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Zones of Regulation: Restructuring Labor Control in Privatized Export Zones

STEVEN C. MCKAY

The article explores work organization in advanced electronics manufacturing in Philippine export processing zones. Previous approaches have painted both advanced manufacturing and "peripheral" production as generic, treating locations as substitutable. Case study analysis of three multinational electronics firms located in both public and privatized export zones demonstrates that the complex demands of high tech production have led to diverse forms of work organization and an extension of labor control outside the factory, making local conditions more, not less, important. The article develops a broader, place-sensitive notion of production politics, focusing on the state's reorganization of export processing zones, and firms'localization strategies that leverage labor market inequalities to elicit worker consent.

Keywords: labor markets; export processing zones; labor control; Philippines; electronics

As industrialized economies have restructured or shed manufacturing, there has been increased debate over production and work organization in less industrialized areas where investment booms. Critics have often painted a generalized

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portrait of "peripheral" manufacturing, focusing squarely on cheap labor, shop floor coercion and direct state repression.¹ This approach has been extended to critiques of globalization, which claim that greater capital mobility only increases the homogenized character of low-cost production locations as states compete in a regulatory race-to-the-bottom to attract investment.² For at least the past quarter century, this has been the enduring image of production in export processing zones (EPZs), from Shenzhen to Central America: deregulated and deterritorialized spaces of cheap labor.³

On the other hand, the spread of advanced manufacturing to developing countries has led some to claim that globally competitive firms, regardless of location, should implement a "high performance" strategy: one that combines new process technologies, quality control systems, and lower inventory buffers, packaged with increased shop floor autonomy and discretion for multiskilled frontline workers.⁴ They argue that since these new forms of work can be applied across a broad range of industries and locations, developing countries would be wise to attract the torrent of new investments, which should come bundled with cuttingedge technology and good jobs, even in EPZs.⁵

Although both approaches address restructuring, they fail to explain the diverse character of production found in today's export processing zones. Facing more complex production processes and enmeshed in denser production networks, advanced manufacturers can no longer—if they ever could—simply rely on a "spatial fix": relocating where cheap labor and shop floor coercion might still provide a competitive advantage. At the same time, while "high performance" work reorganization *can* lead to improved firm performance, it does not explain the myriad cases of competitive firms that have chosen *not* to implement a decentralized, worker empowerment strategy. This is particularly apparent in the few studies of work reorganization in developing countries that demonstrate the compatibility of flexible, high quality manufacturing with job insecurity and strict hierarchical control.⁶ Both the critical globalization and high performance approaches seem to share an overly generic vision of production, whether exploitative or empowering, which makes the homogenous characterization of EPZs and the substitutability of locations possible.

Given the shifting nature and geography of advanced production, this article engages three interrelated questions: what accounts for the variability of advanced production even within a single industry, how is production being reorganized, and with what consequences for worker control and autonomy? To address these questions, this article makes two main arguments. First, that a combination of technological change and complex competitive pressures are pushing firms to reorganize production, but in diverse, rather than generic, ways. And second, the reorganization of production and work, although varied, has increasingly broadened the scope of labor control and worker consent, extending it outside the factory and making local conditions *more*, not less, important.

To develop my arguments, I recast Michael Burawoy's notions of consent and the politics of production, demonstrating how the demand for quality, flexibility, and network coordination under competitive production requires a more complex system of production control. This system includes mastering new production technologies, securing worker commitment, and obtaining new forms of state intervention that tap both formal and informal institutions of labor control. I also show that this variable combination is often realized through firms' localization strategies that exploit both the uniqueness of place and dynamics of space to leverage labor market differences and elicit worker consent.

