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Do Multinational Corporations Exploit Foreign Workers?

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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*¹

Do multinational corporations (MNCs) exploit foreign workers? If we assume the world is perfectly competitive and define exploitation as paying below-market wages, then MNCs generally do not exploit workers in poor nations. Yet answers differ if we consider richer models of labor markets and more demanding definitions of exploitation. The definition of exploitation from the *Encyclopedia of Philosophy* leads us to ask what it would mean to take “unfair advantage [of] another person's vulnerability.” To answer this question, we identify three sets of theories of exploitation: theories based on market outcomes, theories based on sharing an unfair portion of the surplus, and theories based on assumptions about fundamental human rights.

A *market-based* or *consequentialist* definition of exploitation considers whether workers would be better off had they not been employed by an MNC. *Unfair-share* exploitation occurs when profitable firms do not sufficiently share their profits with their employees. Utilitarian ethics is one of several approaches that argue that above-market wages are sometimes ethically desirable. These fairness approaches also raise concerns about a system of production in which MNCs depress labor's share of income, either in source or in destination labor markets.

The third approach to exploitation defines exploitation as a *violation of human rights*. We focus on human rights that almost all nations have agreed to, such as limits on child labor, forced overtime, unsafe conditions, and discrimination and violence against women. Any violations of human rights at MNCs matter, regardless of whether MNCs pay higher wages than domestic employers. Under the *unfair-share* or *human rights* approaches, a multinational can be said to exploit workers even when the job is better than most jobs at domestic employers. In that case, exploitation would occur either if the multinational firm is keeping almost all the surplus generated by the worker's efforts or if labor conditions violate some aspect of basic human rights—such as forced overtime, child labor, or discrimination.

We focus much of our analysis on the effects of multinationals in poor nations. However, we also analyze the effect of MNCs moving operations to lower-income countries on wages and employment of home-country workers. The widespread public perception is that MNCs exploit workers in poor regions. We find almost no evidence of exploitation defined as compensation below the market wage. Multinational firms tend to offer workers slightly better wages and conditions than domestic firms. They generally also increase the demand for workers in high-paying industries and occupations. At the very least, there is little evidence that their effects on wages and working conditions are negative relative to domestic firms.

There also is little direct evidence that multinationals share an unfairly low portion of their surplus. One study² shows that the wage premium offered by MNCs in Europe corresponds to rent-sharing rather than compensating employees for other attributes of their jobs. Yet the relatively low wage premiums reported by many studies shows that most multinationals do not share very much surplus. Shifting to the market level, there is suggestive evidence that the expansion of MNCs decreases labor's share of income.

There is more conclusive 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 may have displaced many of these jobs even without offshoring.

Finally, we find evidence that MNCs violate basic human rights in poor nations. Examples include discrimination against women and migrant workers, suppression of the right to organize, and poor health and safety conditions. These conditions are also prevalent, and may be worse, at local firms in developing countries. However, under the human rights definition of exploitation, doing as well or better than domestic employers does not exonerate MNCs.

Both the multinational company's country of origin and host country influence compensation and other labor practices. It is reasonable to assume that a multinational based in Germany or Sweden, where labor rights are relatively strong, typically treats workers in poor countries more favorably than an MNC whose home base is China or India, where labor rights are relatively weak. Knowing that a multinational produced a product tells consumers little about the living standards or human rights of the workers who made it. Sometimes the host nation is an important signal. For example, Saudi Arabia and Kazakhstan agreed to respect core International Labor Organization (ILO) agreements, but few workplaces in Saudi Arabia avoid gender discrimination, and few in Kazakhstan permit free unions.³

In short, most low-skilled workers in poor nations receive low wages and have poor working conditions, 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 evidence that MNCs treat workers worse than domestic firms.

Policy and activism to improve working conditions and wages can be effective in ensuring that companies become better at sharing the surplus with their workers. As Harrison and Scorse (2010) demonstrate, MNCs that were under pressure by anti-sweatshop activists in Indonesia in the 1990s raised wages in the textile, apparel, and footwear sectors. Wage increases were a win-win in the sense that employment and benefits remained strong. MNCs, especially those that sell highly visible branded products, may be more sensitive to pressure from nongovernmental organizations (NGOs) and consumers because their markups are higher and they want to avoid

negative publicity.⁴ Nonetheless, focusing on policies that aim to broadly increase labor productivity and improve the enforcement of labor standards in developing countries may have larger effects on the well-being of workers in poor nations than focusing solely on multinationals.

