GDP per Capita, Log	0.28* (0.14)	0.28* (0.14)	0.30** (0.15)
Unemployment Rate	0.07 (0.05)	0.07 (0.05)	0.07 (0.05)
Constant	-2.09* (1.10)	-1.99* (1.13)	-2.29** (1.08)
N	51	51	51
R <sup>2</sup>	0.29	0.29	0.29
Country Fixed Effects	no	no	no
Year Fixed Effects	no	no	no

\*\*\*  $p < 0.01$ ; \*\*  $p < 0.05$ ; \*  $p < 0.10$  (two-tailed tests); robust standard errors corrected for clustering by country are reported in parentheses

The results presented in Table 2 support the claim that governments are compensating for the greater job uncertainty imposed by higher levels of trade mainly through the expansion of civil service and administration as a share of total employment, *ceteris paribus*. Note that the country's unemployment rate does have a positive and statistically significant effect on civilian central government employment, once one includes additional controls.<sup>92</sup> Taken together, the trade openness and unemployment findings underscore our argument that governments use civilian government positions for redistributive purposes.

ratio, capital account openness, external risk, IMF program participation, democracy, and the country's legacy of openness; see Tables A9 and A10 in the the supplementary material; Nooruddin and Rudra 2014.

<sup>92</sup> See Table A9 in the supplementary material; Nooruddin and Rudra 2014.

TABLE 3  
THE EFFECT OF TRADE OPENNESS ON SOE EMPLOYMENT

<i>Variable</i>	<i>1</i>	<i>2</i>	<i>3</i>
$\Delta$ Trade (% GDP)	-0.10* (0.06)		
Trade (% GDP)	-0.01 (0.01)		
$\Delta$ Exports (% GDP)		-0.21 (0.14)	
Exports (% GDP)		-0.02 (0.01)	
$\Delta$ Imports (% GDP)			-0.08 (0.07)
Imports (% GDP)			-0.02 (0.02)
Growth of GDP per Capita	0.46* (0.25)	0.54* (0.27)	0.29 (0.18)
GDP per Capita, Log	0.32 (0.31)	0.39 (0.35)	-0.43 (0.38)
Unemployment Rate	-0.05 (0.08)	-0.03 (0.07)	0.03 (0.06)
Constant	-0.99 (2.35)	-1.96** (2.53)	12.79* (7.22)
N	25	25	25
R <sup>2</sup>	0.52	0.54	0.56
Country Fixed Effects	no	no	no
Year Fixed Effects	no	no	no

\*\*\* p<0.01; \*\* p<0.05; \* p<0.10 (two-tailed tests); robust standard errors corrected for clustering by country are reported in parentheses

Table 3 provides suggestive evidence for the claim that increases in trade openness overall also lead to lower levels of SOE employment. We are cautious about drawing strong conclusions based on the small sample size. One issue is that the model is sensitive to the exclusion of China, which is a considerable outlier, with an SOE employment share of 9 percent (the sample maximum).<sup>93</sup> Data limitations unfortunately do not permit us to assess whether, consistent with our theory, this is because of China's outsized reliance on SOEs in the very recent past prior to its adoption of market reforms or because of some other factor, such

<sup>93</sup> Excluding China results in a smaller but still negative coefficient for  $\Delta$ Trade in Table 3, and therefore a higher p-value. The *Trade* coefficient remains essentially unchanged. This suggests that China conforms with our argument and that a large sample would provide stronger support for our hypothesis.



as its authoritarianism. Given our theoretical priors, however, we anticipate that additional SOE employment data would further confirm our third hypothesis. Interestingly, economic growth is positively related to SOE employment, suggesting that public sector enterprises expand in good times but that SOE employees are retrenched when the economy falters. The inclusion of additional controls results in a similar pattern of results, but given the limited degrees of freedom available, we prefer the pared-down version.

In sum, far from being immune to pressures to provide compensation in exchange for increased trade liberalization, our data confirm that developing country governments have sought to build their own version of an EL compact that emphasizes the provision of public sector employment, particularly in the civil service. We report robust results that increased trade openness in the developing world increases overall public employment levels; further, we provide suggestive evidence that this growth is due primarily to increases in civilian government employment that offset the privatization of inefficient and oft-criticized state-owned enterprises. Next, we assess whether this strategy has the desired effect of increasing public support for trade and reducing social unrest.

#### DOES PUBLIC EMPLOYMENT BUILD SUPPORT FOR TRADE OPENNESS?

According to the EL hypothesis, compensation policies pursued by the government during trade liberalization help build support for openness and reduce public unrest. The models below are based upon research focused on the OECD countries that establishes that groups feeling economically insecure because of international trade are less likely to support it.<sup>94</sup> Table 4 provides a test of our claim that public employment is an EL strategy that plays just this role in the developing world. We first use the World Values Survey to estimate a model of support for imports as a function of total public employment, a set of individual-level control variables, and country and year fixed effects to capture unobserved factors.<sup>95</sup> It is important to emphasize that we control for spending on social insurance benefits (that is, income transfers such as social security and unemployment) as a share of GDP to ensure that our public employment

<sup>94</sup> See Ehrlich 2010; Scheve and Slaughter 2001; O'Rourke and Sinnott 2001; Hays, Ehrlich, and Peinhardt 2005; Mayda and Rodrik 2005; and Rogowski 1987.

<sup>95</sup> Ideally we could use central government employment in these survey analyses, but the overlap of countries that report such disaggregated employment data and that are included in the World Values Survey is too small to permit that strategy. Therefore, we use the total public employment data instead. As more countries make disaggregated public employment data available, revisiting this analysis would be a fruitful exercise.