My analysis focuses on work organization in electronics manufacturing firms operating in the Philippines, the privatization and reorganization of Philippine EPZs, and the political construction of local labor markets.⁷ The article first reviews Burawoy's notion of production politics and critiques his characterization of factory regimes in "peripheral" countries as generally despotic. I then develop a revised, place-sensitive notion of labor control, highlighting the roles that firms, state, and nonstate actors play in the reorganization of production and the reproduction of labor power. Following a brief overview of the development of Philippine EPZs, I examine three firms to illustrate the theory: Power Tech, Storage Ltd., and Integrated Production, which are located in one public and two private EPZs, respectively.8 In each case, the labor process, human resource strategies and extrafactory interventions by both the firms and local state institutions will be discussed to demonstrate changes and variation in what Jonas has termed the local labor control regime.⁹ Finally, the article concludes by addressing the implications of these findings for workers and labor movements in the Philippines.

THE POLITICS OF PERIPHERAL PRODUCTION AND GLOBAL ELECTRONICS

Burawoy breathed both controversy and new life into labor control debates by theorizing a dynamic link between shop floor politics and broader state politics. Based on his distinction between the *labor process*, or the technical organization of production, and the *political apparatuses of production*, or the institutions that regulate workplace struggles, he posits two basic types of capitalist factory regimes, the despotic—in which work is organized around shop floor coercion— and the hegemonic—in which workers "must be persuaded to cooperate."¹⁰ While Burawoy identifies four contributing factors to regime difference—the labor process, market competition, labor power reproduction, and state intervention—it is state intervention that critically distinguishes despotic from hegemonic regimes. He argues that when states provide welfare benefits and enforce labor legislation, workers gain enough bargaining leverage to extract concession from management, leading to a consent-based hegemonic regime.¹¹ But he also warns that hegemonic regimes in advanced countries are undermined by capital mobility and

competition from developing countries, where low-wage, despotic production regimes still reign.

While providing a strong analytical framework to approach restructuring, Burawoy's unmodified theory is at pains to explain the complexity of work organization and the blurring of coercion and consent in contemporary electronics manufacturing, particularly in developing countries. Burawoy, like many globalization critics, argues that production in developing country EPZs simply exploits cheap labor, "requiring brutal coercion at the point of production."¹² Although such despotism still exists, production in the larger, now dominant sectors of advanced electronics manufacturing is not so neatly characterized.

Since the late 1980s, technological and market changes have meant increased capital intensity and a more complex competitiveness. Firms producing high tech commodities such as hard disk drives, microprocessors, and integrated semiconductor chips now compete simultaneously on the bases of cost, quality, product differentiation, and speed-to-market. They must also orchestrate intricate production networks that are both globally dispersed and regionally agglomerated.¹³ For the labor process, these market imperatives translate into a need for "mass customization," or the wedding of mass production and economies of scale with extremely short product cycles, rapid technical innovation, and responsiveness to customers. At the shop floor level, production must be flexible but high volume, while products must be inexpensive but of high quality. These contradictory demands often mean that firms experiment with a variety of production organization and labor control strategies to remain competitive.¹⁴ As many studies have shown, work systems based solely on coercion and simple control often lead to instability, inflexibility, and poor quality-precisely those areas in which advanced producers must compete.15

Given the need for production quality and stability, management often prefers worker consent over coercion, even in the absence of state intervention to enforce labor laws or provide welfare provisions. This is increasingly true for final assembly processes, since on-time delivery is crucial and a consent-based system is potentially less disruptive. As will be shown in the case studies, management tries to organize worker commitment to reduce costly turnover and head off any stoppages or slowdowns in production. But just as there is no one best way to organize production, firms also develop multiple and complex ways to manufacture commitment among their workers.