This survey proceeds as follows. We begin by discussing several definitions of exploitation. In particular, we review the literature on how MNCs affect wages, focusing on whether MNCs provide a wage premium relative to domestic firms, while also considering the effects of MNCs on the structure of the economy. We then analyze the slim evidence regarding whether MNCs share an unfairly small portion of their surplus with workers. One interesting question is the effect of MNCs offshoring on workers who remain in the home country, which we then analyze. We also discuss whether MNCs exploit workers by violating their human rights, and finish by presenting our conclusions.

DEFINITIONS OF EXPLOITATION

We focus on three approaches to define exploitation. The first approach is the market-based or consequentialist one. Market-based or consequentialist arguments define exploitation as actions that make workers worse off than they would have been otherwise. Second, both utilitarian arguments and regularities in behavioral economics suggest it is sometimes fair for profitable employers to share surplus with employees. These fairness arguments depend on the employer and its ability to pay. Third, deontological or human rights arguments define exploitation as actions that violate principles of human rights, dignity, and fairness, which hold regardless of what would have occurred otherwise. These deontological or human rights approaches focus on objective standards rather than the employer's ability to pay.

Market-based or 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 benchmark for exploitation is, therefore, whether employees of MNCs fare better than they would have at their next best option.

The assumption of perfect competition embedded in most of these models means that workers make perfectly rational decisions with perfect information, with no costs of mobility, no social or familial constraints on their decisions, and full agency. These assumptions imply that if a worker accepted a job at a multinational, then that job was the best option available. By this definition of exploitation, this transaction is not exploitative. An alternative definition of exploitation, by John Bates Clark (1899), asks whether workers are paid less than the incremental revenue they create (what economists call the worker's marginal revenue product). Again, assuming perfect competition rules out Clark's definition of exploitation.

When we relax the critical assumption of perfect competition, and envision more realistic labor market conditions, then information asymmetry, market power, and the costs of switching jobs make exploitation of workers possible. When firms are monopsonists, such as in a "factory town," or when labor market frictions are important, wages can be lower than workers' marginal revenue products. Workers may not be informed about conditions at their workplace, ranging from risks of immediate injury to long-term exposure to carcinogens, and from sexual harassment to mandatory overtime. With labor market frictions, workers have less ability to threaten to change jobs in response to poor treatment or violations of the terms of their employment.

In theory, either MNCs or purely domestic firms could exploit workers more. Multinationals might exploit workers less, because 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, reducing managers' incentives to treat workers poorly. At the same time, MNCs tend to be larger than average. Thus, they may wield more labor market power than domestic firms. In addition, MNCs' importance to local economies may lead to preferential treatment and weaker enforcement of labor and other standards. Workers may also be less familiar with some hazards (such as the long-term risks posed by carcinogens) that may be more common at multinationals than at domestic employers.

Where social norms may penalize the first firm that implements an effective anti-sexual harassment policy, a requirement from an MNC that all

its suppliers implement policies against sexual harassment can benefit workers. To the extent that employers must 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)) from adopting effective anti-sexual harassment policies. 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)).

Fair Share of the Surplus

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. The definition of exploitation from the *Encyclopedia of Philosophy* suggests that exploitation of workers in poor nations occurs if multinationals “take unfair advantage of” the workers’ low market wages. That language leads us to ask what makes a wage or working condition “fair.” We discuss several overlapping theories.

A utilitarian theory of fairness asks if raising the poor workers’ wage would improve average well-being in the world. If most owners and customers of branded MNCs have lower marginal utility of income than poor workers, then a utilitarian will classify the higher wage as fair. At the same time, if a multinational paying high wages lost a lot of market share or laid off many workers, the resulting job loss and inefficiency would offset distributional gains to workers who received the higher wages.

Behavioral economics provides a complementary approach to defining the fair share of surplus. A large body of research suggests that most people consider it fair to share some of the surplus that arises from a profitable relationship. In particular, evidence from behavioral economics suggests that humans value fairness in transactions. The ultimatum game (Thaler and Camerer (2005)) is a widely reproduced experiment in behavioral economics that shows this behavior. In a typical ultimatum game, the experimenter gives the players US\$100. The Proposer must make a single take-it-or-

leave-it offer to the Responder of an amount Q between 0 and US\$100. If the Responder accepts the offer, the Responder receives Q and the Proposer keeps US\$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 percent to 50 percent of the pot. These offers are rational, as Responders frequently decline “unfair” offers that do not provide them with what they consider a sufficient share of the surplus. In experiments in poor nations, Responders sometimes decline offers equal to several days’ wages (Steffen and others (2011)).⁵ 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 built into the game’s structure and capture the lion’s share of the surplus.