TABLE 4  
PUBLIC EMPLOYMENT'S EFFECT ON INDIVIDUAL-LEVEL SUPPORT FOR IMPORTS<sup>a</sup>

	<i>Full Sample</i>		<i>By Social Class</i>		
	<i>Baseline</i> 1	<i>Interaction</i> 2	<i>Lower</i> 3	<i>Middle</i> 4	<i>Upper</i> 5
Total Public	0.03*	0.01	0.03*	0.03**	0.01
Employment	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Social Spending	0.03	0.03	0.01	0.04	0.02
(% GDP)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)
Lower Class	0.01	-0.65			
	(0.17)	(0.41)			
Public Employment		0.01**			
X Lower Class		(0.01)			
Middle Class	0.11	-0.69***			
	(0.10)	(0.25)			
Public Employment		0.02***			
X Middle Class		(0.01)			
Married?	-0.12	-0.12	-0.18*	-0.12	-0.16
	(0.12)	(0.12)	(0.11)	(0.14)	(0.12)
No. Children	-0.06	-0.06	-0.08**	-0.07*	0.02
	(0.04)	(0.04)	(0.04)	(0.04)	(0.08)
R's Age	-0.14*	-0.15**	-0.02	-0.16*	-0.20**
	(0.08)	(0.08)	(0.14)	(0.08)	(0.08)
Female	0.01	0.01	-0.21**	0.01	0.17
	(0.09)	(0.09)	(0.10)	(0.09)	(0.19)
Chief Wage Earner	0.19**	0.19**	-0.03	0.23***	0.29**
Employed	(0.08)	(0.08)	(0.14)	(0.08)	(0.14)
Education Level	0.36***	0.35***	0.27***	0.41***	0.16
	(0.08)	(0.08)	(0.10)	(0.09)	(0.14)
Constant	-2.24***	-1.57***	-1.83***	-2.43***	-1.24**
	(0.49)	(0.51)	(0.52)	(0.52)	(0.57)
No. Observations	11385	11385	1393	8217	1775
No. Countries	15	15	15	15	15
% Correctly Predicted	0.62	0.62	0.68	0.62	0.57
Adjusted Count R <sup>2</sup>	0.09	0.09	-0.02	0.13	-0.01

\*\*\* p<0.01; \*\* p<0.05; \* p<0.10 (two-tailed tests); standard errors reported in parentheses are corrected for clustering by country

<sup>a</sup>Dependent variable is from the question in the 2005–7 wave of the World Values Survey that asked, “Do you think it is better if: (a) Goods made in other countries can be imported and sold here if people want to buy them OR (b) There should be stricter limits on selling foreign goods here, to protect the jobs of people in this country.” Those choosing (a) are coded 1, while those choosing (b) are coded 0.

variable is what supports embedded liberalism in developing countries and not, as is the case in OECD countries, income transfers.<sup>96</sup>

Of course, not all citizens should be equally responsive to compensation. Ehrlich finds that, in the United States, those who expect to be most harmed by trade support compensation.<sup>97</sup> In LDCs, we expect that privileged urban formal-sector labor groups that tend to be part of the middle class are threatened by the job insecurity wrought by increased liberalization, and they tend to be the most vocal. Therefore, in Table 4, we include an interaction of public employment with social class to allow public employment's effect on support for trade to be conditioned by the respondent's social class. For an alternate specification, we also divide the sample by social class and estimate the model separately. The dependent variable is based on a question asking respondents if they favored increasing imports into the economy, with favorable responses coded 1 and opposition coded 0. We estimate a logit model of the following form:

$$\text{IncreaseImports}_{i,j} = \beta_0 + \beta_1 \text{PublicEmployment}_j + \mathbf{X}_{ij} \alpha + \varepsilon_{ij}, \quad (2)$$

where the unit of observation is respondent  $i$  in country  $j$ ,  $\beta_0$ ,  $\beta_1$ , and  $\alpha$  are coefficients to be estimated,  $\mathbf{X}$  is a vector of individual-level and country-level covariates, and  $\varepsilon_{ij}$  is the stochastic component. The standard errors are corrected for clustering by country.<sup>98</sup>

The results are striking: the baseline model makes clear that higher levels of public employment are positively associated with support for imports, even when we control for individual-level factors such as the education level of the respondent, and whether the chief wage earner in the family is currently employed. Nor is the finding simply a function of greater social spending by the government; controlling for social spending as a share of GDP does not alter our results, and, in fact, Table 4 makes clear that, at least for this sample, spending on social insurance has negligible effects on support for imports once we control for public employment.

The results grow even more interesting once we assess whether support for imports varies by socioeconomic class. We do this in two different ways. First, we interact our social class indicators with public employment, leaving upper-class respondents as the reference category. Accordingly, the uninteracted public employment variable provides its

<sup>96</sup> Hays, Ehrlich, and Peinhardt 2005.

<sup>97</sup> Ehrlich 2010.

<sup>98</sup> We obtain the same results if we estimate this model in a multilevel framework with random effects. See Table A11 in the supplementary material; Nooruddin and Rudra 2014.

effect for the upper class. The results in column 2 show that, as hypothesized, public employment has no effect on upper-class attitudes (that is, the uninteracted coefficient is not statistically significant). But for the lower- and middle-class respondents in our sample, the level of public employment plays a vital role in relieving their concerns about increased import competition, with both interaction terms positive and statistically significant. Calculating the conditional coefficients reveals that the estimated effect of public employment for the lower class is positive and statistically significant ( $\beta = 0.02$ ; s.e. = 0.01;  $p = 0.07$ ) and that the effect is even larger for the middle class ( $\beta = 0.03$ ; s.e. = 0.01;  $p = 0.04$ ), just as theorized. Recall further that public employment's effect is statistically insignificant for upper-class respondents. In addition, note that the baseline effect of membership in the lower and middle class, provided by the uninteracted social-class indicators, is negative and statistically significant, which tells us that members of those groups are significantly less sanguine about trade openness than their upper-class counterparts. It is precisely these groups that governments seek to target through increased public employment.