These new and more active strategies to stabilize production exploit a broader basis for constructing worker consent than Burawoy and others theorize. In his own analysis, Burawoy remains firmly focused on the shop floor. Ching Kwan Lee extends his insights, arguing that worker consent is crucial but that nonclass subjectivities formed outside the workplace—based on gender, culture, and conditions in the labor market—are equally important factors shaping worker interests.¹⁶ However, both Burawoy and Lee fail to recognize alternative types of state

intervention beyond the bureaucratic model that nevertheless have a direct role in reproducing labor power and constructing worker consent. Burawoy implies that the state's primary roles are on the macroeconomic level: providing general welfare benefits and regulating industrial relations.¹⁷ Yet because of the complexities of global production and competition, states must often go beyond traditional bureaucratic regulation to draw and retain investment. State actors at multiple levels may pursue alternative strategies such as upgrading complementary infrastructure and selectively regulating both industry and labor to provide the appropriate conditions for advanced production.¹⁸ In the Philippines, the shift in state policies has meant the conscious redesign of EPZs and their evolution since the 1970s from deregulated public export platforms to reregulated privatized high tech enclaves.

Finally, in Lee's extended model of consent, it is workers' labor market dependence that "determines management strategies of incorporating labor."¹⁹ However, her account treats conditions in the labor market as entirely exogenous. As noted above, she does not acknowledge the active role of the state, a central player in the political construction of the labor market. She also underestimates the power of employers, who do not simply respond to labor market conditions but actively shape labor markets to increase worker dependence, enhance commitment, and diffuse resistance. As Mair and others have shown, global firms often engage a "strategic localization" policy by adapting their labor control strategies to balance their labor process requirements with patterns of local labor regulation.²⁰

The Philippine case confirms that changes in advanced manufacturing are leading to a greater need for production stability and worker consent. But both firms and the state have developed new strategies and intervene in a variety of arenas, constructing more complex political apparatuses of production than Burawoy considers. In particular, the active roles of both employers and the state in the manipulation of the labor market require a rethinking and expanded understanding of labor control and worker consent that goes beyond the shop floor.

In the three case studies that follow, I develop a more integrated notion of labor control drawing from Burawoy's own emphasis on the *reproduction* of the social relations in and of production.²¹ Here I follow Peck by going beyond the factory, focusing on the labor process; the labor market; and three integrated processes of labor control, namely the securing of an appropriate labor supply, maintaining control within the labor processes, and reproducing this set of social relations.²² In analyzing these three processes I look below the macro-level interventions of the national welfare state and the interests of "capital-in-general," using Jonas's concept of a local labor control regime to examine three local institutional domains where different production politics play themselves out.²³ These domains include: production locales, such as the factories as sites for negotiating technical and bureaucratic control; reproduction locales, such as the provincial and local

governments and the community for the politics of employment and welfare; and consumption locales such as communities, families, and boarding houses for the politics of housing and consumption.²⁴ In the following analysis, the locally specific processes of reproducing both labor power and the production regime occur across these various domains through the reorganization of the export processing zones and worker housing; the political construction of the local labor market; and firms' work organization and human resources policies, which include recruitment, training, shop floor organization, work incentives, and antiunion strategies.

PHILIPPINE EXPORT PROCESSING ZONES

EPZs have typically been depicted as little more than detached sweatshop enclaves for mobile manufacturers with few local linkages.²⁵ This is also how Philippine EPZs have been presented since the opening of the first zone in 1972.²⁶ But the static characterization masks important changes, both in the development of the zone program and in the nature of production within the zones. In the 1970s, the Philippines was seen as an ideal production site by many American semiconductor firms because of its large pool of cheap, English-speaking workers²⁷ and special incentive packages.²⁸ Early investors, led by Intel and Texas Instruments, focused on labor-intensive, screwdriver assembly and helped the Philippines established itself as a leading export platform.²⁹ Although the zone program expanded to four government-owned zones in the 1980s, political instability and labor unrest in the middle of the decade sent many investors fleeing to nearby Malaysia and Singapore. However, in the 1990s, rising wage rates in these two countries, coupled with renewed stability, increased privatization, and a revamping of the incentive program in the Philippines, helped revive the Philippines zone program, making it now one of the top five EPZ programs in the world.³⁰ The Philippines has 48 active zones, of which only the first 4 are government owned, and 148 total planned zones.