If these (and many other) laboratory experiments generalize, many people 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. On the one hand, we did not find any research on questions such as how profits from a product development center in California (Apple) affects perceptions of the fair wage for assembly workers (FoxConn) at a supplier in China or Vietnam. On the other hand, the anti-sweatshop campaigns against Nike and Adidas in the 1990s and the new concerns about market power and excess profits (Philippon (2019)) suggest that some activists perceive a link between profits and fair wages.⁶

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 help or harm workers—the latter being 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 antidemocratic institutions. However, MNCs may also increase productivity, reduce cartel power, and promote more efficient government policies.

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 ILO assumes there are human rights in workplaces regardless of 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 NGOs lobbying for worker rights use this human rights approach to define exploitation.

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

MNC EFFECTS ON WAGES

We now turn to the evidence regarding the market-based theories of exploitation. We start by examining wages. Wage rates are one of the most important, and easiest to measure, factors in assessing employees' well-being. In most studies of how multinationals affect wages, the 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 controlling for unobservable worker characteristics, such as human capital, that influence hiring by MNCs (see Almeida (2007)). These studies may underesti-

mate the wages paid by MNCs by controlling 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. Given the fairly large number of studies, we focus primarily on studies that control for worker characteristics.

MNC Wages in Developing Countries

Public and academic discourse on the effect of MNCs on foreign workers typically refers to MNCs based in countries belonging to the Organization for Economic Cooperation and Development (OECD) and 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 foreign direct investment (FDI) in Mexico, Venezuela, and the United States is associated with higher wages. In their cross-sectional analysis, they find that a 10 percent increase in manufacturing FDI in Mexico and Venezuela corresponds to a 2.2 percent increase in production worker wages, and a 2.9 percent 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 effect of MNC ownership on wages in Indonesia. In the regression with the most controls, they find wage premiums of 12 percent for production workers and 22 percent 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 percent and 28 percent higher wages for production and non-production workers, respectively, than plants that remained domestic. These effects are significantly larger than the effects 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 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 41 percent higher wages after two years relative to the counterfactual they construct, and that foreign privatizations led to 27 percent 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 effect 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 premiums.⁷ 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 with the unconditional wage gaps of 50 percent, the wage premium associated with working for a foreign firm falls to between 3 percent and 7 percent once they control for worker and firm characteristics. Both Martins and Esteves (2006) and Poole (2008) conclude that their results support a small positive effect 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 premiums, 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 Canadian manufacturing in 1999 and 2001. They find that when controlling for worker and firm characteristics, foreign ownership results in a wage premium of 7 percent. Bircan (2011) examines the MNC wage premium in Turkish manufacturing from 1993–2001 and uses a continuous instead of binary measurement of foreign ownership. She finds that for every 10 percent increase in foreign ownership at the firm level, there is a corresponding 4 percent 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 ordinary least squares (OLS) regressions at the firm level, he finds an average wage premium of 32 percent for MNC-owned plants. 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 effect of foreign acquisition on the wages of workers in the U.K. food and electronics sectors from 1980–1994. They find that acquisitions by U.S. MNCs led to wage increases of 13 percent for production workers and 8 percent for non-production workers, while acquisitions by EU MNCs did not lead to any wage premiums. 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 and others (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 percent 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 effect of multinational employment on wages. They find that when firm-specific factors are not accounted for, the wage premium is 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, industry and worker attributes appear to mostly explain the large gap between multinational and domestic. The most rigorous studies find that a small 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 0 percent to 7 percent for developed countries.

MNCs AND FAIR SHARING OF SURPLUS

We now turn to arguments that judge exploitation by MNCs absolutely, rather than relative to domestic firms. We start with theories about fairly sharing surplus. As noted, utilitarian theories and behavioral economic experiments suggest it is fair for employers with high ability to pay to share their profits with their employees. Inequality-averse utilitarians also worry if MNC activity increases market-level inequality.

Sharing Surplus with MNC Employees and Their Suppliers

As discussed, MNCs typically pay slightly higher wages than similar domestic firms when controlling for worker characteristics. Evidence suggests that the premium is quite small—almost certainly less than 10 percent and likely in the range of 3 to 7 percent. Also, as discussed, it is unclear how much of this premium is due to rent sharing; MNCs could pay higher wages to reward unmeasured skills. The wage gap could overstate employee benefits if it compensates workers for unmeasured poor working conditions (Lipsey and Sjöholm (2006)), or understate employee rents if MNCs have above-average working conditions (for example, due to customers enforcing their codes of conduct). With those cautions in mind, it appears that many

MNCs share some small amount of their rents with employees.

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 percent to 5 percent. However, we are not aware of any such studies in a developing country. At the same time, the small size of the wage premium suggests any rent sharing through wages is small. In addition, the scattered evidence on employee turnover rates for factories in poor nations (often more than 100 percent per year) suggests that sharing surplus via better working conditions is not large.