Models 3–5 in Table 4 further accentuate the nature of this developing world EL compact. Here we separate the sample by class, which is the statistical equivalent of interacting all the variables by the class indicators. As we would expect, given the interactive results in model 2, higher levels of public employment make lower- and middle-class respondents more likely to favor imports (models 3 and 4), but the effect is statistically indistinguishable from zero for the upper class (model 5). Importantly, social spending, the policy lever of choice in the OECD EL compact, is *never* statistically significant in any of these models. These disaggregated models also reveal some other noteworthy patterns. For instance, higher education is positively correlated with more free trade attitudes *only* for the lower and middle classes. These groups are also clearly more worried about their families. Married respondents who are lower class are less supportive of free trade, but marital status does not matter for better-off respondents. Likewise, having more children reduces one's support for trade if one is in the lower or middle class, but has no effect on the upper class. Lower-class women evince concerns about free trade, but there are no gender differences among the middle and upper classes. Taken together these results paint a vivid picture supporting our contention that free trade increases insecurities, especially for those who are lower down the socioeconomic ladder. These findings are robust to different model specifications, including a multilevel model in which we include country-level random effects.

Given the increased insecurities among the lower classes, the substantive size of the pacifying effects of public employment is noteworthy. As stated above, upper-class citizens, who are the least likely to be direct beneficiaries of this type of compensation, are unresponsive, but their lower- and middle-class counterparts are anything but. Consider the change in predicted probability of favoring increased imports as one changes the level of public employment of a country in which a hypothetical respondent resides. If we increase the level of public employment from the 10th (0.18) to the 90th percentile value (0.6), a member of the middle class's predicted probability of favoring imports increases by 0.3!<sup>99</sup> As predicted, the effect is smaller, though still large, for members of the lower class, whose probability of favoring imports increases by 0.25. But if one is a member of the upper class, the probability of favoring imports given the same increase in public employment increases by just 0.11. Overall, we think this is persuasive evidence that the EL compact derived via public employment increases public confidence and support for international market expansion and that this effect is significantly larger among the middle class in developing countries.<sup>100</sup>

The evidence that increases in public employment bolster support for free trade, especially among the middle classes, provides additional support for the causal logic advanced in this article. It raises, however, the specter of possible endogeneity: could it be that countries with higher public employment have more supportive publics and therefore higher levels of trade, rather than the other way around? We dismiss this concern for two reasons. First, our principal independent variable is the realized level of trade openness rather than the decision to liberalize. While the latter might plausibly have a public opinion basis, decades of economic research make clear that a country's level of trade openness is largely a function of its level of economic development, market size, natural resource wealth, geographic location, and proximity to external markets.<sup>101</sup> Just as importantly, exogenous pressure from the international financial institutions (IFIs) and the Washington Consensus played a more important role in shaping the timing and extent of

<sup>99</sup> Predicted probabilities are calculated using estimates from model 2 in Table 4, holding all covariates at their modal or mean values as appropriate. Obviously, we get the same results if we use models 3–5 instead.

<sup>100</sup> The compensating effects of public employment are also suggested by an analysis of the number of riots and antigovernment demonstrations that occur in a country. Public employment is found to reduce the number of riots and antigovernment demonstrations in a country (see Table A12 in the supplementary material; Nooruddin and Rudra 2014).

<sup>101</sup> See Amoroso, Chiquiar, and Ramos-Francia 2011; Krugman 1983; Krugman 1995; Martínez-Zarzoso and Márquez-Ramos 2005; and Matthee and Naudé 2008.



liberalization reforms in the developing world than did any groundswell of domestic support.<sup>102</sup>

#### IMPLICATIONS: THE UNIQUE NATURE OF EL IN THE DEVELOPING WORLD

The analysis thus far has found that the effect of trade openness varies by the type of state employment (that is, SOE versus civil service) and that public employment can bolster support for trade. For privileged labor groups, this is mixed news. On the one hand, the retrenchment of the SOEs is bad news, since the middle class was the primary beneficiary of SOE employment. On the other hand, to the extent that SOE jobs were replaced by opportunities to work in civilian government, the middle class could be protected still. Recall that studies show that a substantial degree of reabsorption often occurs in the SOE public sector after retrenchment.<sup>103</sup>

Do our findings that a historically contingent version of the EL compact exists in developing countries suggest that all is well and that LDCs are on a desirable path to social and economic progress? We hesitate here simply because we cannot ignore the widespread concern among development scholars that the great bulk of public-sector jobs tends to be geared toward privileged labor; and while LDC governments do set up public works projects postliberalization, scholars question whether they really help the poor.

We conducted some preliminary data analysis to explore the conjecture that the current EL compact is not effectively protecting the great bulk of the population in developing countries, that is, the urban and rural poor.<sup>104</sup> Our results confirm that public employment in the developing world does not appear to be helping the poor in a significant way. It is also worth emphasizing that the total government spending variable is not significant in our two poverty models; this suggests that governments are not necessarily investing in other propoor programs that might compensate for the middle-class bias of public employment.

<sup>102</sup> Boockmann and Dreher 2003; Edwards 1997; Joyce and Noy 2008; Vreeland 2003.

<sup>103</sup> Lindauer and Nunberg 1996.