Since the mid-1990s, the Philippines has also reemerged in the global electronics industry as a premier site for technology-intensive assembly and test manufacturing of semiconductors and computer hard disk drives (HDD).³¹ From 1994 to 2000, multinationals from the United States, Japan, Europe, and Asia poured in nearly \$9 billion to develop new plants or upgrade existing ones in Philippine EPZs. Electronics now account for nearly three-quarters of all Philippine exports and employ 315,000, almost all within export zones.³²

But not only have the number of zones and the amount of investments exploded; there have also been important changes in the character of state intervention, in labor control strategies, and in the organization of the zones themselves, particularly in response to the rise of early labor militancy. These changes

are chronicled below in the transitions from the first public zone in Bataan, to the modified public zone developed in Cavite, and finally, to the privatized zone model that dominates the zone program today. The changes in zone organization, however, are part of the wider changes in the political apparatus of production and are intimately connected with the changes in investment and work restructuring. Thus, the changes in zone organization are presented along with the case studies of the three firms and their expanded labor control strategies that reach into the three institutional domains or locales of production politics.

In 1972, President Ferdinand Marcos opened the first Philippine EPZ, less than two months after he declared martial law. The Bataan Export Processing Zone was located in a remote area of the Bataan province, so workers, like all supplies and equipment, had to be brought in from afar. Run by the national government, it chose to house workers in large on-site dormitories, centralizing worker surveillance and making workers dependent on government housing.

Initially, the zone proved successful in attracting foreign garment and electronics firms; by 1980, it employed 28,260 workers, over 80 percent of who were female.³³ But working conditions in the zone were poor, particularly because many firms used casual labor, paid subminimum wages, and frequently laid off workers. ³⁴ Despite heavy repression by the state and zone authorities, the isolation and heavy concentration of workers proved a tinderbox for union organizing. After a string of individual strikes were met with police violence and the arrest of union leaders, a zonewide sympathy strike was organized in 1982 involving 13,000 workers. The strike, which was the first general strike in the Philippines following the partial lifting of martial law, shut down the entire zone for four days and was also the first zonewide general strike in an EPZ anywhere in the world.³⁵

POWER TECH AND THE CAVITE ECONOMIC ZONE

The hard lessons learned at the Bataan zone were not lost on the national zone authority. Before the Bataan strikes, the government had planned to set up twelve additional public zones. But in part because of the militant labor activity in Bataan, the government decided to push ahead with only one other, the Cavite Economic Zone (CEZ).³⁶ As will be shown below, low-tech electronics firms at CEZ, like their counterparts in Bataan, continue to rely on direct shop floor control and most closely resemble Burawoy's despotic model. But in attempt to curb labor militancy, shop floor control is buttressed by expanded and integrated labor control strategies that extend to other domains outside the factory and below the macro-level. Nevertheless, the expanded despotism involving a range of different actors has proven neither stable nor effective in suppressing labor organizing, leading other, more advanced firms to avoid public zones and the peripheral despotism model.

Power Tech

Power Tech is a Korean subsidiary with 306 workers producing low-tech electronic transformers and cellular phone adaptors for other subcontracting Korean firms. Operations are modest: Production takes place in a cramped, cinderblock building in warehouse-like conditions. Of the three cases, Power Tech is the least flexible and most despotic in its production organization and employment relations. Production is labor-intensive—82 percent of the workers are production operators—and organized along an assembly line where work is standardized and uses mostly older machinery transferred from Korea.³⁷ Product quality is relatively low, with reject rates many times higher than in the other two firms analyzed. Whereas the other two firms in this study view international quality certifications, such as ISO 9002 and ISO 14000, as absolutely essential to globally competitiveness, Power Tech has no international quality certification, no quality programs, and little training.³⁸