MNCs' Effects on Labor Markets in Poor Nations

While the studies discussed only focus on multinational affiliates, multinational entry may also affect wages and employment at the industry and local labor market levels. In theory, this entry could either benefit or harm workers in host countries. If the MNC competes with local firms, then local firms may contract. In extreme cases, there may even be a net loss of jobs. However, the MNC may also increase labor demand by more than their own employees. For example, MNCs may increase labor demand for other firms in the labor market as well, or they spread knowledge on technology or on good management.

Not many studies 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 effect on wages. In contrast, Atkin, Faber, and Gonzalez-Navarro (2018) find that despite overall welfare gains, foreign retail entry in Mexico was associated with a 3.9 percent reduction in the number of domestic retail establishments. This job loss occurred along with a 4.4 percent to 5.1 percent reduction in profits for traditional retailers and a 5.9 percent decline in monthly income for traditional retail workers.⁸ In the former context, the authors find strong linkages and knowledge transfer between foreign 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.

More generally, a utilitarian is concerned with how a system of production dominated by MNCs affects inequality as well as productivity. Labor shares have been declining globally over the past few decades (Dao and

others (2017)), while corporate profits as a share of national economies have been increasing (Harrison (2004)). This pattern raises questions about the extent to which MNCs drive these trends. Harrison (2004) develops a bargaining game between labor and capital owners in a framework where imperfect competition leads to excess profits, which must be shared. In her model, capital owners are more likely to achieve a stronger bargaining position when it is easier for them to relocate than it is for workers. She then tests the implications of the model for changes in global labor shares. Determinants of such shares include restrictions on labor and capital mobility. The evidence suggests that higher foreign investment flows (consistent with fewer restrictions on capital) are associated with lower labor shares globally.

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. Jayadev (2007) correlates measures of capital account openness with national labor shares. Consistent with Harrison's work, Jayadev (2007) finds a negative correlation in developed countries between openness and labor shares, possibly a negative correlation in middle-income countries, and no correlation for the poorest nations. Jaumotte and Tytell (2007) examine labor shares in the advanced economies and find that measures of globalization, such as share of imported intermediate inputs and levels of immigration, are negatively correlated with labor share. They also find that technological change in the information and communication sector has a larger negative correlation with the labor share.

Research on the relationship between MNCs and labor shares generally relies on macro rather than firm-level data. Moreover, it is difficult to separate the effects of MNCs on the labor share from the effects of market concentration, technological change, and trade. More evidence is needed on the linkages between differential mobility and labor shares at the micro as well as the aggregate level.

THE EFFECT OF MNC OFFSHORING ON DOMESTIC WAGES

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. Critics often assume offshoring supplants American workers one-for-one with cheaper workers abroad. In this view, offshoring puts downward pres-

sure on wages at home by threatening to replace workers with cheaper labor abroad. The fairness theories reviewed above suggest it is not always fair for companies to profit while workers in their home nations lose.

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

Given the mixed predictions of theory, we turn to the data. The literature we discuss is largely at an aggregate level—most papers deal with industry, labor market, and supply chain 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, participants in experiments view an 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 more than one-third, with American multinationals accounting for a disproportionate share (41 percent) of this decline (Boehm, Flaaen, and Pandalai-Nayar (2019)). According to Slaughter (2009), U.S. multinational parents accounted for about 19 percent of total U.S. employment, while, more recently, Boehm, Flaaen, and Pandalai-Nayar (2019) find that multinationals accounted for 29 percent of U.S. manufacturing employment as of 2011. Much 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 with 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), more than 40 percent of U.S. imports were through related-party transactions and more than 60 percent of manufacturing imports in 2007 were intermediate goods (Boehm, Flaaen, and Pandalai-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, to keep our task manageable, we focus on papers explicitly covering foreign-affiliate employment and related-party trade.

The modern literature on the effects of offshoring on domestic wages arguably begins with Feenstra and Hanson (1999). They first identify the effect 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 of 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 show that a 10 percent increase in a multinational's overseas investment is associated with a 2.6 percent increase in domestic investment, and a 10 percent increase in overseas employee compensation is associated with a 3.7 increase in domestic employment compensation. 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 assumes that U.S. wage bills and investment are uncorrelated with foreign growth rates. However, it is plausible that firms respond to foreign growth by increasing production at home. This would lead to an overestimate of the effect 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 affect 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. 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. Occupations with non-routine and communication-intensive tasks obtain higher wages, while occupations that involve computer use see wage declines. On the other hand, Hummels and others (2014) find positive effects of offshoring for high-skilled workers in Denmark, and negative effects for low-skilled workers; they also find that routine jobs, as well as jobs using natural science and engineering knowledge, undergo larger wage losses due to offshoring.

