

# Do MNCs Exploit Foreign Workers?

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## **Abstract**

Do MNCs exploit foreign workers? To answer this question, we use several definitions of “exploitation.” Paying below-market wages is quite different from violating legal or ethical standards such as bans on forced labor. We also look at many dimensions of workers’ well-being: wages, human rights, workplace safety, and discrimination. Without controlling for worker education levels or firm size, multinationals pay a bit more than purely domestic employers. However, when controlling for observable differences across workers this gap shrinks and is largely erased. A separate strand of literature finds that countries with the largest increases in multinationals in their economy also tended to have a slightly larger decline in labor’s share of GDP. That is, individual MNCs pay more than similar domestic firms but a *multinational system of production* may simultaneously depress the overall share of income going to labor. Moreover, multinationals may affect home country wages by relocating to low wage countries or outsourcing labor-intensive aspects of their supply chains to lower wage countries. Some definitions of unethical or exploitative behavior look beyond market compensation and focus more on (violations of) human rights. Using this alternative definition, there is no consistent evidence that MNCs or their suppliers treat workers worse than their domestically-owned peers.

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*“To exploit someone is to take unfair advantage of them. It is to use another person’s vulnerability for one’s own benefit. Of course, benefiting from another’s vulnerability is not always morally wrong—we do not condemn a chess player for exploiting a weakness in his opponent’s defense, for instance. But some forms of advantage-taking do seem to be clearly wrong, and it is this normative sense of exploitation that is of primary interest...”*

-- Stanford Encyclopedia of Philosophy<sup>2</sup>

## **I. Introduction**

Do multinational corporations (MNCs) exploit foreign workers? If we assume the world is perfectly competitive and define exploitation as paying below the market wage, then MNCs do not exploit workers in poor nations. Yet many critics start with richer models of labor markets and regulation. Is it enough to avoid harming workers relative to possibly worse alternatives in order to dodge the label of “exploitation”?

Our definition of exploitation, taken from a standard source, naturally leads us to ask what it would mean to take “unfair advantage [of] another person’s vulnerability”. To answer this question, we identify three standard theories of exploitation: consequentialist, unfair-share, and deontological. A consequentialist definition of exploitation considers whether workers would be better off had they not been employed by an MNC. Similarly, we consider whether home country workers would be better off had MNCs not engaged in offshoring. Unfair-share exploitation occurs when profitable firms do not share profits with their employees. This approach also raises concerns about a system of production in which MNCs depress labor’s share of income. Finally,

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<sup>2</sup> <https://plato.stanford.edu/entries/exploitation/>

deontological and human rights approaches define exploitation as a violation of human rights, dignity, and fairness. These violations can hold regardless of what would have occurred otherwise. Examples includes child labor, forced overtime, unsafe conditions, discrimination and violence against women, etc. Under this definition, voluntary transactions can be exploitative even when they benefit workers compared to their outside option.

After an extensive review, we find that there is not enough evidence to draw firm conclusions across all three theories of exploitation for the role of multinationals in local labor markets. Thus, we use this survey to analyze whatever incomplete evidence is available and to set out an agenda for the future. We find almost no evidence of exploitation when it is defined as compensation below the market level. Multinational firms tend to offer workers slightly better wages and conditions than domestic firms. They generally also increase the demand for jobs in high-paying industries and occupations. At the very least, there is little to no evidence that they have negative effects on wages and conditions relative to domestic firms.

At the same time, there is strong evidence that offshoring by MNCs to low-income countries leads to lower wages and fewer jobs for low-skilled home-country workers performing routine tasks. However, import competition and technical change would likely have displaced many of these jobs even without offshoring.

There is little direct evidence for or against unfair-share arguments. One study shows that the wage premium offered by MNCs in Europe corresponds to rent-sharing rather than compensating employees for other attributes of their jobs. However, we are not aware of any such study in low-income countries. Shifting to the market level, there is suggestive evidence that the expansion of MNCs decreases labor's share of income.

Finally, there is evidence of deontological exploitation occurring at MNCs in poor countries. Examples include discrimination against women and migrant workers, suppression of the right to organize, and poor health and safety conditions. However, these conditions are also prevalent and, may be worse, at local firms in developing countries. Under the human rights definition of exploitation, this comparison does not exonerate violations by MNCs.

It would be foolish to generalize too broadly across countries. Both the multinational company's country of origin and host country influence compensation and other labor practices. For example, an MNC based in Germany or Sweden, where labor rights are relatively high, typically treats workers in host countries more favorably than an MNC based in China or India, where labor rights are relatively weak. For consumers, knowing that a multinational produced a product tells little about the living standards or human rights of the workers who made it. Sometimes nation of origin is a more valid signal. For example, few workplaces in Saudi Arabia or Kazakhstan respect core ILO agreements that those nations agreed to.<sup>3</sup>

Overall, these findings suggest that global supply chains are associated with low wages and poor working conditions for workers in low and middle-income countries regardless of the employer's ownership. Indeed, MNCs typically offer slight improvements relative to domestic firms. The perception of MNCs as particularly exploitative seems to arise from the assumption that these companies have a greater surplus that they could share with their workers, not from any evidence that MNCs treat workers *particularly* badly.

While policy and activism aimed at MNCs can improve working conditions, it is not necessarily the best approach. Policy and activism may be more effective with MNCs because they

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<sup>3</sup> ITUC has an index of poor labor rights, from a trade union perspective. <https://www.ituc-csi.org/ituc-global-rights-index-2018>

are larger, more salient to global consumers, and are subject to stricter standards than local firms in developing countries. Nonetheless, focusing on policies that aim to broadly increase labor productivity and improve the enforcement of labor standards in developing countries may have larger aggregate effects. In developed countries, policies that enable workers to better compete and cope with import competition and technological change (such as support for education and retraining programs) would probably be more effective than attempts to limit offshoring.

This survey proceeds as follows: First, in Section II we discuss economic and deontological definitions of exploitation. We then review the literature on how MNCs affect wages in Section III, both in developing nations and at home. In developing nations, we focus on whether MNCs provide a wage premium relative to domestic firms, while also considering effects of MNCs on the structure of the economy and government. In Section IV, we assess whether offshoring by MNCs harms home country workers, focusing on US evidence. Next, in Section V we assess whether MNCs individually and systemically depress the share of income going to labor. We then discuss whether MNCs exploit workers by violating their human rights in Section VI. Our conclusions are presented in Section VII.

## **II. Definitions of Exploitation**

We focus on three sets of theories of exploitation. Consequentialist arguments define exploitation as actions that make workers worse off than they would have been otherwise. In contrast, deontological arguments define exploitation as actions that violate principles of human rights, dignity, and fairness, which hold regardless of what would have occurred otherwise. We distinguish between two types of deontological arguments: fairness arguments require a firm to share its profits with its employees, while human rights arguments require employers to uphold

their employees' safety, dignity, and a minimum standard of economic well-being. The former depends on the employer and their ability to pay while the latter focuses on objective standards.

### *Consequentialist arguments*

In the language of philosophy, the neoclassical approach - which focuses on the outcomes of actions and transactions - uses consequentialist arguments to make a normative judgment. For example, an action is considered "good" if its consequence is an improvement in global welfare. Applying the consequentialist approach to questions of exploitation, neoclassical economists will typically judge a transaction between a worker and firm as "good" (hence non-exploitative) if it is a Pareto improvement; that is, both the worker and firm are better off.

A simple benchmark for exploitation would therefore be whether employees of MNCs fare better than they would have at their next best option. Perfect competition implies that labor supply decisions are made by perfectly informed workers with full agency. This implies that if a worker accepted an MNC job, then it was the best option available. By the consequentialist definition, this cannot be exploitation. However, as soon as we relax the strong assumptions of perfect competition and move beyond Pareto optimality as the ethical standard, there are additional senses in which exploitation becomes possible.

The theory of perfect competition assumes complete information, no transaction costs, no costs to switching jobs, and no market power by firms or employers. An economist measuring exploitation typically asks whether wages at MNC are lower than the market wage (equivalent to the employee's reservation wage), the wage paid at employers similar to MNCs, in terms of size and industry, or the worker's marginal revenue product (that is, how much the firm's revenue rises when hiring an additional worker). The latter corresponds to John Bates Clark's (1899) definition of exploitation.

The assumptions of perfect competition rule out these versions of exploitation because all agents are equally (in)vulnerable. All are perfectly informed and no one has market power that allows them to exploit another agent. Without specifying the strong assumptions of perfect competition, many economists assume MNCs cannot be exploitative or morally suspect because the jobs they offer are better than the alternatives for low-skilled workers in poor countries.

The strong assumption of perfect competition also implies that most labor standards do not help workers. For example, the theory of compensating differentials states that wage offers adjust for desirable and undesirable attributes of a job. With perfect information, workers are aware of all these attributes and may choose to accept more unpleasant or unsafe conditions for an implicit wage premium. This implies that workers lose more expected well-being due to lower base pay than they gain from a rule improving safety standards or overtime pay. However, such an argument also assumes that workers are not present-biased or optimistic when it comes to safety risks, that no family member pressures workers to accept the job, and so forth.