In part because of its relatively low-tech and easily learned production process, Power Tech has little interest in fostering worker commitment and instead focuses on direct control and minimizing labor costs. Discipline on the shop floor is often harsh. For example, workers are not allowed to go to the bathroom during production, prompting some workers to bring plastic bags to their workstations to relieve themselves in emergencies. The pay rate is minimum wage, or P200 per day (approximately US\$5). But because workers are not paid during the frequent slowdowns and forced vacations, earnings average just P3,000 or just over half the take-home pay of a fully employed minimum wage earner and only one-third of the locally estimated "living wage" for a family of six.³⁹ Workers also complained that management was deducting employee contributions to the national Social Security System, Medicare, and PAG-IBIG (a national social loan fund) from their paychecks, but had failed to actually remit these and their matching contributions to the federal agencies in over a year. Finally, other legally mandated benefits, such as paid vacation and maternity leave, had been suspended at the time of the production slowdowns, leaving sick leave the only remaining benefit.

To secure an adequate labor supply at such low pay levels, Power Tech exploits workers' labor market dependence, recruiting young, less-educated women, who are often below the legal minimum working age. Over 80 percent of the workers are female and nearly all are only high school graduates. Angel, a production worker noted:

After finishing school, I went to Manila to look for work. But in Manila, you need to be 18. I heard about Power Tech from a friend at church. She told me they are hiring and needed young ones and I was only 17.

At the time of research, Power Tech was struggling to stay alive. They had lost several important Japanese customers due to poor product quality, resulting in layoffs, forced vacations, and irregular work. The workforce went from a peak of 750 employees in 1997 down to 300 in 1999. Remaining workers began organizing a union to demand better treatment and to try and protect their jobs. In response, management accused the union president of theft, then fired him, while other union officers were threatened, then bribed, to drop their demands. Labor relations at Power Tech became increasingly adversarial as working conditions continued to deteriorate, further demoralizing the existing workers, and making it harder to maintain quality or fill existing orders. One worker aptly summed up the general view: "I don't think they look at us as workers. It's like we're brooms, when they need us, that's OK, they take us, but if they're done using us, they just dump us in a corner."

Cavite Economic Zone

The coercive labor control at the point of production is in many ways made possible by the wider antilabor strategies of the provincial and local governments and the reorganization of the zone itself. Established in 1986, the CEZ in Rosario is the newest and largest of the four government-run zones, with 215 mainly garment and electronics firms employing more than 56,000 workers.⁴⁰ The success of the zone is due in large part to the former governor, Juanito Remulla (1979-86, 1988-95), known for his ruthless control over the province.⁴¹ Remulla touted Cavite as a prime foreign investment destination by promising and brutally enforcing a provincewide "no union, no strike" policy.42 Among other tactics, he created the Industrial Security Action Group (ISAG), a special police force that patrols the province's various economic zones. Both militant and moderate unions stayed away from Cavite, intimidated not only by the ISAG, but also by the "disappearance" and "salvaging" of emergent labor leaders and other enemies of the governor.⁴³ In 1991, Remulla declared the entire province an "Industrial Peace and Productivity Zone" and by 1995, CEZ was already the largest Philippine EPZ, with 166 firms, 40,000 workers, but not one labor union.

In addition to the governor's strong-arm political tactics, the strategic planning of the zone itself also helped deter early union organizing. Zone planners took particular note of the "disasters" at Bataan and changed their design approach. First, the national zone authority chose a suburban region close to Manila that would allow firms to recruit locally. Zone designers also purposely avoided constructing any centralized worker housing. As one CEZ administrator noted,

Their main mistake in Bataan was it was too isolated. Everyone had to migrate, which meant they had to create a community *inside* the zone. Unrest at Bataan was high because of the dormitories: it made it easier to organize them.

Thus, at CEZ, workers either commute or become "bed spacers" in small makeshift boardinghouses scattered in the local community. The conscious nonorganization of worker housing reduces worker density and makes contact by union organizers more difficult.