Hummels and others (2014) and Oldenski (2014) show that offshoring is associated with wage losses for less skilled workers and wage gains for more skilled employees. Ebenstein and others (2014) and Ebenstein, Harrison, and McMillan (2017) study the effects of exposure to offshoring to high- and low-income countries as well as the effects of exposure to 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 percent increase in industry foreign affiliate employment leads to a 0.14 percent increase in wages), but find no effect of offshoring to low-income nations. However, at the occupational level, Ebenstein and others (2014) find that offshoring to high-income countries significantly increases U.S. wages (a 10 percent increase in occupational foreign affiliate employment leads to a 0.34 percent rise in wages), but offshoring to low-income countries has a larger negative effect

(0.40 percent) 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 and others (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 United States has a comparative advantage and losses to the factor in which the United States has a comparative disadvantage. These effects have been increasing over time, reflecting the growth of offshoring and globalization in general (Ebenstein and others (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 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 and others (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 and others (2014) tracked cohorts that left a firm after an offshoring event in Denmark, finding that the present discounted value of lost earnings exceeded 50 percent of pre-displacement earnings for both high- and low-skilled workers. This implies that changing occupation and industry is costly for workers. Kambourov and Manovskii (2009) find that occupational rather than industry tenure represents a stock of human capital—five 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 United States 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) after the establishment of permanent normal trade relations in 2001 led 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, Flaaen, and Pandalai-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 of 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 find that the recent growth in sourcing from China reduces domestic sourcing by 0.53 percent on net leads. However, this masks considerable heterogeneity: firms not linked to China contract or exit, while those linked with China increase their 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 the effects of offshoring 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 them? Would they be able to keep pace with increasingly com-

petitive foreign firms if they did not produce their optimal product mix at the cheapest cost?

To the best of our knowledge, no empirical work 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 Pandalai-Nayar (2019) show that the number of domestic manufacturing firms decreased by nearly 3 percent per annum on average from 2001 to 2011, while the number 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 with 4.17 percent for U.S. multinationals and 0.35 percent for foreign multinationals. Obviously, some of this could be due to the supply-chain effects of multinational offshoring, but they alone cannot plausibly explain these downward trends. While employees of domestic firms are different (in ways 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 the effects due to foreign import competition in general. Ebenstein and others (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 United States.

While technical change and automation are interlinked with offshoring, their direct labor-substituting effects are likely greater than the effects of offshoring. Proxying for technical change with computer use, Feenstra and Hanson (1999) find that technical change 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 and others (2003), who develop the routineness measure used by Ebenstein and others (2014), Oldenski (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 the jobs 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 to 0.37 percentage point decline in manufacturing employment but find that exposure to robot use is 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, especially 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 the effects of offshoring.

The literature discussed shows the nuanced and disaggregated effects that 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 in the 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 workers 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 U.S. manufacturing, as well as manufacturing in Europe and even China (where manufacturing employment shares have also begun to decline). While off-

shoring is an important factor, it does not appear plausible that offshoring is the only factor driving 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 question would require substantial extensions of existing models of multinational sourcing.

DO MNCs EXPLOIT WORKERS BY DENYING THEM BASIC RIGHTS?

A wide array of domestic and international laws and standards provide clear, although not exhaustive, descriptions of conditions that lead to exploitation. This section addresses the extent to which MNCs deny workers what many consider to be basic rights.⁹ Many claims of MNC exploitation are not based on relative wages, as discussed in the previous section. Rather, the claims refer 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, exploitation may arise from violations of moral rights, irrespective of the distributional outcome (Zwolinski and 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 Organization (International Labor Organization (2016)). The 1998 ILO Declaration on Fundamental Principles and Rights at Work commits all member states to respecting rights in four categories:

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

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.

Presumably because these rights are enshrined in ILO conventions, they are also found in the code of conduct adopted by many MNCs. For example, the Fair Labor Association (FLA) has based its standards on the ILO conventions. Twenty-eight U.S. companies and suppliers have signed on to these standards and the FLA's monitoring and compliance programs. FLA members include major brands such as Nike, New Balance, Fruit of the Loom, and Patagonia.¹⁰

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 migrants. 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" (International Labor Organization (2016)). Similarly, the International Organization for Migration's 2003 World Migration Report notes the "particular vulnerability to exploitation and abuse of women migrant workers" (International Organization for Migration (2003), 105–06). 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 uses absolute standards rather than relative ones. Nonetheless, comparing labor rights at MNCs relative to domestic employers provides additional insights.

Relatively few studies directly compare how well MNCs meet non-wage labor standards to similar domestic firms. For this reason, we include studies that 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 percent and 96 percent 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 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 with 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 that 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 and Riddell (2019)).