<sup>104</sup> See Table A13 in the supplementary material; Nooruddin and Rudra 2014. The small available sample size makes any results from this analysis suggestive at best, but the results are still interesting. Lacking disaggregated civilian central government employment data to isolate the effects of trade liberalization on public works projects, we used poverty indices to assess whether the EL compact in developing countries is adequately compensating the poor. The intuition is that if public employment is being targeted to the poor, then increases in such employment postopenness should reduce overall levels of poverty. We focused on two indicators of poverty that are commonly used in the literature: immunization rates of children against DPT and infant mortality rates.

Our interpretation of these results based on theoretical priors is that while the poor may not drive the political agenda, politicians must still make some effort to compensate them for globalization-induced risks. Otherwise, ignoring them altogether is likely to cause destabilizing riots and demonstrations. Politicians therefore initiate, with great fanfare, public works projects portrayed as tangible evidence of their commitment to the poor.<sup>105</sup> The problem is that such schemes tend to be temporary and often result in leakages to groups (just) above the poverty line because of poor design; in addition, temporary workers are frequently targeted when governments are under pressure to reduce public service employment.<sup>106</sup> Ultimately, a strategy that emphasizes temporary public works projects aimed at lowering the risk perceptions of the poor and maintaining stability can at best be a short-term solution since it ignores the deeper needs of the vast majority of the citizenry.

### CONCLUSION

Developing country governments face a formidable challenge: they must pursue openness and reduce government spending to accommodate the demands of exporters, foreign investors, international capital, and even consumers, who welcome the consumer goods and lower prices and other advantages that accompany openness.<sup>107</sup> This is despite the lessons of the OECD experience, which suggest they must build affordable and equitable safety nets that protect citizens from market fluctuations in order to maintain domestic stability and build support for openness. If existing research is to be believed, LDCs appear to be failing on this count, increasing their exposure to international competition while reducing government social protections.

We demonstrate in this article that this conventional understanding of developing countries' encounters with globalization is overly simplistic and potentially misleading. We show instead how developing countries have sought to build support for globalization. And to address greater economic insecurity among privileged workers, we build

<sup>105</sup> Indira Gandhi's *garibi hatao* (remove poverty) campaign that led to her election in 1971 was reinitiated by the Congress Party in the run-up to the 2009 elections. A centerpiece of the current government's efforts is the Mahatma Gandhi National Rural Employment Guarantee Scheme (NREGS), which commits to providing one hundred days of paid employment to rural unskilled labor.

<sup>106</sup> See Seekings 2006; Ravallion 1991; Kohli 2012; Marinakis 1994; and Lindauer and Nunberg 1996. Devesh Kapur and Arvind Subramanian summarize the performance of such schemes in India with the trenchant observation that "policies pursued on behalf of the poor were not just macroeconomically ruinous and microeconomically inefficient, they also ended up being more anti- than pro-poor." See Kapur and Subramanian 2009.

<sup>107</sup> Drunberg 1998.

on Rodrik and show how LDC governments use other techniques more suited to the histories and politics of these countries, that is, employment generation by the state. Other income groups are placated—at least temporarily—by lower risk perceptions and prospective improvements in their economic situation. Increasing the sense of job security by expanding public sector jobs is a compensation strategy practiced throughout the developing world in response to globalization pressures, including in the world's poorest countries that have weak, or non-existent, social insurance (that is, pension) schemes. This strategy, in turn, plays a key role in moderating anxieties about the negative impacts of trade. Put simply, as governments maintain their commitment to familiar compensation strategies amid expanding markets, citizens of developing countries have a sense of continuity amid change.

This argument is entirely consistent with Ruggie's proposition that EL strategies are historically contingent: in the postwar European order, "the legitimate role of the state in managing economic relations at home and abroad [is] a vision that grew out of earlier experiences."<sup>108</sup> Specifically, we propose that developing country governments increase public employment in the face of trade openness, and they concentrate these increases in the area of civilian government and administration, which is less politically controversial. Contrariwise, employment in state-owned enterprises, which has been severely criticized for reducing competitiveness and inefficiency, particularly by business sectors and IFIs such as the IMF and World Bank, is more subject to the downward pressures of increased openness. Statistical analysis of cross-national time-series data from a sample of developing countries supports these arguments.

Our argument, thus confirmed, might be a source of inspiration for free traders because of the support for openness that EL compacts can engender. However, we also urge an element of caution: the EL compact in the LDCs we identify here may not be sustainable, as compared with the EL compacts in the OECD nations. We take seriously scholars who charge that the public sectors in most LDCs are already too large, bloated, and inefficient.<sup>109</sup> The trends that we observe in this analysis thus cannot be dismissed as being part of the normal process of state maturation. We are also sensitive to studies arguing that very rarely are permanent public sector employees drawn from the poorest segments of the population. The implications are that the current EL compact in LDCs is inefficient and may thwart both long-run economic progress and "equitable economic liberalization" (à la Ruggie), since the state

<sup>108</sup> Ruggie 2008, 3.

<sup>109</sup> See, for example, Rama 1999; Krueger 1990; and Gelb, Knight, and Sabot 1991.

continues to expand and large groups of losers of openness (urban informal workers, rural poor) do not benefit sufficiently.

In the short run, governments might be able to ignore the actual needs of the poor by manipulating their perceptions of risk alongside reforms promoting economic openness. In the long run, however, it is doubtful that the poor will remain complacent as trade liberalization deepens and exacerbates risks and uncertainty across sectors. Perceptions of growing inequality and dissatisfaction of the poor are bound to evolve in tandem. To continue with the current EL compact, then, and maintain support for openness, governments will have to expand the more coveted public sector jobs to include the poor and/or ensure that public works programs are well designed. Yet there is a limit to the size of the government, and the economic disadvantages of a public sector that is overly large and inefficient are obvious. The long-term costs and challenges of the current EL compact might thus outweigh its immediate benefits.