When we relax the theoretical assumption of perfect competition, and envision much more realistic labor market conditions, then information asymmetry, market power, and costs of switching jobs make exploitation of workers possible. When firms are monopsonists, such as in a “factory town,” or labor market frictions exist, wages can be lower than workers’ marginal revenue products. Beyond wages, workers may not be fully informed about safety conditions at their workplace, which may include risks of immediate injury, long-term exposure to carcinogens, and sexual harassment. Likewise, workers may be forced to perform labor beyond the scope of their contract, such as in the case of forced overtime. With labor market frictions, workers do not have as much of a credible threat to switch jobs in response to poor treatment or violations of the terms

of their employment. These market imperfections do exist, creating potential for exploitation by MNCs and domestic firms alike.

In theory, either MNCs or domestic firms could exploit workers more. On the one hand, MNCs are formal-sector firms that are subject to more domestic and international labor standards that guarantee basic conditions for workers. Market failures such as market power in product markets can raise MNCs ability to share rents with workers. On the other hand, MNCs may wield more labor market power than domestic firms as they are typically much larger firms, and MNC's importance to local economies may lead to preferential treatment and weaker enforcement of labor and other standards. The largest employer in China, for example, is Hon Hai Precision Industry (typically known as Foxconn), a Taiwanese company that is the main supplier for Apple.

Labor standards can limit exploitation of workers (and sometimes also benefit owners and/or consumers). For example, if managers are not well informed about safety risks, it is plausible that basic safety standards such as requiring a first aid kit (a common requirement MNCs impose on their suppliers) benefit both workers and owners. Likewise, informing workers about the risks of long-term exposure to carcinogens may not benefit owners, but would benefit workers while increasing overall efficiency.

Where social norms may penalize the first firm that implements an effective anti-sexual harassment policy, a requirement from MNC customers that all suppliers implement policies against sexual harassment can benefit workers. To the extent that employers pay workers a compensating difference for the risk of sexual harassment (or face higher turnover costs due to harassment), owners can also benefit (Hersch 2011). Finally, both firms and owners may dislike standards, such as limits on voluntary overtime and requirements for uncomfortable safety equipment. However, if workers have imperfect information or present bias related to safety and



health hazards such standards may benefit them. In addition, workers may gain collectively by limiting child labor or long hours, even if an individual family prefers more work at the going wage (Basu and Van 1998).

Assuming that multinationals are more subject to these types of labor standards than domestic firms it is *possible* the standards benefit workers at MNCs, both absolutely and relative to those at domestic firms. However, there is limited research on the costs and benefits of such standards, so it is difficult to draw strong conclusions from a consequentialist perspective.

The above discussion takes individual firms as the unit of analysis. At the same time, multinationals may change the structure of the economy or politics in ways that harms workers—what some have called “structural exploitation.” For example, multinationals may either increase local labor demand through vertical linkages or decrease it by competing with labor-intensive local firms. Other examples of potential structural exploitation include reducing labor’s bargaining power, lowering governments’ ability to tax capital and using political influence to support anti-democratic institutions. However, there are also arguments that MNCs may increase competitiveness, reduce cartel power, and promote more efficient government policies. While we address some arguments, there is not enough evidence for us to take a firm stand on whether such structural exploitation occurs and further discussion is beyond the scope of this chapter.

### ***Fairness***

Many observers consider that paying “better than the alternative” may still fall short of a fair wage. We define “unfair-share” economic exploitation as occurring when the worker is made better off by the MNC, but there remains something reasonably construed as “unfair” about the

transaction. For our definition of “reasonably construed as unfair”, we turn to the evidence from behavioral economics.

Evidence from behavioral economics suggests that humans value transactional fairness. The ultimatum game (Thaler and Camerer 2005) is perhaps the most widely-reproduced experiment in behavioral economics. In a typical ultimatum game, the experimenter gives the players \$100. The Proposer must make a single take-it-or-leave-it offer to the Responder of an amount  $Q$  between 0 and \$100. If the Responder accepts the offer, the Responder receives  $Q$  and the Proposer keeps  $\$100-Q$ . If the Responder declines the offer, they both get zero. Economic theory has a simple prediction: the Proposer offers one cent, which the Responder accepts. In a vast array of settings, Proposers typically offer 20%-50% of the pot. These offers are rational, as Responders frequently decline “unfair” offers that do not provide the Responder with a “sufficient” share of the surplus. In experiments in poor nations, Responders sometimes decline offers equal to several days’ wages (Steffen et al. 2011).<sup>4</sup> The evidence from these experiments suggests the vast majority of people around the world consider it morally wrong for one party (the Proposer) to exploit their advantage bequeathed by the game structure and capture the lion’s share of the surplus.

Applying this evidence to MNCs suggests that many perceive it is morally wrong for MNCs with high ability to pay not to share some of their surplus with workers. In other words, MNCs paying at or slightly above market wage is insufficient to conclude that they are not exploiting their workers in the sense of unfair sharing. At the same time, we do not know of any research on questions such as how profits from a research center in California (Apple) affects

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<sup>4</sup> Andersen, Steffen, Seda Ertac, Uri Gneezy, Moshe Hoffman, and John A. List. "Stakes matter in ultimatum games." *American Economic Review* 101, no. 7 (2011): 3427-39.

perceptions of the fair wage for assembly workers (at FoxConn) at a supplier in China or Vietnam.<sup>5,6</sup>

### ***Deontological or human rights approaches***

Kant and other philosophers posit that humans have basic human rights (Kant, *Groundwork of the Metaphysic of Morals* (1785)). Deontological, or human rights, arguments suggest it is unethical to benefit from the poverty of (or discrimination faced by) poor workers in poor nations. Instead, every worker is entitled to be treated with dignity. One common condition for dignity is that employers should pay workers enough to afford decent accommodation, food for their families, and education for their children, regardless of the wage employees are willing to work for.

The human rights approach also considers it unfair to pay a woman less than a similarly qualified man, regardless of differences in market wages. There is substantial evidence of large discrimination by gender and often ethnicity in many nations. More generally, the International Labor Organization (ILO) posits human rights in workplaces separate from whether the market transaction is voluntary. Child labor, forced labor, discrimination, and suppression of unions constitute violations of these rights. Almost all nations have signed treaties endorsing these rights. Many non-government organizations lobbying for worker rights use this human rights approach to defining exploitation.

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<sup>5</sup> We appreciate comments from the editors in making this point.

<sup>6</sup> Theories of procedural justice also posit that outcomes can be “unfair” or “unjust” on the basis of how they arose. For example, many people consider it fairer to react to an exogenous shock than to take the initiative and cause harm (Rabin 1993). Kahneman, Knetsch & Thaler (1986)’s seminal quasi-experiment found that people are more likely to judge layoffs and pay-cuts by an employer as unfair if they were undertaken in order to increase the employer’s profits: in particular, in order to hire cheaper alternative workers. These original Canadian findings have since been reproduced in several countries including the U.S. (Charness & Levine 2000; 2002) and Germany (Gerlach, Levine, Stephan & Struck, 2008).

In contrast to a consequentialist approach, a deontological approach will condemn a multinational which adequately compensates workers, yet has high rates of sexual harassment, or has many easily-preventable injuries, even if domestically-owned employers are treated worse. Thus, this approach suggests measuring the *absolute* performance of MNCs (compared to ILO agreements or to ethical standards), not just MNCs' performance relative to workers' alternatives.

### **III. MNC Effects on Wages**

A standard approach to the question, "Do MNCs exploit foreign workers?" is to compare how well MNCs pay relative to domestic firms in the host countries. Wage rates are one of the most important, and easiest to measure, factors in assessing employees' well-being. A large literature focuses on wages paid by MNCs. In most of these studies, wage is the dependent variable and the authors interpret a positive partial correlation with foreign ownership as evidence of a wage premium at multinationals. These studies may overestimate the effects of MNCs by not sufficiently controlling for unobservable worker characteristics, such as human capital, that influence hiring by MNCs (see Almeida 2007). On the other hand, it is unclear if it is always appropriate to control for employer characteristics such as size and industry. For example, large firms may pay above-market wages due to efficiency wage effects or rent sharing while certain sectors may also be associated with wage premiums. If the MNC wage premium is driven at least partially by locating in large and profitable sectors, thereby creating more opportunities for better paying jobs, it may make sense to credit MNCs for this benefit, even if a similarly positioned domestic firm would pay equivalent wages. A few studies have examined how wages change in firms as ownership shifts from domestic to foreign (or vice versa) or follow workers as they move

between domestic and foreign-owned firms. Such longitudinal designs provide more convincing evidence of a causal link between foreign ownership and higher wages.

In addition, the industry in which an MNC operates likely influences their wages. As Harrison and Scorse (2010) demonstrate, MNCs operating in Indonesia that were under pressure by anti-sweatshop activists in the 1990s, raised wages in the textile, apparel, and footwear sectors. These sectors were linked to high-profile retail brands, such as Nike, Adidas, and Reebok. At the same time, these wage gains did not carry over to other industries. For all of these reasons, making sweeping generalizations about MNCs and wages is difficult. Despite the large literature that examines MNC wage premiums, we focus primarily on the most robust studies that at a minimum are able to control for worker and/or firm characteristics.