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 and Amengual (2008)).¹¹ 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 (BFC) provides high-quality evidence from a garment industry with one of the best reputations for maintaining labor standards (International Finance Corporation (2018)). Almost all (96 percent) of the factories assessed were foreign-owned, predominantly by Chinese multinationals. More than 70 percent of assessed factories did not comply with the requirement that overtime never exceed two hours per day. However, in only 5 percent to 10 percent 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 more than 30 percent).

Compulsory overwork in export processing zones is documented by Hein (1988) and ILO (2016) for the Mauritius apparel EPZ, and Yonghong (1989) for Shenzhen EPZ in China. Similarly, in 2016, FLA assessors in twenty-seven 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)).

Little evidence compares working hours in MNCs with hours at domestic firms. One exception is Hijzen and Swaim (2008). Using linked employer-employee data, they find no statistically significant effect of moving to an MNC on logged weekly hours in Germany, Portugal, or the United Kingdom. For Brazil, they find a decrease in working hours of around 0.2 percent.¹²

Turning to evidence from EPZs, Cirera and Lakshman’s 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” (Cirera and Lakshman (2017)). Kabeer and Mahmud (2004) compare workers and working conditions inside and outside export processing zones (EPZs) in Dhaka, Bangladesh.¹³ 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 Labor Organization 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 Organize Convention in 1948. In addition, the presence of unions is a strong predictor of compliance with local employment laws (Pohler and Riddell (2019)).

Evidence on whether MNCs discourage labor organizations more than domestic firms is limited and mixed. Using linked employer-employee data, Hijzen and Swaim (2008) find workers in Germany and the United Kingdom are less likely to be in a union when they are working for a multinational firm.¹⁴ Using time-series data to compare segmented production (MNC supply chain) to the traditional integrated production sector in El Salvador and Honduras, Anner (2011) finds segmentation 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 with 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 than, or similar to, in firms outside the zones. Arnal and Hijzen (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 and others (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 and Amengual (2008); also Manjoo (2012) provides one example). BFC's review of 464 Cambodian garment factories found 243 incidents of noncompliance with the right to organize among 155 different factories (International Finance Corporation (2018)).

Despite potential reputational costs, wholly owned factories of major international brands sometimes actively prohibit rights to organize. An investigation by Cividep India (2017) found workers in one of Samsung India's factories claimed they were asked during job interviews if they knew what a union was, and not hired if they responded affirmatively. The report also claimed that leaders of attempts to unionize 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 example. Union organizers have been attacked with machetes or found dead, with their bodies showing signs of torture (Human Rights Watch (2015)).¹⁵

Child Labor

Few actions are as universally condemned in the West as child labor. For this reason, over the past decade, Western-based MNCs have almost universally announced zero-tolerance policies on employment of children in their affiliates and supply chains. Enforcement of these policies can vary, 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) and (2014); Donaghey and others (2014)), enforcement is imperfect. Moreover, audits at factories may mask labor done by children of employees who bring their work home, as documented by Husselbee (2000) and Khan, Munir, and Willmott (2007) among soccer ball producers in Pakistan.

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 (Theuws, Sandjojo, and Vogt (2017)) found some families took their children out of school not only to reduce expenses but also to complete childcare and housework tasks 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

Some MNCs and (more often) their suppliers provide very dangerous workplaces. For example, more than a thousand workers died when the 2013 Rana Plaza building collapsed in Bangladesh. Workers in that building produced clothes for many major brands. That tragedy highlighted concerns that multinationals exploit workers' ignorance of safety conditions such as the structural integrity of a building.

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), or when workers are unfamiliar with the hazard (such as many chemicals that lead to long-term harm).

Manjoo (2012) interviewed MNC employees in Honduras, who had reportedly "witnessed coworkers 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) found workers were required to stand for their work during the entire shift. Furthermore, the workers reported 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 suffered from allergic reactions and often developed coughs. Bangladeshi garment workers interviewed by Human Rights Watch claimed the water the factory supplied was so dirty it was undrinkable (Human Rights Watch (2015)). Of course, interviews with workers identify only the hazards workers know about.

Systematic data collection supports the anecdotal evidence above. A survey from Better Factories Cambodia (International Finance Corporation (2018)) shows that even in one of the most high-profile, best-practice industries in a low-wage nation, health and safety problems are common (table 7-1).