#### SUPPLEMENTARY MATERIAL

Supplementary material for this article can be found at <http://dx.doi.org.10.1017/S0043887114000203>.

#### REFERENCES

- Acemoglu, Daron. 2003. "Patterns of Skill Premia." *Review of Economic Studies* 70, no. 2 (April): 199–230.
- Agarwala, Rina. 2012. *Dignifying Discontent: Informal Workers and the State in India*. New York, N.Y.: Cambridge University Press.
- Alesina, Alberto, Reza Baqir, and William Easterly. 2000. "Redistributive Public Employment." *Journal of Urban Economics* 48, no. 2 (September): 219–41.
- Allan, James P., and Lyle Scruggs. 2004. "Political Partisanship and Welfare State Reform in Advanced Industrial Societies." *American Journal of Political Science* 48, no. 3: 496–512.
- Allison, Paul D. 1999. *Fixed Effects Regression Models*. Thousand Oaks, Calif.: Sage Publications.
- Amoroso, Nicolás, Daniel Chiquiar, and Manuel Ramos-Francia. 2011. "Technology and Endowments as Determinants of Comparative Advantage: Evidence from Mexico." *North American Journal of Economics and Finance* 22, no. 2: 164–96.
- Assaad, Ragui. 1997. "The Effects of Public Sector Hiring and Compensation Policies on the Egyptian Labor Market." *World Bank Economic Review* 11, no. 1: 85–118.
- Avelino, George, David S. Brown, and Wendy Hunter. 2005. "The Effects of Capital Mobility, Trade Openness, and Democracy on Social Spending in Latin America." *American Journal of Political Science* 49, no. 3: 625–41.
- Baker, Andy. 2003. "Why Is Trade Reform So Popular in Latin America? A Consumption-Based Theory of Trade Policy Preferences." *World Politics* 55, no. 3 (April): 423–55.

- Bardhan, Pranab. 2006. "Globalization and Rural Poverty." *World Development* 34, no. 8: 1393–1404.
- Bates, Robert H., Philip Brock, and Jill Tiefenthaler. 1991. "Risk and Trade Regimes: Another Exploration." *International Organization* 45, no. 1: 1–18.
- Boockmann, Bernhard, and Axel Dreher. 2003. "The Contribution of the IMF and the World Bank to Economic Freedom." *European Journal of Political Economy* 19, no. 3: 633–49.
- Brooks, Clem, and Jeff Manza. 2006. "Why Do Welfare States Persist?" *Journal of Politics* 68, no. 4: 816–27.
- Brooks, Sarah M. 2008. *Social Protection and the Market in Latin America: The Transformation of Social Security Institutions*. New York, N.Y.: Cambridge University Press.
- Brooks, Sarah M., and Marcus J. Kurtz. 2007. "Capital, Trade, and the Political Economies of Reform." *American Journal of Political Science* 51, no. 4: 703–20.
- Cao, Xun. 2009. "Networks of Intergovernmental Organizations and Convergence in Domestic Economic Policies." *International Studies Quarterly* 53, no. 4: 1095–1130.
- Cao, Xun, Aseem Prakash, and Michael D. Ward. 2007. "Protecting Jobs in the Age of Globalization: Examining the Relative Salience of Social Welfare and Industrial Subsidies in OECD Countries." *International Studies Quarterly* 51, no. 2: 301–27.
- Carr, Marilyn, and Martha Alter Chen. 2001. "Globalization and the Informal Sector: How Global Trade and Investment Impact on the Working Poor." ILO Task Force on the Informal Economy Background Paper. Geneva, Switzerland: International Labour Office.
- Chandra, Kanchan. 2004. *Why Ethnic Parties Succeed*. Cambridge, UK: Cambridge University Press.
- . 2007. "Counting Heads: A Theory of Voter and Elite Behavior in Patronage Democracies." In Herbert Kitschelt and Steven I. Wilkinson, eds., *Patrons, Clients, and Policies: Patterns of Democratic Accountability and Political Competition*. Cambridge, UK: Cambridge University Press.
- Chew, David C. E. 1992. *Civil Service Pay in South Asia*. Geneva, Switzerland: International Labour Office.
- Chibber, Vivek. 2003. *Locked in Place: State-Building and Late Industrialization in India*. Princeton, N.J.: Princeton University Press.
- Chinn, Menzie D., and Hiro Ito. 2006. "What Matters for Financial Development? Capital Controls, Institutions, and Interactions." *Journal of Development Economics* 81, no. 1: 163–92.
- Cramer, Brian, and Robert Kaufman. 2011. "Views of Economic Inequality in Latin America." *Comparative Political Studies* 44, no. 9: 1206–37.
- Currie, Janet, and Ann Harrison. 2007. "Sharing the Costs: The Impact of Trade Reform on Capital and Labor in Morocco." *Journal of Labor Economics* 15, no. 3: S44–S71.
- Denoon, David. 1998. "Cycles in Indian Economic Liberalization." *Comparative Politics* 31, no. 1: 43–60.
- Devey, Richard, Caroline Skinner, and Imraan Valodia. 2003. "The Informal Economy." In *Human Resources Development Review 2003: Education, Employment, and Skills in South Africa*. HSRC, Cape Town, South Africa: HSRC Press.