### *MNC wages in developing countries*

When commentators discuss the impact of MNCs on foreign workers, they typically refer to MNCs based in OECD countries operating in lower and middle-income countries. Some of the first work on the MNC wage premium was done by Aitken, Harrison, and Lipsey (1996), who examine whether manufacturing FDI in Mexico, Venezuela, and the US is associated with higher wages. In their cross-sectional analysis, they find that a 10% increase in manufacturing FDI in Mexico and Venezuela corresponds to a 2.2% increase in production worker wages, and a 2.9% increase in non-production wages. In a time-series analysis that controls for firm-level size, capital intensity, and industrial composition, the foreign ownership wage premium persists, but is only about a third as large. The authors interpret these results as suggesting that FDI is associated with higher productivity in MNCs, some of which is passed on to workers in the form of higher wages.

Lipsey and Sjöholm (2004) use cross-sectional data to control for worker education along with firm size, location, industry and input mix to isolate the impact of MNC ownership on wages

in Indonesia. In the regression with the most controls, they find wage premiums of 12% for production workers and 22% for non-production workers, although this does not rule out the possibility of upward bias caused by unobservable characteristics. Their 2006 study uses Indonesian panel data from 1975-1995 to examine how changes in firm ownership, from domestic to MNC and vice versa, affect wages. While their panel findings are similar to their 2004 cross-section results, they find that plants that underwent a foreign takeover during the sample period paid 17% and 28% higher wages for production and non-production workers respectively, than plants that remained domestic. These effects are significantly larger than those of a domestic takeover. However, the authors note that these results are still subject to selectivity bias from time-varying unobservables that influence multinational takeovers.

Arnold and Javorcik (2009) attempt to overcome these endogeneity issues by combining comparing trends in Indonesian firms that become acquired by a multinational to trends in firms that have similar observable characteristics prior to the acquisition but are *not* acquired. (Economists call these methods propensity score matching with a difference-in-difference approach.) Using data from 1983-2011, they find that foreign takeovers result in subsequent increases in 41% higher wages after two years relative to the counterfactual they construct and that foreign privatizations led to 27% higher wages after two years. They also find significant increases in employment and investment and that foreign plants actually become less skill-intensive, inconsistent with the idea that takeovers displace low-skilled workers within the firm.

Martins and Esteves (2006) and Poole (2008) use matched worker and firm panel data for 1995-1999 to analyze the impact of foreign ownership on wages in Brazil. Like Earle and Telegdy (2007), Martins and Esteves (2006) use changes in firm ownership as a way to control

for unobserved firm-specific effects that could be correlated with wage premia.<sup>7</sup> They also follow workers who move to or leave foreign enterprises, to control for unobserved worker-specific effects. They find that workers moving from foreign to domestic firms typically take wage cuts when they move, while movers from domestic to foreign firms increase their pay. However, compared to the unconditional wage gaps of 50%, the wage premium associated with working for a foreign firm falls to between 3% and 7% once worker and firm characteristics are controlled for. Both Martins and Esteves (2006) and Poole (2008) conclude that their results support a small positive impact of foreign firms in the Brazilian labor market.

To summarize, there is varying robust evidence that the higher wages paid by multinationals in developing countries do in fact represent a premium. However, only one of the above studies provides a causal estimate, and only two studies follow the same enterprises over time using matched worker-employer data. The evidence is consistent with positive wage premia which drop to single digits once worker and firm characteristics can be controlled for.

### *MNC wages in developed countries*

The literature on MNC wages in developed countries faces similar identification challenges as in developing countries. Breau and Brown (2011) examine MNC ownership in the Canadian manufacturing sector in 1999 and 2001. They find that when controlling for worker and firm characteristics, foreign ownership results in a wage premium of 7%. Bircan (2011) examines the MNC wage premium in the Turkish manufacturing sector from 1993-2001 and uses a continuous instead of binary measurement of foreign ownership. She finds that for every 10% increase in

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<sup>7</sup> Of course, we want to control for unobserved differences in skill and working conditions, but not for unobserved differences in firm-specific rents that could be shared with workers. Firm-specific fixed effects are too crude a tool to disentangle these three sources of firm-specific differences.

foreign ownership at the firm level there is a corresponding 4% increase in non-production wages, but finds no premium for production workers.

Martins (2004) examines the MNC wage premium using matched employee-employer data from 1991-1999 in Portugal. Using OLS regressions at the firm level, he finds an average wage premium of 32% for MNC-owned firms. These statistically significant effects generally disappear when applying propensity score matching and the study finds negative wage effects of foreign acquisitions from a combined propensity score difference-in-difference approach similar to that used by Arnold and Javorcik (2009). However, Martins does not present balance tests to ensure the appropriateness of the matching procedure (Girma and Gorg 2007).

Girma and Gorg (2007) use a similar difference-in-difference approach coupled with propensity scores and examine the impact of foreign acquisition on the wages of workers in the UK food and electronics sectors from 1980-1994. They find that acquisitions by US MNCs led to wage increases of 13% for production workers and 8% for non-production workers, while acquisitions by EU MNCs didn't lead to any wage premiums at all. However, the authors point out that since they were unable to control for worker characteristics these wage premiums may be the result of "poaching" the best workers from domestic firms. Heyman et al (2007) also combine propensity score matching and difference in differences using data from 1996-2000 in Sweden. While they find that foreign ownership is associated with a 20% wage premium when using firm-level variables, they actually find a negative wage effect when using individual-worker fixed-effects.

The latest study, by Setzler and Tintelnot (2019) uses matched employee-employer data for the United States to examine the impact on wages of multinational employment. They find that when firm specific factors are not accounted for, the wage premium is at 25 percent. Moving



from a non-multinational to a multinational firm, after accounting for other factors, reduces the wage premium to 7 percent. Setzler and Tintelnot (2019) also use an instrumental variable approach inspired by Bartik to get at the possible endogeneity of foreign firm location.

Overall, the large gap between multinational and domestic appears to mostly be explained by industry and worker attributes. The most rigorous studies find that a premium from MNCs does persist in developing countries (to the extent that selectivity bias is successfully controlled for by propensity score matching) and recent studies get estimates ranging from zero to seven percent for developed countries.

While the above studies only focus on multinational affiliates, multinational entry may also affect wages and employment at the industry and local labor market levels. In theory, this could either benefit or harm workers in host countries. The addition of 100 MNC jobs in a local labor market most likely does not simply lead to a 100-person aggregate gain in employment. If the MNC competes with local firms, then these firms may contract and partially offset the jobs directly created by MNCs and lead to a net gain less of than 100 jobs; in extreme cases there may even be a net loss of jobs. However, the MNC may also lead to a disproportionate increase in jobs if, for example, they increase demand for intermediate inputs produced by local firms. In this case, the economy could gain more than 100 jobs in total. In general, it is ambiguous as to which effect dominates. Moreover, MNCs could either encourage their suppliers to pay higher wages to comply with labor standards or lead them to lower wages through pressure to keep costs down.

There are not many studies that address these factors. In Ethiopia, Abebe, McMillan and Serafinelli (2018) find some evidence of increased employment at domestic manufacturing firms in locations that experienced an FDI entry but no discernible impact on wages. On the other hand, Atkin Faber and Gonzalez-Navarro (2018) find that foreign retail entry in Mexico was associated

with a 3.9% reduction in the number of domestic retail establishments. This occurred along with a 4.4-5.1% reduction in profits for traditional retailers and a 5.9% decline in monthly income for traditional retail workers.<sup>8</sup> In the former context, the authors find strong linkages and knowledge transfer between local and domestic firms, while in the latter foreign and domestic firms compete against each other directly. These two papers are not an exhaustive treatment of labor market effects of MNCs; rather, they illustrate the potential for positive or negative effects of MNC entry on employees of local firms.

Most recently, Setzler and Tintelnot (2019) estimate what they describe as “indirect effects” of multinational firms in the United States. Using matched employer-employee data, they find that an expansion in the foreign multinational employment share in a commuting zone increases domestic employment, wages, and value-added. In particular, they estimate that these indirect effects account for two-thirds of the positive impact of foreign multinationals on local labor market outcomes, with most of the gains accruing to skilled workers.

#### **IV. The Impact of MNC Offshoring on Domestic Wages**

While we have discussed the wage and employment effects of MNCs in the host country where they locate production, we now turn to the effects of offshoring by MNCs on home-country workers. Media and politicians (on both sides of the aisle) have criticized companies that offshore routine manufacturing jobs to low-income countries. Such criticisms often assume offshoring substitutes American workers one-for-one with cheaper workers abroad. In this view, offshoring puts downward pressure on wages at home by threatening to replace workers with cheaper labor

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<sup>8</sup> These effects are offset by large but regressive gains in consumer surplus. The authors also note that these results are likely specific to retail FDI.

abroad. However economic theory suggests that the motive for offshoring, type of work, and destination of the offshored jobs will determine the a priori ambiguous effects of offshoring. While offshoring could substitute for home-country workers, it could also allow firms to expand, or simply stay in business, leading to higher wages and more jobs at home.

Given the mixed predictions of theory, we turn to the data. The literature we discuss is largely structural<sup>9</sup> – most papers deal with industry, labor market, and supply chains effects, while only a few limit their analysis to within-firm effects. However, empirical research on offshoring's effects is challenging from an identification standpoint because employers with expanding product demand are likely to increase employment both at home and abroad. While some studies use instrumental variables or assume some prices are exogenous, it is hard to justify all the assumptions needed to interpret the estimates as causal.