Studies of EPZs are also generally grim. In their review, Cirera and Lakshman (2017) 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) conclude: “Many workplaces in EPZs throughout the world still fail to provide safe environments.” These studies, however, suggest employers in EPZs have fewer violations

TABLE 7-1. Safety Hazards Reported in Cambodian Factories with the Highest Rate of Noncompliance

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

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. 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, preemployment pregnancy tests, unfair dismissal and discrimination on the grounds of pregnancy, and denial of maternity leave and other legally required benefits (Raworth (2004)).¹⁶ Manjoo (2012) found women working in EPZs in Honduras earn between 28 percent and 51 percent less than the minimum wage, with employers justifying lower wages for women with the stereotype that women's work is less demanding.

Some discrimination is overt. To find examples, we downloaded employment ads from leading websites in Korea, India, Indonesia, and Thailand. 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 looking for only male or only female applicants.¹⁷ 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 is 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 with domestic firms.¹⁸ Vahter and Masso (2019) find that in Estonia 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 the results of Bøler, Smarzyńska Javorcik, and Ulltveit-Moe (2018), which show that the gender wage gap is higher among exporting firms in Norway.

In contrast, Kodama, Javorcik, and Abe (2018) find 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. They find that, among manufacturing firms in China, foreign affiliates from countries with a more gender-equal culture tend to employ proportionally more women and promote female managers. Notably, the UNDP Gender Inequality Index, which the authors use to measure home-country culture, ranks European countries as more equal and the United States as less equal than China.¹⁹

Discrimination and Treatment of Migrant Workers

Migrant workers are more vulnerable than local workers (International Labor Organization (2016)). Among other things, migrant workers lack social and political networks, they may not proficiently speak or read 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 their rights.

If MNCs are not exploiting their workers, they should treat migrant workers as well as local workers—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 the extent of the mistreatment and how MNCs' discrimination compares with 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 by multinationals (SOMO (2013)).²⁰ 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, while outsourcing agency workers work twelve hours a day, six days a week, and all shifts” (SOMO (2013)).

Migrant workers also reported that their pay was docked if they were late or sick, supervisors threatened them with deportation if they made complaints, that the outsourcing agency held their passports, and 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 the human rights violations described 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 rights-based approach emphasizes the correctness of the choices made by an agent, not their outcomes. So long as MNCs allow human rights violations, they are exploiting workers.

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, and Toffel (2016b)). Improvement was faster if auditors have more training and if audit visits also help train suppliers (Hugill, Short, and Toffel (2016); Short, Toffel, and Hugill (2016); and Thorlakson and others (2018)). Hugill, Short, and Toffel (2016), Short, Toffel, and Hugill (2016), and Stroehle (2017) find adherence is higher if domestic institutions promote compliance (for example, there is a free press).²¹

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.

CONCLUSION

We have introduced three different approaches to define exploitation of workers by MNCs. The market-based or consequentialist approach asks if 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. It is unclear whether this represents rent sharing, unmeasured skills, or a compensating differential for uncertainty over job tenure or other differences between MNCs and local firms. 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 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 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 the effects of offshoring, would have driven much of these job losses. Therefore, it is difficult to conclude that offshoring constitutes our first definition of exploitation by making workers worse off than they otherwise might have been.

Our second set of definitions of exploitation founded in utilitarian ethics and behavioral economics asserts that it is fair for rich employers to share some of their surplus with 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. The small wage gaps and relatively high turnover we find suggest that any sharing of surplus is modest.

At the market level, an inequality-averse utilitarian worries that MNCs may harm workers. Labor shares are declining in many nations as multinationals have risen in importance. We review a handful of papers associating MNCs with this trend, but robust causal evidence linking multinational activity with the robust decline in labor shares is limited.

Our third definition of exploitation occurs if MNCs violate workers' rights. These rights include, but are not limited to, rights defined by local laws and international standards, such as rights set forth by the ILO. This definition of exploitation does not depend on whether domestic firms also commit these violations. We find well-documented evidence that multinationals do violate workers' rights, including discrimination by gender and preventing workers from exercising their right to unionize. We do not have consistent evidence whether MNCs exacerbate, ameliorate, or simply participate in the poor treatment of workers in poor parts of global supply chains.

Some Limitations

The key question to understanding the effects of multinationals involves the relevant counterfactual. As we noted, this counterfactual is difficult for studies of wages and working conditions. Moreover, those studies focused more on MNCs, not on the multinational supply chains that are often of interest to activists and policymakers. At a deeper level, our view of MNCs might differ if we think the counterfactual of working for a multinational is (a) working for a multinational's supplier, (b) working for a domestic employer who exports because the multinational never entered, or (c) remaining a peasant farmer.

Our literature review has focused on the wages and working conditions of multinationals and their suppliers. However, many of the harshest critics 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. At the same time, multinationals can 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 review of these important arguments for others.