- Dollar, David, and Aart Kraay. 2002. "Growth Is Good for the Poor." *Journal of Economic Growth* 7, no. 3: 195–225.
- Drunberg, Isabelle. 1998. "Double Jeopardy, Globalization, Liberalization, and the Fiscal Squeeze." *World Development* 26, no. 4: 591–605.
- Edwards, Sebastian. 1997. "Trade Liberalization Reforms and the World Bank." *American Economic Review* 94, no. 2: 59–64.
- Ehrlich, Sean D. 2010. "Who Supports Compensation? Individual Preferences for Trade-Related Unemployment Insurance." *Business and Politics* 12, no. 1: 1–22.
- Garrett, Geoffrey. 2001. "Globalization and Government Spending around the World." *Studies in Comparative International Development* 35, no. 1: 3–29.
- Geithner, Timothy. 2007. "Developments in the Global Economy and Implications for the United States." Speech to the Council of Foreign Relations, January 11. At <http://www.cfr.org/economics/c-peter-mccolough-series-international-economics-developments-global-economy-implications-united-states-rush-transcript-federal-news-service/p12433>, accessed June 5, 2012.
- Gelb, A., J. B. Knight, and R. H. Sabot. 1991. "Public Sector Employment, Rent Seeking and Economic Growth." *Economic Journal* 101, no. 408: 1186–99.
- Government of India. 2009. *Census of Central Government Employees*. New Delhi, India: Ministry of Labor and Employment, Survey and Study Division.
- Greenhill, Kelly, Layna Mosley, and Aseem Prakash. 2009. "Trade-Based Diffusion of Labor Rights: A Panel Study, 1986–2002." *American Political Science Review* 103, no. 4: 669–90.
- Gregory, Peter. 1996. "Diagnosis with Limited Information: Government Pay and Employment Reform in Somalia." In Barbara Nunberg and David Lindauer, eds., *Rehabilitating Government: Pay and Employment Reform in Africa*. Washington, D.C.: World Bank.
- Grossman, Gene M., and Elhanan Helpman. 1994. "Protection for Sale." *American Economic Review* 84, no. 4: 833–50.
- Ha, Yong Chool. 2007. "Late Industrialization, the State, and Social Changes: The Emergence of Neofamilism in South Korea." *Comparative Political Studies* 40, no. 4: 363–82.
- Hall, Anthony L., and James O. Midgley. 2004. *Social Policy for Development*. London, UK: Sage Publications Ltd.
- Hansson, Åsa. 2007. "Free Factor Mobility and Fiscal Competition: Can the National Welfare State Survive in a 'United Europe'?" In Krister Andersson, Eva Eberhartinger, and Lars Oxelheim, eds., *National Tax Policy in Europe*. Berlin, Germany: Springer Berlin Heidelberg.
- Hasan, Arif. 2002. "The Changing Nature of the Informal Sector in Karachi as a Result of Global Restructuring and Liberalization." *Environment and Urbanization* 14, no. 1: 69–78.
- Hays, Jude C., Sean D. Ehrlich, and Clint Peinhardt. 2005. "Government Spending and Public Support for Trade in the OECD: An Empirical Test of the Embedded Liberalism Thesis." *International Organization* 59, no. 2: 473–94.
- Heller, Peter S., and Alan A. Tait. 1983. "Government Employment and Pay: Some International Comparisons." IMF Occasional Paper no. 24. Washington, D.C.: International Monetary Fund.
- Herring, Ronald, and Rex Edwards. 1983. "Guaranteeing Employment to the Rural Poor: Social Functions and Class Interests in the Employment Guarantee Scheme in Western India." *World Development* 11, no. 7: 575–92.

- Honaker, James, and Gary King. 2010. "What to Do about Missing Values in Time Series Cross Section Data: An Alternative Algorithm for Multiple Imputation." *American Journal of Political Science* 54, no. 2: 561–81.
- Inter-American Development Bank. 1997. *Economic and Social Progress in Latin America: 1997 Report*. Baltimore, Md.: John Hopkins University Press.
- International Labour Organization. 2001. *World Labour Report 2000: Income Security and Social Protection in a Changing World*. Geneva, Switzerland: International Labour Office.
- International Monetary Fund. 2001. *Government Finance Statistics Manual*. Washington, D.C.: International Monetary Fund.
- Joyce, Joseph P., and Ilan Noy. 2008. "The IMF and the Liberalization of Capital Flows." *Review of International Economics* 16, no. 3: 413–30.
- Kapur, Devesh, and Arvind Subramanian. 2009. "Rahul's role? *Garibi hatao*." *Business Standard Online*. May 23.
- Kaufman, Robert R., and Alex Segura-Ubierno. 2001. "Globalization, Domestic Politics, and Social Spending in Latin America: A Time-Series Cross-Section Analysis, 1973–1997." *World Politics* 53, no. 4 (July): 553–87.
- Kohli, Atul. 2004. *State-Directed Development: Political Power and Industrialization in the Global Periphery*. New York, N.Y.: Cambridge University Press.
- . 2010. *Democracy and Development in India: From Socialism to Pro-Business*. New York, N.Y.: Oxford University Press.
- . 2012. *Poverty amid Plenty in the New India: Politics, Economics and Inequality*. New York, N.Y.: Cambridge University Press.
- Kong, Tat Yan. 2006. "Globalization and Labour Market Reform: Patterns of Response in Northeast Asia." *British Journal of Political Science* 36, no. 2: 359–83.
- Korpi, Walter, and Joakim Palme. 2003. "New Politics and Class Politics in the Context of Austerity and Globalization: Welfare State Regress in 18 Countries, 1975–95." *American Political Science Review* 97, no. 3: 425–46.
- Krebs, Tom, Pravin Krishna, and William Maloney. 2010. "Trade Policy, Income Risk, and Welfare." *Review of Economics and Statistics* 92, no. 3: 467–81.
- Krueger, Anne O. 1990. "Government Failures in Development." *Journal of Economic Perspectives* 4, no. 3: 9–23.
- Krugman, Paul. 1983. "New Theories of Trade among Industrial Countries." *American Economic Review* 73, no. 2: 343–47.
- . 1995. "Growing World Trade: Causes and Consequences." *Brookings Papers on Economic Activity* 1995, no. 1: 327–62.
- Kurtz, Marcus J., and Sarah M. Brooks. 2008. "Embedding Neoliberal Reform in Latin America." *World Politics* 60, no. 2 (January): 231–80.
- Kwon, Huck-Ju. 1997. "Beyond European Welfare Regimes: Comparative Perspectives on East Asian Welfare Systems." *Journal of Social Policy* 26, no. 4: 467–84.
- Lall, Sanjaya. 1998. "Technological Capabilities in Emerging Asia." *Oxford Development Studies* 26, no. 2: 213–43.
- Levinsohn, James. 1999. "Employment Responses to International Liberalization in Chile." *Journal of International Economics* 47, no. 2: 321–44.
- Lindauer, David, and Barbara Nunberg, eds. 1996. *Rehabilitating Government: Pay and Employment Reform in Africa*. Aldershot, UK, and Brookfield, US: Avebury Press.
- Long, J. S., and L. Ervin. 2000. "Using Heteroscedasticity-Consistent Standard Errors in the Linear Regression Model." *American Statistician* 54, no. 3: 217–24.
- MacKuen, Michael B., Robert S. Erikson, and James A. Stimson. 1992. "Peasants