Despite the concerns about causality, the bulk of the literature is consistent with theory. The average effect of offshoring on employment and earnings in industrialized nations is not typically large and may be positive. However, this average effect hides predictable heterogeneity. Specifically, most studies find that offshoring to low-wage nations lowers demand for routine labor in source nations. Similarly, offshoring to high-wage nations lowers demand for non-routine labor in source nations. The same studies also find outsourcing to low-wage countries *increases* demand for non-routine labor and that outsourcing to high-wage countries increases demand for routine labor in the source nations.

Distributional effects say more about the possibility for exploitation as defined earlier in the paper. There are both winners and losers from offshoring and it is important to identify and compensate the losers (Bernanke 2006). As discussed above, participants in experiments view an

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<sup>9</sup> By structural, we mean dealing with broader effects of offshoring beyond the firm-level. The literature contains a mix of reduced-form and structural economic estimation.

outcome as “unfair” when one party chooses an option that benefits themselves while knowingly significantly harming another. However, it is difficult to conclude that offshoring itself harms workers if the same job losses would have occurred anyway. We therefore measure consequentialist exploitation against the counterfactual of how workers would have fared in the absence of offshoring.

### ***How Prevalent is Offshoring?***

Before delving into the effects of offshoring, we highlight a few facts presented in the literature that show its importance to the U.S. economy. Between 1993 and 2011, U.S. manufacturing employment fell by over one-third, with American multinationals accounting for a disproportionate share (41 percent) of this decline (Boehm, Flaen and Palandai-Nayar 2019). According to Slaughter (2009), U.S. multinational parents accounted for about 19% of total U.S. employment, while more recently, Boehm, Flaane and Palandai-Nayar (2019) find that multinationals accounted for 29 percent of U.S. manufacturing employment as of 2011. Much of offshoring consists of production of intermediate inputs. The same authors calculate that in 2011, 49 percent of U.S. multinationals sourced intermediate inputs from affiliates in low-income countries and 73 percent sourced from unaffiliated suppliers in low-income countries, compared to 25 percent and 44 percent in 1993, respectively. This constitutes a major share of U.S. trade; as reported in Kovak, Oldenski and Sly (2018), over 40% of US imports were through related-party transactions and over 60% of manufacturing imports in 2007 were intermediate goods (Boehm, Flaane and Palandai-Nayar 2019). Thus, much of the effects of foreign import competition in general include offshoring – both through related-party imports and offshoring through unrelated

parties. However, for clarity, we mainly focus on papers explicitly covering foreign affiliate employment and related-party trade.

### *Literature*

The modern literature on the effects of offshoring on domestic wages arguably begins with Feenstra and Hanson (1999). They first identify the impact of offshoring and technical change on industry prices and productivity, which they use to decompose each channel's effect on wages. They find that offshoring led to no discernible change in the wages of production workers and a small increase in wages for non-production workers. Some other studies also find offshoring improves labor outcomes. For example, Desai, Foley and Hines (2009) use data matching domestic firms to foreign affiliates to argue that 10 percent increases in a multinational's overseas investment and employee compensation are associated with a 2.6 percent increase in domestic investment and a 3.7 increase in domestic employment compensation, respectively. However, their analysis is limited to what occurs within a firm, not at the industry or occupational level. They also do not distinguish between the types of labor and the destination of offshoring. Moreover, they use foreign growth rates to instrument for investment in foreign affiliates. This estimation strategy relies on the assumption that U.S. wage bills and investment are uncorrelated with foreign growth rates. However, it appears quite plausible that firms do respond to foreign growth by increasing production at home. This would lead to an overestimate of the impact of offshoring on domestic employment.

A second approach is to construct measures of exposure to offshoring at the industry and occupational level. This permits a broader analysis than that of Desai, Foley, and Hines (2009)

since offshoring by one firm may impact workers differentially across geography and worker skill levels. Oldenski (2014) finds results suggesting offshoring complements non-routine U.S. labor and substitutes for routine U.S. labor, but glosses over the distinction between high and low-income destinations. Since offshoring by U.S. firms may be a response to rising domestic wages, she instruments for offshoring by US firms with offshoring by European firms to address this potential endogeneity. Offshoring – measured through firm-level foreign affiliate sales rather than employment – increases overall wages and employment for the average occupation within an industry. Oldenski also finds that the overall wage increase is accompanied by wage polarization, with increases at the top and bottom of the wage distribution and a decline in the middle of the wage distribution. Occupations with non-routine and communication-intensive tasks obtain higher wages while those that involve computer-use experience wage declines. On the other hand, Hummels et al (2014) find positive effects of offshoring for high-skilled workers and negative effects for low-skilled workers in Denmark; they also find that routine jobs as well as those using natural science and engineering knowledge undergo larger wage losses due to offshoring.

Hummels et al (2014) and Oldenski (2014) show that offshoring is associated with wage losses for less skilled workers and wage gains for more skilled employees. Ebenstein et al (2014) and Ebenstein, Harrison, and McMillan (2017) study the effects of exposure to high and low-income offshoring and import penetration at the industry and occupation level, broken down by the degree of routineness. At the industry level, they find that offshoring to high-income countries has a small positive effect on wages (a 10% increase in industry foreign affiliate employment leads to a 0.14% increase in wages) but find no effect of offshoring to low-income nations. However, at the occupational level Ebenstein et al (2014) find that offshoring to high-income countries significantly increases U.S. wages (a 10% increase in occupational foreign affiliate employment

leads to a 0.34% rise in wages) but offshoring to low-income countries has a larger negative effect (-0.40%) on wages. However, their estimates can only be interpreted as causal under the assumptions that offshoring is not a response to changes in domestic wages and that technical change is uncorrelated with offshoring.

The fall in wages reported by Ebenstein et al (2014) are entirely driven by workers performing the most routine tasks. Using more recent data, Ebenstein, Harrison, and McMillan (2017), show that these effects are partially offset by small but significant increases in wages in low-income regions and decreases in wages in high income countries for non-routine workers. This reflects the fact that routine tasks are performed in low-income countries while non-routine tasks are performed in high-income countries and is consistent with evidence that workers are more easily able to switch industry than occupation (Kambourov and Manovskii 2009). Such interpretations are consistent with standard trade theory applied within multinational firms – gains accrue to the factor in which the U.S. has a comparative advantage and losses to the factor in which the U.S. has a comparative disadvantage. These effects have been increasing over time, reflecting the growth of offshoring and globalization in general (Ebenstein et al 2014; Ebenstein, Harrison and McMillan 2017).

### ***Mechanisms***

In this section we explore how offshoring affects labor demand and individual worker wages in the home country. Offshoring to low-income countries affects wages of U.S. workers at the individual level, as well as at the local labor market level and within firms exposed to offshoring through upstream and downstream linkages. One mechanism is worker displacement—when jobs are offshored, workers are forced to seek a new job or leave the labor force. Other

mechanisms include induced changes in labor intensity and supply chain consequences that indirectly affect labor demand and wages. The results discussed above indicate that the negatives outweigh the positives primarily for U.S. workers performing routine, highly-substitutable tasks.

### ***Worker displacement***

When jobs are offshored workers are forced to transition to other occupations or sectors, become unemployed, or drop out of the labor force. Ebenstein et al (2014) and Ebenstein, Harrison, and McMillan (2017) match a sample of individual workers observed in the Current Population Survey (CPS) in consecutive years. Ebenstein, Harrison, and McMillan (2017) find no significant effect of switching industries within manufacturing but switching industries and leaving manufacturing leads to 2.7 percent lower wages, and leaving manufacturing and switching occupation leads to 4 percent lower wages. Hummels et al (2014) track cohorts that leave a firm after an offshoring event in Denmark, finding that the present discounted value of lost earnings exceeds 50 percent of pre-displacement earnings for both high- and low-skill workers. This implies that changing occupation and industry is costly for workers. Kambourov and Manovskii find that occupational rather than industry tenure represents a stock of human capital – 5 years is associated with a 12 percent wage premium – that is depleted when an individual switches occupation. Ebenstein, Harrison, and McMillan (2017) find that occupational exposure to offshoring in China is associated with a small but statistically significant negative effect on labor force participation. Nevertheless, they also find that technology, proxied for by computer use, explains much more of the decline in labor force participation.

### ***Changes in Factor Intensity***



Offshoring also changes optimal factor allocations within domestic operations, which can compound job losses. Given that the U.S. typically has a comparative advantage in capital and high-skilled labor, standard trade theory suggests that increasing inter or intra-firm trade would lead domestic plants to use these factors more intensively. Pierce and Schott (2016) find that exposure to Chinese import competition (including related-party imports, which they find constitutes nearly 60 percent of the increase in U.S. firms importing from China) through the establishment of permanent normal trade relations in 2001 leads plants to become significantly more capital and skill-intensive, with production workers experiencing 1.5 times the decrease in employment of non-production workers. Similarly, offshoring routine tasks may decrease routine manufacturing activities domestically, but having a larger and more dispersed supply chain may increase the number of executive, managerial, and administrative jobs performed at headquarters (Kovak, Oldenski and Sly 2018). This indicates effects beyond direct substitution of domestic for foreign labor and suggests that technology replaces labor directly and indirectly through offshoring and import competition.

### ***Labor market and supply chain effects***

In an analysis that does not separate high and low-income offshoring, Kovak, Oldenski, and Sly (2018) find that a 10 percent increase in foreign affiliate employment is associated with a 0.67 percent increase in local labor market employment in addition to a 1.8 percent increase in domestic employment. Boehm, Flaane, and Palandai-Nayar (2019) develop a model of multinational firm sourcing that allows them to estimate an upper bound of a single parameter – the elasticity of firm size with respect to production efficiency – that determines the effect of foreign sourcing by multinationals on domestic employment at affiliated and non-affiliated plants.