We also did not have sufficient data to separate out when MNCs enter a poor nation to create an export platform versus when they are producing for the poor nation's market. Entering a poor nation to produce for the domestic market is more likely to displace local workers, and also to improve product variety for consumers.²² In addition, there is increasing anecdotal evidence that MNCs originating in rich countries are likely to have very different behaviors and effects than MNCs originating in emerging markets. Since multinationals often import their home-country approaches to their host country, MNCs originating in countries with robust labor standards and generous compensation schemes are likely to behave quite differently from others.

Implications

Overall, asking 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 enforcing existing minimum-wage laws and ILO standards and implementing policies to raise worker productivity. To improve economic outcomes, researchers and policymakers should shift their attention away from MNC status and instead focus on the firm characteristics that more strongly influence wage rates—firm size and industrial sector—as well as the related issues of market concentration and monopsony power that are correlated with declining labor shares across the world.

Given that MNCs employ only a modest share of the workforce, addressing violations of workers' rights at MNCs only puts a dent in widespread poor conditions. Nevertheless, addressing 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 easier to sanction and providing a profit incentive for MNCs 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 will not end all violations of human rights.

Thus, improving the welfare of vulnerable workers will require much more than pressure on MNCs. It is beyond our scope to recommend policies

toward achieving these goals. However, common sense suggests focusing on improving human capital, creating healthy work spaces, encouraging the functioning of labor markets, helping workers defend their rights through collective action, training workers and managers on employees' rights, and increasing enforcement of labor laws already on the books.

NOTES

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1. "Exploitation," *Stanford Encyclopedia of Philosophy*. Available at <https://plato.stanford.edu/entries/exploitation/>.

2. Budd, J. W., Konings, J. and Slaughter, M. J. 2005. "Wages and International Rent Sharing in Multinational Firms," *Review of Economics and Statistics*, 87(1), 73–84.

3. ITUC has an index of poor labor rights, from a trade union perspective. Available at www.ituc-csi.org/ituc-global-rights-index-2018.

4. These sectors in Harrison and Scorse (2010) 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.

5. Andersen, Steffen, Seda Ertaç, Uri Gneezy, Moshe Hoffman, and John A. List. "Stakes matter in ultimatum games," *American Economic Review*, 101/7 (2011): 3427–39.

6. 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)). The seminal quasi-experiment of Kahneman, Knetsch, and Thaler (1986) found that people are more likely to judge layoffs and pay cuts by an employer as unfair if they were undertaken to increase the employer's profits: in particular, to hire cheaper alternative workers. These original Canadian findings have since been reproduced in several countries, including the United States (Charness and Levine (2000) and (2002)) and Germany (Gerlach, Levine, Stephan, and Struck (2008)).

7. 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 untangle these three sources of firm-specific differences.

8. 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.

9. For additional research on the extent to which market concentration has increased in the United States, see Abdela and Steinbaum (2018) and Krueger and Posner (2018).

10. Fair Labor Association, "Improving Workers' Lives Worldwide." Available at www.fairlabor.org.

11. For example, Manjoo (2012): "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."

12. 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 with traditional integrated production facilities. For more on this argument, see, for example, Anner (2011).

13. Seventy-two percent of firms in Bangladesh's EPZs have some foreign ownership (58 percent are wholly foreign owned), and 100 percent of firms are part of multinational supply chains. Available at www.bepza.gov.bd/pages/details/about.

14. The difference is only statistically significant for the United Kingdom. No data was available for unionization in Portugal and Brazil.

15. 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 third floor management room that 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."

16. See Manjoo (2012) for evidence from Honduras, Ngai (2007) for evidence from China, and Human Rights Watch (2015) for evidence from Bangladesh.

17. For example, in Korea, Domino's Pizza (subsidiary of a U.S. 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 (www.alba.co.kr, www.albamon.com, www.saramin.com); February 12, 2019, for the Korean site in English (<https://incruit.com>); February 15, 2019, for the Thai sites (<https://th.jobsdb.com>, <https://jobtopgun.com>); and February 18, 2019, for the Indian (www.shine.com, www.wisdomjobs.com, www.naukri.com) and Indonesian sites (<https://id.jobsdb.com>, 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>.

18. 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.

19. Gender Inequality Index (GII), United Nations Development Programme. Available at <http://hdr.undp.org/en/composite/GII>.

20. Migrant workers come predominantly from Indonesia, Nepal, India, Thailand, China, the Philippines, Burma, Cambodia, Bangladesh, Pakistan, and Vietnam.

21. Some of the challenges to monitoring is that (as noted) 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 admitted 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, employee resistance to endorsing 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 present-biased. At the same time, such challenges in measurement show how difficult it can be to enforce rules that workers do not endorse.

22. Of course, if the added product varieties create positive or negative externalities, the effects are even more complex. Think of new drugs versus harmful infant formula, or high or low pollution.

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