- or Bankers? The American Electorate and the U.S. Economy." *American Political Science Review* 86, no. 3: 597–611.
- Marinakís, Andrés E. 1994. "Public Sector Employment in Developing Countries: An Overview of Past and Present Trends." *International Journal of Public Sector Management* 7, no. 2: 50–68.
- Martínez-Zarzoso, Immaculada, and Laura Márquez-Ramos. 2005. "Does Technology Foster Trade? Empirical Evidence for Developed and Developing Countries." *Atlantic Economic Journal* 33, no. 1: 55–69.
- Matthee, Marianne, and Wim Naudé. 2008. "The Determinants of Regional Manufactured Exports from a Developing Country." *International Regional Science Review* 31, no. 4: 343–58.
- Mayda, Anna Maria, and Dani Rodrik. 2005. "Why Are Some People (and Countries) More Protectionist Than Others?" *European Economic Review* 49, no. 6: 1393–1430.
- McGuire, James W. 2010. *Wealth, Health, and Democracy in East Asia and Latin America*. New York, N.Y.: Cambridge University Press.
- Mesa-Lago, Carmelo. 1989. *Ascent to Bankruptcy: Financing Social Security in Latin America*. Pittsburgh, Pa.: University of Pittsburgh Press.
- Mosley, Layna. 2003. *Global Capital and National Governments*. New York, N.Y.: Cambridge University Press.
- Mulligan, Casey B., Ricard Gil, and Xavier Sala-i-Martin. 2004. "Do Democracies Have Different Public Policies Than Nondemocracies?" *Journal of Economic Perspectives* 18, no. 1: 51–74.
- Nelson, Joan. 1991. "Organized Labor, Politics, and Labor Market Flexibility in Developing Countries." *World Bank Research Observer* 6, no. 1: 37–56.
- Nooruddin, Irfan, and Nita Rudra. 2014. Supplementary material. At <http://dx.doi.org.10.1017/S0043887114000203>.
- Nooruddin, Irfan, and Joel W. Simmons. 2009. "Openness, Uncertainty, and Social Spending: Implications for the Globalization–Welfare State Debate." *International Studies Quarterly* 53, no. 4: 841–66.
- O'Rourke, Kevin H. and Richard Sinnott. 2002. "The Determinants of Individual Trade Policy Preferences: International Survey Evidence." In Susan M. Collins and Dani Rodrik, eds., *Brookings Trade Forum: 2001*. Washington, D.C.: Brookings Institution Press.
- Pitruzzello, Salvatore. 2004. "Trade Globalization, Economic Performance, and Social Protection: Nineteenth-Century British Laissez-Faire and Post-World War II U.S.-Embedded Liberalism." *International Organization* 58, no. 4: 705–44.
- Polanyi, Karl. 1944. *The Great Transformation*. New York, N.Y.: Farrar and Rinehart Inc.
- Rama, Martin. 1994. "The Labor Market and Trade Reform in Manufacturing." In Michael Connolly and Jaime de Melo, eds., *Essays on the Effects of Protectionism on a Small Country: The Case of Uruguay*. Washington, D.C.: World Bank.
- . 1999. "Public Sector Downsizing: An Introduction." *World Bank Economic Review* 13, no. 1: 1–22.
- . 2003. "Globalization and the Labor Market." *World Bank Research Observer* 18, no. 2: 159–86.
- Rama, Martin, and Donna MacIsaac, 1999. "Earnings and Welfare after