They estimate this upper bound (in most specifications) to be well below one – implying negative effects of multinational sourcing. In a simple counterfactual analysis, they find that offshoring accounted for about 810,000 manufacturing job losses between 1997 and 2007, roughly one-fifth of the total decline in manufacturing employment in that period. Slightly more than half these job losses occur at unaffiliated domestic suppliers rather than within multinationals, alongside a smaller effect of greater foreign sourcing by non-multinationals. In a similar model, Antràs, Fort, and Tintelnot (2017) estimate this elasticity to be greater than one, but nevertheless find that lower costs of sourcing from China lead to decreases in overall sourcing from firms not linked to China and those that exit the market that dominate the positive effect Chinese sourcing has on domestic sourcing, leading to a net decrease of 0.53 percent of domestic sourcing. While they do not map changes in sourcing to employment outcomes, they predict substantial churn in the labor market compounding these net effects. These recent models underscore the importance of offshoring's effects outside the parent firm.

### ***Is Offshoring Exploitation?***

We find that *some* types of offshoring have negative effects on *some* workers. However, our consequentialist definition of exploitation requires that workers would not have been exposed to these negative effects had offshoring not taken place. How many of the American workers whose jobs were replaced by cheaper overseas labor would still be employed if their employer had not engaged in offshoring? Would their firms have automated their jobs instead of offshoring? Would they be able to keep pace with increasingly competitive foreign firms if they did not produce their optimal product mix at the cheapest cost?

To the best of our knowledge, there is no empirical work that fully addresses this counterfactual. However, technological change and increasing import competition would likely have reduced U.S. manufacturing employment even in the absence of offshoring. First, domestic firms have been contracting and dying at similar rates to U.S. multinationals' domestic operations – summary statistics reported by Boehm, Flaaen and Palandai-Nayar (2019) show that the count of domestic manufacturing firms decreased by nearly 3 percent per annum on average from 2001 to 2011, while that of U.S. multinationals only decreased by 1.3 percent and the count of foreign multinationals increased by 2.3 percent per annum, on average. Likewise, employment at domestic firms contracted by 5.04 percent per annum, compared to 4.17 percent for U.S. multinationals and 0.35 percent for foreign multinationals. Obviously, some of this could be due to supply chain effects of multinational offshoring, but they alone cannot plausibly explain these downward trends. While employees of domestic firms are different (in manners both observed and unobserved) from employees of multinationals, this nevertheless suggests that employees would have been no better insulated from layoffs and plant closures had they worked for a domestic firm rather than a multinational.

Moreover, the effects of offshoring – particularly through related-party intermediate input imports – are a small part of those due to foreign import competition in general. Ebenstein et al. 2014 find that a 10 percent increase in occupational exposure to import competition is associated with about four times the decline in wages as the same increase in exposure to offshoring. Similarly, Ebenstein, Harrison, and McMillan (2017) find that the effect of import competition from China was three times that of related party offshoring. In this vein, the forces that encourage multinationals to establish and expand operations in China and other low-wage countries – rural-

urban migration, liberalization, industrialization, technological advances – are the same forces that threaten to compete with them should they continue to produce in the U.S.

While technical change and automation are interlinked with offshoring, their direct labor-substituting effects likely dominate the effects of offshoring. Proxying for technical change with computer use, Feenstra and Hanson (1999) find that it explains roughly three times as much of the decline in employment as offshoring. Similarly, Ebenstein, Harrison, and McMillan (2017) show that both computer use and prices of investment goods are much more important determinants of employment than exposure to Chinese offshoring. Autor et al. (2003), who develop the routineness measure used by Ebenstein et al (2014), Oldeski (2014) and Ebenstein, Harrison, and McMillan (2017), initially use this framework to show that computers substitute for routine labor and increase the skill bias within manufacturing plants. Moreover, by the logic of applying this framework, the jobs vulnerable to offshoring are the same as those vulnerable to replacement through technical change.

However, technical change runs far beyond computer use, with rapidly increasing automation in both the manufacturing and service sectors. Economists are still grappling with a theoretical framework for automation and few empirical analyses exist. Like offshoring, automation of certain tasks could be associated with substitution or crowding-in effects on employment. Acemoglu and Restrepo (2017) find that the substitution effects of robots dominate, with each robot per thousand workers leading to a 0.18-0.37 percentage point decline in manufacturing employment but find that they are only weakly correlated with measures of offshoring. On the other hand, Autor and Salomons (2018) provide some evidence that adoption of robots has not displaced employment but has reduced labor's share in value-added and has become more labor displacing in recent years. With the number of robots expected to triple or

quadruple over the next few years (Acemoglu and Restrepo 2017), the magnitude of these effects will likely outpace those of offshoring.

The literature discussed above shows the nuanced and disaggregated impacts offshoring by multinationals has had on American workers. Despite disagreement over whether positive or negative channels dominate, offshoring clearly generates winners and losers. Even when effects balance out on aggregate, distributional consequences do not. The evidence suggests that blue-collar manufacturing workers performing routine tasks that can easily be replicated in low-wage countries stand to lose the most. It will be important for policy to ensure that those most vulnerable to globalization can be insulated from or compensated for the inevitable changes the U.S. labor market will continue to face.

These changes appear to be part of broader trends affecting the U.S. manufacturing sector, as well as manufacturing in Europe and even China—where manufacturing employment shares have also begun to decline. While offshoring is an important factor, it does not appear plausible that offshoring is the only factor drives these trends, given the larger roles import competition and technical change play. Many of the jobs lost due to offshoring could have been lost through these other channels, although a rigorous analysis of this would require substantial extensions of existing models of multinational sourcing.

## **V. MNCs and Fairness**

We now turn to arguments that judge exploitation by MNCs absolutely rather than relative to domestic firms, starting with fairness. At the individual level, many ethical theories (along with recent behavioral economic work) suggest that employers are obligated to share their profits with their employees. At a structural level, this corresponds to a “fair economy” where labor earns a

fair share of income. Although what constitutes a fair share is ambiguous, most ethicists would argue it should provide high enough wages for workers to meet their basic needs.

### ***Rent sharing***

As discussed above, MNCs typically pay slightly higher wages than similar domestic firms and there is suggestive evidence of an MNC premium when controlling for worker and industry characteristics. Moreover, it is unclear whether this premium is due to rent sharing; MNCs could pay higher wages to protect firm-specific knowledge from labor turnover or to compensate workers for more volatile employment demand (Lipsev and Sjöholm 2006). Budd, Konings and Slaughter (2005) find evidence of rent sharing using panel data across Europe; a doubling of parent profits raises affiliate wages by 1 to 5%. However, we are not aware of any such studies in a developing country context.

### ***MNCs and global labor shares***

Even if MNCs do raise wages absolutely, one may consider a system of production that decreases the *share* of income going to labor unfair, either on principle or due to consequentialist arguments about exacerbating inequality. Labor shares have been declining globally over the past few decades (Dao et al. 2017), while corporate profits as a share of national economies have been increasing (Harrison 2004). This raises questions about the extent to which MNCs drive and benefit from these trends. However, the research on this lacks robust causal evidence and generally relies on macro rather than firm-level data. Moreover, it is difficult to separate the effects of MNCs on the labor share from those of market concentration, technological change, and trade.

Jayadev (2007) correlates measures of capital account openness (using a slightly modified version of the Quinn index) with national labor shares and finds a negative correlation in developed

countries between openness and labor shares, with some evidence in middle-income countries, and no correlation for the poorest nations. The underlying theory motivating this research is that capital account openness increases the relative bargaining power of capital with respect to labor, and weakens labor's relative position. Jaumotte and Tytell (2007) examine labor shares in the advanced economies and find that although measures of globalization, such as share of imported intermediate inputs and levels of immigration, are negatively correlated with labor share, technological change in the information and communication sectors have a larger negative correlation.

One often imagines MNCs as giant global conglomerates with access to state-of-the-art production technology. Autor et al. (2017) present a theoretical and empirical model of “superstar” firms, in which increased market concentration in key industrial sectors reduces labor shares.<sup>10</sup> Using firm-level data, they find that these superstar firms have a relatively low share of labor throughout their supply chains, and since they dominate the market, lead to lower overall labor shares. The bulk of their research focuses on the US, but they find corroborating evidence using datasets from other OECD countries. They conclude that market concentration likely contributes to the decline in the labor share, especially in sectors with high level of technical change. However, their analysis does not explicitly focus on multinationals and thus makes it difficult to attribute these effects to multinationals per se or due to market concentration and technical change.

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<sup>10</sup> For additional research on the extent to which market concentration has increased in the US see Abdela and Steinbaum (2018) and Krueger and Posner (2018).

## **VI. Do MNCs exploit workers by denying them basic rights?**

A wide array of domestic and international laws and standards provide clear, although not exhaustive, conditions for exploitation. This section addresses the extent to which MNCs deny workers what many consider to be basic rights.<sup>11</sup> Many claims of MNC exploitation are not based on relative wages as discussed in the previous section. Rather, reference is made to evidence of “unacceptably” or “immorally” bad standards of treatment, including child labor, physical and verbal abuse, excessive working hours, and inadequate health and safety measures. As discussed above, exploitation may arise from violations of moral rights, irrespective of the distributional outcome ([Zwolinski & Wertheimer, 2017](#)). Nevertheless, we do compare outcomes between MNCs and other firms in some instances, which may shed light on the extent to which MNCs may either improve conditions to international standards or reduce them by subverting domestic standards.