- Downsizing: Central Bank Employees in Ecuador." *World Bank Economic Review* 13, no. 1: 89–116.
- Ravallion, Martin. 2008. "Bailing Out the World's Poorest." Policy Research Working Paper no. 4763. Washington, D.C.: World Bank.
- Reinhart, Carmen, and Kenneth Rogoff. 2004. "The Modern History of Exchange Rate Arrangements: A Reinterpretation." *Quarterly Journal of Economics* 119, no. 1: 1–48.
- Reventa, Ana. 1997. "Employment and Wage Effects of Trade Liberalization: The Case of Mexican Manufacturing." *Journal of Labor Economics* 15, no. S3: S20–S43.
- Robinson, James, and Thierry Verdier. 2002. "The Political Economy of Clientelism." CEPR Working Paper no. 3205. London, UK: Centre for Economic Policy Research.
- Rodrik, Dani. 1997. *Has Globalization Gone Too Far?* Washington, D.C.: Institute for International Economics.
- . 1998. "Why Do More Open Economies Have Bigger Governments?" *Journal of Political Economy* 106, no. 5: 997–1032.
- . 2000. "What Drives Public Employment in Developing Countries?" *Review of Development Economics* 4, no. 3: 229–43.
- Rofman, Rafael, Leonardo Lucchetti, and Guzmán Ourens. 2006. "Pension Systems in Latin America: Concepts and Measurements of Coverage." Social Protection Discussion Paper no. 0616. Washington, D.C.: World Bank.
- Rogowski, Ronald. 1987. "Political Cleavages and Changing Exposure to Trade." *American Political Science Review* 81, no. 4: 1121–37.
- Ross, Michael L. 2006. "Is Democracy Good for the Poor?" *American Journal of Political Science* 50, no. 4: 860–74.
- Rudra, Nita. 2002. "Globalization and the Decline of the Welfare State in Less Developed Countries." *International Organization* 56, no. 2: 411–445.
- . 2008. *Globalization and the Race to the Bottom in Developing Countries: Who Really Gets Hurt?* New York, N.Y.: Cambridge University Press.
- Ruggie, John G. 1982. "International Regimes, Transactions, and Change: Embedded Liberalism in the Postwar Economic Order." *International Organization* 36, no. 2: 379–415.
- . 1994. "At Home Abroad, Abroad at Home: International Liberalization and Domestic Stability in the New World Economy." *Millennium: Journal of International Studies* 24, no. 3: 507–26.
- . 2002. "Trade, Sustainability and Global Governance." *Columbia Journal of Environmental Law* 27, no. 2: 297–308.
- . 2003. "Taking Embedded Liberalism Global: The Corporate Connection." In David Held and Mathias Koenig-Archibugi, eds., *Taming Globalization: Frontiers of Governance*. Cambridge, UK: Polity Press.
- . 2008. "Introduction: Embedding Global Markets." In John G. Ruggie, ed., *Embedding Global Markets: An Enduring Challenge*. London, UK: Ashgate Publishers.
- Sachs, Jeffrey D., and Andrew M. Warner. 1995. "Economic Reform and the Process of Global Integration." *Brookings Papers on Economic Activity* 1, no. 1: 1–95.
- Scheve, Kenneth F., and Matthew J. Slaughter. 2001. "What Determines Individual Trade-Policy Preferences?" *Journal of International Economics* 54, no. 2: 267–92.



- Schmidt, Sonke. 1995. "Social Security in Developing Countries: Basic Tenets and Fields of State Intervention." *International Social Work* 38, no. 1: 7–26.
- Seddon, Jessica, and Romain Wacziarg. 2001. "Trade Liberalization and Intersectoral Labor Movements." Manuscript, Stanford University.
- Seekings, Jeremy. 2006. "Employment Guarantee or Minimum Income? Workfare and Welfare in Developing Countries." *International Journal of Environment, Workplace, and Employment* 2, no. 1: 44–68.
- Segura-Ubierno, Alex. 2007. *The Political Economy of the Welfare State in Latin America: Globalization, Democracy, and Development*. Cambridge, UK: Cambridge University Press.
- Shepherd, Geoffrey. 2003. "Civil Service Reform in Developing Countries: Why Is It Going Badly?" Paper presented at the 11th International Corruption Conference, Seoul, Republic of Korea, May 25–28.
- Shirley, Mary, and John Nellis. 1991. *Public Enterprise Reform*. Washington, D.C.: World Bank.
- Singer, Matthew M. 2013. "What Goes Around Comes Around: Perceived Vulnerable Employment and Economic Voting in Developing Countries." *European Journal of Political Research* 52, no. 2: 143–63.
- Stallings, Barbara, and Wilson Peres. 2000. *Growth, Employment, and Equity: The Impact of the Economic Reforms in Latin America and the Caribbean*. Washington, D.C.: Brookings Institution Press.
- Subbarao, K. 2003. "Systemic Shocks and Social Protection: Role and Effectiveness of Public Works Programs." Social Protection Discussion Paper no. 0302. Washington, D.C.: World Bank.
- Teitelbaum, Emmanuel. 2010. "Mobilizing Restraint: Economic Reform and the Politics of Industrial Protest in South Asia." *World Politics* 62, no. 4 (October): 676–713.
- Vreeland, James R. 2003. *The IMF and Economic Development*. New York, N.Y.: Cambridge University Press.
- Walter, Stefanie. 2010. "Globalization and the Welfare State: Testing the Microfoundations of the Compensation Hypothesis." *International Studies Quarterly* 54, no. 2: 403–26.
- Weyland, Kurt. 1999. "Neoliberal Populism in Latin America and Eastern Europe." *Comparative Politics* 31, no. 4: 379–401.
- Wibbels, Erik. 2006. "Dependency Revisited: International Markets, Business Cycles, and Social Spending in the Developing World." *International Organization* 60, no. 2: 433–68.
- Wibbels, Erik, and John S. Ahlquist. 2011. "Development, Trade, and Social Insurance." *International Studies Quarterly* 55, no. 1: 125–49.
- Wibbels, Erik, and Moises Arce. 2003. "Globalization, Taxation, and Burden-Shifting in Latin America." *International Organization* 57, no. 1: 111–36.
- World Values Survey 1981–2008 Official Aggregate v.20090901, 2009. World Values Survey Association. Aggregate File Producer: ASEP/JDS, Madrid. At [www.worldvaluessurvey.org](http://www.worldvaluessurvey.org).