A rights-based approach is central to the International Labor Organisation (ILO) ([ILO, 2016](#)). The [1998 ILO Declaration on Fundamental Principles and Rights at Work](#) commits Member States to respect and promote principles and rights in four categories, whether or not they have ratified the relevant Conventions. These categories are:

- the elimination of all forms of forced or compulsory labor;
- freedom of association and the right to collective bargaining;
- the abolition of child labor; and
- the elimination of discrimination in respect of employment and occupation.

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<sup>11</sup> For additional research on the extent to which market concentration has increased in the US see Abdela and Steinbaum (2018) and Krueger and Posner (2018).



We structure the available evidence according to these categories. In addition, we summarize available evidence related to health and safety of workers. These working conditions arise repeatedly in the literature and public debate on MNCs' treatment of foreign workers. They are also a component of key ILO Conventions.

Because the above rights are enshrined in ILO Conventions, they are also found in the Code of Conduct adopted by many MNCs. Notably, the Fair Labor Association (FLA) has based its standards on the ILO Conventions. Twenty-eight U.S. companies and suppliers have signed up to these standards and the FLA's monitoring and compliance schemes. These include major brands such as Nike, New Balance, Fruit of the Loom, and Patagonia (Source: fairlabor.org).

An important element of the concept of exploitation is the use of another person's vulnerability. To that end, we pay specific attention to the working conditions of more vulnerable workers such as women and migrant workers. As noted in a 2016 ILO Statement to the UN General Assembly in New York, the "situation is often bleaker for groups working in vulnerable circumstances, including migrants, refugees, women and domestic workers". Similarly, the International Organisation for Migration's 2003 World Migration Report notes the "particular vulnerability to exploitation and abuse of women migrant workers" (p. 105-106). This is not to say that employing a vulnerable person is exploitation; however, given that vulnerable workers have fewer recourses, simply requiring that MNCs improve on their next-best option may still condone unethical behavior.

This section presents evidence on labor rights at MNCs. The rights-based approach to exploitation is a deontological one, as discussed in Section II. As such, it typically uses absolute

standards, rather than relative one. Nonetheless, comparing labor rights at MNCs relative to domestic employers provides additional insights.

There are relatively few studies directly comparing performance of MNCs to similar domestic firms with regard to non-wage labor standards. For this reason, we include studies which compare conditions inside and outside export processing zones (EPZs) in the same city. This evidence is relevant because nations create EPZs largely to encourage FDI and increase participation in MNC supply chains. The proportion of establishments with substantial foreign ownership was between 70-96% in the EPZs we discuss. These inside-outside EPZ comparisons do, however, mix MNC versus local with cross-sectoral comparisons – comparing, for example, formal manufacturing jobs with informal service-sector jobs. As such, they answer a different question than that examined in within-sector analyses of wage differentials.

Because the academic literature on non-wage working conditions is limited, we also bring in evidence from international organizations such as the OECD, the World Bank and International Labor Organisation (ILO), research institutes such as the Centre for Research on Multinational Corporations (SOMO), and high-profile NGOs such as Human Rights Watch and Oxfam. We acknowledge that one reason there is relatively little academic literature on this topic compared to wages is that there is relatively little data of high quality. This topic seems to be too important to simply exclude, however, so we have used the best quality sources we could find.

Finally, we note that much of the available evidence does not distinguish the home country of the MNC. The studies which do distinguish tend to show variation in compliance with the home country. A recent high-quality study for Ontario, Canada found that U.S. based-firms had lower compliance than Canadian or continental European firms, but higher than Mexican or Chinese (Pohler & Riddle, 2018).

### ***Forced labor and working hours***

We found no evidence of MNCs involved in slavery in the sense of workers being forced to work for no pay. At the same time, there is extensive evidence of employers requiring workers to work overtime in excess of two hours per day, often without compensation (Milberg & Amengual, 2008).<sup>12</sup> Workers can be compelled to work more overtime than they want to by threats of dismissal, violence or (in some cases) deportation.

The 2018 compliance report from Better Factories Cambodia provides high-quality evidence from a garment industry with one of the best reputations for maintaining labor standards (ILO, 2018). Almost all (96%) of the factories assessed were foreign owned, predominantly by Chinese multinationals. Over 70% of assessed factories were non-compliant with the requirement that over-time never exceed two hours per day. However, in only 5-10% of factories was there involuntary overtime or failure to pay the penalty rates for overtime (with the exception of meal allowances, where the non-compliance rate was over 30%).

Compulsory overwork in export processing zones is documented by Hein (1988) and ILO (2001b) for the Mauritius apparel EPZ, and Yonghong (1989) for Shenzhen EPZ in China. Similarly, in 2016, FLA assessors in 27 countries including Myanmar, Vietnam, Bangladesh, China, Indonesia, India and Sri Lanka found “more than three-quarters of all facilities [to be] in need of improvement regarding excessive hours of work” (Fair Labor Association, 2017).

There is little comparative evidence on working hours in MNCs and domestic firms. One exception is Hijzen, et al. (OECD, 2010). Using linked employer-employee data, they find no

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<sup>12</sup> E.g. Manjoo (2015, p. 12) “women EPZ workers were allowed two timed bathroom breaks per shift and were not paid for their overtime if their production requirements were not met.”

statistically significant impact of moving to an MNC on log weekly hours in Germany, Portugal or the UK. For Brazil they find a decrease in working hours of around 0.2%.<sup>13</sup>

Turning to evidence from EPZs, Cirera and Lakshman's (2017, p.10) summary of eight studies was: "while long working hours appear to be a common element in many EPZs, the comparison with working hours outside the zone is mixed." Kabeer and Mahmud (2004) compare workers and working conditions inside and outside export processing zones (EPZs) in Dhaka, Bangladesh.<sup>14</sup> They find workers inside the EPZs were substantially more likely to receive a contract letter, paid leave, and payment for overtime worked; and less likely to work more than ten hours per day.

### ***Freedom of association and right to organize***

The Preamble to the Constitution of the International Labour Organisation declares "recognition of the principle of freedom of association" to be a means of improving conditions of labor and of establishing peace. One of the first Declarations of the ILO was the Freedom of Association and Protection of the Right to Organise Convention, 1948. In addition, the presence of unions is a strong predictor of compliance with local employment laws (Pohler and Riddell 2018, p.1).

Evidence on whether MNCs discourage labor organizations more than domestic firms is limited and mixed. Using linked employer-employee data, Hijzen et al. (OECD, 2010) find

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<sup>13</sup> It should be noted that this decrease was also correlated with an increased likelihood of working a low-paid job. In combination, these findings are consistent with arguments that MNCs' distributed supply chains reduce the number of middle-income jobs compared to traditional integrated production facilities. For more on this argument see for example Anner (2011).

<sup>14</sup> 72% of firms in Bangladesh's EPZs have some foreign ownership (58% are wholly foreign owned), and 100% of firms are part of multinational supply chains. Source: <https://www.bepza.gov.bd/pages/details/about>

workers in Germany and the United Kingdom are less likely to be in a union when they are working for a multinational firm.<sup>15</sup> Using time-series data to compare segmented-production (MNC-supply-chain) production to the traditional integrated production sector in El Salvador and Honduras, Anner (2011) finds segmentation is strongly associated with a decrease in unionization. Also in Honduras, a survey found that EPZ workers are relatively less likely to be employed in workplaces with unions (compared to workers applying to work in the EPZ). At the same time, in their survey of the literature, Cirera and Lakshman (2017) conclude that in a majority of cases unionization in EPZs is slightly higher or similar than in firms outside the zones. Arnal et al (2008) also find that simple comparisons between MNC affiliates and (not necessarily similar) domestic firms show higher unionization rates in MNC affiliates. These mixed results suggest that on the question of unionization, it is important to carefully disentangle selection effects from causal effects of MNC ownership and multinational production processes. National norms and government policy also play an important role (Distelhorst et al., 2015).

EPZs in some countries explicitly forbid unions and labor organization (Cirera and Lakshman, 2017). Even where legal, unions are *de facto* prohibited in many places because workers are threatened with dismissal or blacklisting, or occasionally even violence if they attempt to organize (Milberg & Amengual, 2008, p.32; also Manjoo, 2015, p.12 provides one example). BFC's review of 464 Cambodian garment factories found 243 incidents of non-compliance with the right to organize among 155 different factories (ILO, 2018).

Despite potential reputational costs, rights to organize are sometimes actively prohibited in wholly-owned factories of major international brands. An investigation by Cividep India (2017)

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<sup>15</sup> The difference is only statistically significant for the UK. No data was available for unionization in Portugal and Brasil.

found workers in one of Samsung India's factories claimed that they are asked if they know what a union is during job interviews, and not hired if they respond affirmatively. The report also claimed that leaders of a couple of attempts at unionizing the plant workforce were subsequently dismissed. Finally, contract letters revealed restrictions on rights to join any social organization without the permission of the management (Cividep India (2017)).

In some places, union participation in MNC supply chains is violently suppressed. The Bangladeshi garment sector is one such example. Union organizers have been attacked with machetes or found dead showing signs of torture (HRW, 2015). But violence is still routine.<sup>16</sup>

### ***Child labor***

Few actions are as universally condemned in the West as child labor. For this reason, over the last decade Western-based MNCs have almost universally instituted zero-tolerance policies on employment of children in their affiliates and supply chains. Enforcement of these policies can be variable, however, and cases of child labor are still routinely uncovered even in best-practice monitoring settings like the FLA and the Cambodian garment sector (Halegua, 2006). Child labor may be harder to detect and prevent at suppliers of multinationals. While studies and audits have shown improving compliance of suppliers with child labor laws (Egels-Zandén 2007, 2014; Donaghey et al 2013), enforcement is imperfect. Moreover, audits at factories may mask labor done by children of employees who bring their work home, as documented by Husselbee (2001) and Khan et al (2007) among soccer ball producers in Pakistan.

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<sup>16</sup> As one of the Human Rights Watch (2015) interviewees explains:

*I was beaten with metal curtain rods in February when I was pregnant. I was called to the chairman's room, and taken to the 3rd floor management room which is used by the management and directors — and there I was beaten by the local goons... There were other women who were called at other times, and they were beaten the same way as well. They were threatening me saying 'You need to stop doing the union activities in the factory, why did you try and form the union.'*

More recently, campaigns have started to focus on the ways in which MNCs may indirectly contribute to child labor by paying workers low wages. A 2017 report on the children of Bangladeshi garment workers (SOMO, 2017) found some families took their children out of school not only to reduce expenses, but also to undertake childcare and housework that their mothers could not perform due to long working hours. Some children also supplemented family income by working in sectors that do not have a zero-tolerance policy for child labor.

### *Health and safety*

Any discussion of the impacts of MNCs on workers must consider health and safety. Some MNCs and (more often) their suppliers provide very dangerous workplaces. Catastrophes like the 2013 Rana Plaza collapse in Bangladesh represent some of the most high-profile drivers of concerns over workers whose vulnerability is exploited by MNCs. Over one thousand workers died when an unsafe building collapsed. Workers in that building produced clothes for many major brands.

It is possible that the MNC wage premium observed in some studies may reflect that these jobs are more dangerous than others. This premium could be inefficiently (and unfairly) low when health and safety risks are hard for workers to evaluate. This problem is especially true in industries and jobs of which workers have little prior knowledge, when workers cannot observe hazards (such as poor building construction), when workers are unfamiliar with the hazard (such as many chemicals that lead to long-term harms).

Manjoo's (2015, p.12) interviewees with MNC employees in Honduras had reportedly: "witnessed co-workers succumb to chronic fatigue, depression and musculoskeletal disorders as a result of the hazardous working conditions." Similarly, field research on foreign firms in the Malaysian electronics industry by SOMO (2013, p.7) found workers are required to stand for their

work during the entire shift. Furthermore, the workers report exposure to toxic fumes and chemicals during the process of lead welding. Employers do not provide protective equipment such as masks. Many workers said they suffer from allergic reactions and often get coughs. Bangladeshi garment workers interviewed by Human Rights Watch claim water the factory supplied is so dirty that it is undrinkable (Human Rights Watch, 2015).

Systematic data collection supports the anecdotal evidence above. The following table based on Better Factories Cambodia (2018, p.31) shows that even in one of the most high-profile, best-practice industries in a low-wage nation, health and safety problems are common. Better Factories Cambodia found the following issues have the highest levels of non-compliance:

<b>Nature of non-compliance</b>	<b>Extent of non-compliance (% of factories assessed)</b>
Inadequate lighting	93% of 433
Inadequately equipped/staffed infirmary	85% of 394
Improper labelling of chemicals	56% of 464
Failure to meet ergonomic standards	58% of 464
Failure to adhere to OSH workplace policy	62% of 464
Failure to assess workplace OSH issues	64% of 464
No mechanism(s) for managing employee OSH matters	64% of 464
Unacceptable temperature and/or ventilation	65% of 464
No requirement for pre-employment medical assessment	63% of 464



Studies on EPZs are also generally grim. In their review, Cirera and Lakshman (2017, p.10) found “significant health and safety issues in EPZs documented in the literature, ranging from anecdotal evidence to more robust studies”. Similarly, Milberg and Amengual (2008, p.35) conclude “Many workplaces in EPZs throughout the world still fail to provide safe environments.” These studies, however, suggest employers in EPZs have fewer violations than employers not in an EPZ. Cirera and Lakshman (2017) find no studies showing worse health and safety conditions inside EPZs and some showing better conditions. Milberg and Amengual (2008) conclude that MNCs’ efforts to improve health and safety are making progress.

### ***Discrimination and treatment of women***

In many countries, women face substantial discrimination in the home and workplace, including lack of access to education. As such, female workers in poor countries are a particularly vulnerable group and hence prone to exploitation.

Female workers at suppliers for MNCs in many nations report recurrent violations of their rights. Examples include verbal and physical abuse by supervisors, sexual harassment, pre-employment pregnancy tests, unfair dismissal and discrimination on the grounds of pregnancy, and denial of maternity leave and other legally required benefits (Raworth, 2004).<sup>17</sup> Manjoo (2015) found women working in EPZs in Honduras earn between 28 and 51 per cent less than the minimum wage, with employers justifying lower wages for women with the stereotype that women’s work is less demanding.

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<sup>17</sup> See for evidence from Honduras (Manjoo 2015), China (Ngai, 2007) and Bangladesh (HRW, 2015).

Some discrimination is overt. To find examples, we downloaded employment ads from leading websites in Korea, India, Indonesia, Thailand and India. Except for Korea, all websites were in English. We first searched for terms such as “female” and “male.” We then read candidate ads to be sure they referred to having only male or only female applicants.<sup>18</sup> Many globally recognizable MNCs posted ads, seeking only males or females for different types of positions, in violation of ILO standards. However, domestically-owned firms placed the vast majority of ads both with and without overt discrimination.

There remains little evidence on whether MNCs are more or less likely than domestic employers to adhere to the ILO right for equal pay for equal work. There have, however, been some recent studies on the gender pay gap in foreign affiliates compared to domestic firms.<sup>19</sup> Vahter and Masso (2018) find in Estonia that foreign ownership is associated with a substantial increase in the gender pay gap (controlling for worker and firm characteristics). They posit that their result may be driven by lower tolerance for flexible work hours among foreign-owned firms. Their results are consistent with those of Boler et al (2018) which show that the gender wage gap is higher among exporting firms in Norway. In contrast, Kodama, Javorcik and Abe (2018) find

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<sup>18</sup> For example, in Korea, Domino’s Pizza (subsidiary of a US firm) wanted a male cook/server and the German firm Adidas wanted a male salesperson. In Thailand, a subsidiary of the Japanese multinational Canon advertised for a male waste management professional. Not all ads from multinationals favored men: In Korea, the French clothing firm Le coq sportif wanted a female salesperson; in Thailand the Austrian fashion company Swarovski advertised for a female sales executive; and in Indonesia, the U.S.-based Marriott wanted a female food and beverage manager. Jeseo Park collected these data. The downloads were a single snapshot for each website: February 10 2019 for the Korean-language sites in Korea (<https://www.alba.co.kr>, <https://www.albamon.com>, <https://www.saramin.com>), Feb. 12, 2019 for the Korean site in English (<https://incruit.com>), Feb. 15 for the Thai sites (<https://th.jobsdb.com>, <https://jobtopgun.com>), and Feb. 18 2019 for the Indian (<https://www.shine.com>, <https://www.wisdomjobs.com>, <https://www.naukri.com>) and Indonesian sites (<https://id.jobsdb.com>, <https://www.glassdoor.co.uk>). We did not code all employers for multinational status; instead, we skimmed the list to identify a handful of recognizable brands. Thus, the true number of multinationals is almost surely larger than the few we note here. This study updates Levine 1989 <https://doi.org/10.1111/0019-8676.00078>

<sup>19</sup> Studies of gender pay gap do not necessarily get at exactly the issue of equal pay for equal work as it is often not clear whether workers being compared are performing the same tasks.

that foreign affiliates in Japan employ more women and are more likely to provide telecommuting, childcare subsidies and flexible working arrangements.

Tang and Zhang (2017) suggest that whether MNC affiliates exhibit more or less gender discrimination may depend on the cultures of the home and host countries. Among Chinese manufacturing firms they find that foreign affiliates from countries with a more gender-equal culture tend to employ proportionally more women and appoint female managers. Notably, the UNDP Gender Inequality Index that the authors use to measure home country culture ranks European countries as more equal and the U.S. as less equal than China.<sup>20</sup>

### ***Discrimination and treatment of migrant workers***

Migrant workers are more vulnerable than local workers ([ILO, 2016](#)). Among other things, migrant workers lack social and political networks, they may not speak or read proficiently the local language, and their employer may have the ability to have them deported (legally or otherwise). Because of their migration status, especially if they are undocumented, they may not be able to seek legal recourse without fear of deportation, or may not be aware of the rights available to them.

If MNCs are not exploiting their workers, they should treat migrant workers as well as local workers – in order to avoid benefitting at the expense of migrants’ higher vulnerability. There are well-documented cases of MNCs providing worse conditions to migrant workers, but we do not know their extent and how MNCs discrimination compares to treatment by domestic firms.

The Center for Research on Multinational Corporations (a Dutch NGO), investigated the relative treatment of migrant and foreign workers at three Malaysian electronics factories owned

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<sup>20</sup> <http://hdr.undp.org/en/composite/GII>

by multinationals (SOMO, 2013).<sup>21</sup> Migrants are a substantial part of the workforce in the industry, facilitated by government policy, and a set of intermediary firms who bring the migrants in. Often migrants are employed formally by one of the intermediary firms, not the factory.

Migrant workers were treated substantially worse than local workers. Local workers reported working “eight to ten hours a day, five days a week, and mainly work in the morning shift, whilst outsourcing agency workers work 12 hours a day, six days a week and all shifts.” (SOMO, 2013, p. 7) Migrant workers also reported that had their pay docked if they were late or sick, supervisors threatened them with deportation if they made complaints, that the outsourcing agency held their passports, that the pay was as little as half what they were promised. Many had never seen their formal employment contract, and even fewer had seen their contract in a language they could read.

### ***Enforcement of standards and intention to exploit?***

Most large MNCs have codes of conduct for their subsidiaries and their suppliers. While these codes vary widely, almost all encompass the labor standards we discuss. This raises an interesting question. Do human rights violations described above persist because the MNCs benefit from them? Or do they persist because, despite best effort, MNCs are not able to eliminate violations from their supply chains?

The answer to this question matters to our question of exploitation. As Rabin’s work shows, intentions matter in many people’s determination of whether an action is fair or not. Furthermore, the deontological approach emphasizes the correctness of the choices made by an agent, not their

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<sup>21</sup> Migrant workers come predominantly from Indonesia, Nepal, India, Thailand, China, the Philippines, Burma, Cambodia, Bangladesh, Pakistan, and Vietnam.

outcomes. So long as MNCs are not choosing to allow human rights violations, they are not exploiting workers according to the deontological definition.

In the 1990s many MNCs introduced codes of conduct for their suppliers. In some cases, the MNCs announced workplace inspections ahead of time, had managers choose workers to interview, and had managers present during interviews. These standards did not look at second-tier suppliers. In the last generation, many large companies have implemented more serious efforts to ensure their suppliers adhere to the agreed-on standards. Most obviously, more codes have consequences, where suppliers are dismissed if they do not improve (Boudreau 2019). At the same time, the literature on supplier adherence paints a complex picture of how often codes lead to improvement in supplier behavior. For example, one study found that on average adherence improved over time (Hugill, Short & Toffe, 2016b). Improvement was faster if auditors have more training and if audit visits also help train suppliers (Hugill, Short & Toffel (2016a, b) and Thorlakson, et al. (2018)). Hugill, Short & Toffel (2016a, 2016) and Stroehle, J. C. (2017) find adherence is higher if domestic institutions promote compliance (e.g., there is a free press).<sup>22</sup>

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<sup>22</sup> Some of the challenges to monitoring is that (as noted above) it is difficult to monitor labor standards that workers do not see as a benefit. One of the authors (Levine) had a graduate student with family connections to several garment factories in Pakistan. These factories largely supplied multinationals. She first toured each factory wearing a white lab coat and holding a clipboard. As expected, workers assumed she was auditing working conditions in the factory. She observed all workers wearing their safety equipment. During interviews, the workers reported working within the legal overtime limits. She then removed the lab coat and explained that she was just a friend of the factory owner pretending to audit. The workers were forthcoming that they rarely wore the safety equipment and that they worked longer hours than on the official timesheet.

A second student carried out a similar small study near a very large furniture factory in Vietnam, also supplying an MNC. When she presented herself as a possible inspector, workers reported zero work at home. When she explained she was a visiting student, many students discussed how they and their children wove rattan at home in the evening.

As noted above, employee resistance to endorse a standard does not mean that the standard is ineffective in improving workers' collective well-being, especially if workers lack information about exposure to harm or are

In short, codes of conduct do not automatically ensure high compliance. With sufficient effort and resources it is possible for MNCs to validate their supplier standards to show the standards are achieving their stated goals (and to improve their compliance process if adherence remains low). Only then can MNCs be confident that they are not responsible for the exploitation of foreign workers.

## **VII. Conclusions**

We have introduced three different conditions for exploitation of workers by MNCs. Assessing the first condition – whether MNCs create worse outcomes for workers than they would have had otherwise – we find that MNCs typically pay slightly higher wages than local firms in developing countries. While much of this can be attributed to worker and industry characteristics, there is still suggestive evidence of a wage premium from MNCs, although it is unclear whether this represents rent sharing or a compensating differential for uncertainty over job tenure or other differences between MNCs and local firms. Moreover, if MNCs create more jobs in high-paying productive sectors, then controlling for worker attributes may underestimate positive impacts of MNCs. In either case, there is no evidence that MNCs systematically pay lower wages than their domestic counterparts.

Likewise, our analysis of offshoring by MNCs finds no effects on wages or employment at the aggregate or industry levels. However, at the occupational level, there is strong evidence that offshoring by MNCs to low-income affiliates hurts workers performing routine tasks, but that

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present-biased. At the same time, such challenges in measurement show how difficult it can be to enforce rules that workers do not endorse.

offshoring to high-income locations benefits them. Nevertheless, given the costliness of job transitions, such churn is likely to have deleterious effects on many workers. These workers are also those more exposed to the labor substitution effects of foreign import competition and technical change. Although we cannot observe a counterfactual in which offshoring never took place, it appears likely that these channels, whose effects are much larger than those of offshoring, would have driven much of these job losses. Therefore, it is challenging to conclude that offshoring constitutes our first definition of exploitation by making workers worse off than they otherwise might have been.

Our second condition for exploitation deals with the idea – founded in ethics and behavioral economics – that firms are responsible for sharing their surplus with their employees. Budd and Slaughter (2004) and Budd, Konings and Slaughter (2005) find evidence of MNC rent sharing in Canada and Europe, respectively, but we are not aware of any such study in a developing country context. Also central to the idea of fairness is the labor share, which has been declining in recent years. MNCs may depress the labor share through market concentration and by posing a credible threat of shifting production abroad. We review a handful of papers associating MNCs with this trend, but robust causal evidence is limited.

Our third condition for exploitation is perhaps the most straightforward – do MNCs violate workers’ rights? These rights include, but are not limited to, those defined by local laws and international standards, such as those set forth by the ILO. This condition for exploitation does not depend on whether domestic firms also commit these violations. In our analysis of reports by watchdogs and human rights organizations, we find well-documented evidence that multinationals do violate workers’ rights, including preventing workers from exercising their right to unionize. While this unambiguously constitutes exploitation, it is still important to note that domestic firms

also engage in these rights violations. The sources analyzed do not provide rigorous evidence as to whether MNCs exacerbate, ameliorate, or simply participate in the poor treatment of workers in poor parts of global supply chains. While this does not change the fact that MNCs do engage in this type of exploitation, it may matter for the efficacy of attempts to improve the conditions faced by workers in poor countries.

Our literature review has focused on the wages and working conditions of multinationals and their suppliers. However, many of the harshest criticisms of MNCs go beyond specific transactions. These arguments examine how MNCs change the structure of the economy and of politics to “rig the rules of the game.” Multinationals’ willingness to relocate can reduce the bargaining power of all workers. That same mobility makes MNCs harder to tax, requiring nations to shift to more regressive taxes or to lower spending that might help the poor. Multinationals’ size can give them disproportionate influence in politics, reducing democratic accountability. Nevertheless, multinationals can also increase living standards globally by increasing efficiency and facilitating knowledge transfer to developing countries (Abebe, McMillan and Serafinelli 2018). MNCs also sometimes fight for efficient policies and reduce the monopoly power of domestic cartels. We leave a more complete review of these important arguments for others.

Overall, focusing on whether MNCs exploit their workers may be the wrong question when it comes to preventing exploitation and improving workers’ outcomes. Meaningful improvements in living standards will require policies to raise worker productivity and to enforce existing laws towards minimum wages and ILO standards. In terms of economic outcomes, by shifting attention away from MNC status, researchers and policy makers can instead focus on the firm characteristics that more strongly influence wage rates—firm size and industrial sector—as well as related issues of market concentration and monopsony power that are correlated with declining labor shares



across the world. by political and regulatory forces (or the lack thereof) that are responsive to policy changes.

Given that MNCs employ only a share of the workforce in most nations, addressing violations of workers' rights at MNCs alone only puts a dent in widespread poor conditions. Nevertheless, MNCs violations of workers' rights may be efficacious to the extent that MNCs and their suppliers are more visible to governments, watchdogs, and conscious consumers, potentially making violations more enforceable and providing a profit incentive to treat employees more fairly (and to require the same of suppliers). While the marginal returns to activism may thus be higher for MNCs, solely focusing on them is unlikely to address the full issue of exploitation.

Going forward, it will therefore be important to continue holding MNCs to internal and external standards. Yet improving the welfare of vulnerable workers will require much more than pressure on MNCs. It is beyond our scope to recommend policies towards achieving these goals. However, common sense suggests focusing on boosting labor productivity, the nurturing of human capital, creating healthy work spaces, encouraging the functioning of labor markets, reversing the downward trends in unionization rates, increasing efforts to prevent and enforce rights violations, all while considering the broader evolution of labor's role amid increasing global competition and technical change.

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