Also, unlike at Bataan, the local government officials in Cavite play a key role within the zone itself. First, the governor and mayor both maintain offices in the zone, primarily to process recommendation letters that are required of all applicants. As a local official from the Philippine Economic Zone Authority (PEZA) remarked:

If one company has a [labor] problem, the local officials get involved with the solution. The mayor has a lot of say about how these workers behave. If a worker is causing trouble, the mayor talks with the parents or the worker herself.

Second, zone officials help regulate the zone's labor market through mandatory employee screening conducted by the Industrial Relations Department (IRD). Applicants who flock to the zone are coursed through the IRD office for endorsement to firms. This "manpower pooling" and recommendation system allows the zone administration and local officials to track workers and regulate the zone's labor market.⁴⁴

However, despite the complexity of labor regulation, the system is not without conflict, and conditions have proven to be neither entirely stable nor static. In fact, the very "success" of the zone has led to host of new problems. For one, poor working conditions similar to Power Tech have become zonewide problems. Workers face little job security, forced overtime, forced layoffs, and abuse by supervisors.⁴⁵ One study found that over 38 percent of workers were being paid below the minimum wage.⁴⁶ With more than fifty-six thousand workers directly employed in the zone, the surrounding town of Rosario has mushroomed into exactly what the zone planners had hoped to avoid—a dense community of primarily zone workers with many shared grievances.

In response to such conditions, labor unrest has developed, but not until there was a dramatic change in local politics. In 1995, Governor Remulla lost his reelection bid and the dismantling of his political machine led directly to a wider political space for organizing labor. Emboldened by his successor, whose campaign rhetoric included proworker sympathies, both moderate and militant unions reemerged in the province. As one labor organizer put it, "our main goal is to organize workers, since everyone else they face is organized: PEZA, the local government, the personnel managers, all of them. It's only the workers who aren't organized." Several of the largest national trade unions began targeting CEZ and by July 2000, CEZ had twenty-five registered unions. While still only 11 percent of the zone's firms, the twenty-five unions represent a huge leap from zero just four years before, causing much concern among firms and the zone authority.

The recent problems at Power Tech and the rise in union organizing at CEZ in general highlight the potential instability of both shop floor despotism and coercive local labor control regimes. The case of Power Tech shows that a despotic factory regime, which fosters no worker commitment, can generate open conflict and threaten a firm's viability. The rising labor conflicts in the zone also show that even sophisticated labor control regimes are contingent and subject to challenge. Just as the Bataan zone was originally designed to contain labor conflicts, CEZ too was considered a new, improved model of zone organization that could deliver on its promise of "no unions, no strikes." But CEZ, as a public zone, is still formally accountable to local citizens and has the explicit mandate to provide employment and foster local development, a mandate it shares with the other three public EPZs. This mandate has helped create the conditions for potential problems, since to fulfill it, the administration has sought to attract a large number of specifically labor-intensive firms. Meanwhile, because it is a government-run zone that is publicly answerable to a shifting political base, the government authority that manages the zone is now somewhat limited in their labor control strategies. Thus, the high concentration of labor-intensive firms in a public, government-run zone has likely contributed to both the rise in conflict and an inability to entirely contain it. The failure of CEZ firms and public authorities to contain instability underscores the fact that the despotic local labor control regime at CEZ, while extensive, has not been able to provide what many more advanced manufacturing firms require most: conditions for stable yet flexible production.

STORAGE LTD. AND THE PRIVATIZATION OF EPZS

The case of Storage Ltd., a subsidiary of a leading Japanese HDD producer, demonstrates that worker consent is crucial for advanced production, even in a developing country. But it also shows that consent and competitive production do not necessarily require a barrage of positive incentives, direct worker participation or strategies restricted to the shop floor. Instead, the firm is also active in domains outside of production, taking advantage of labor market segmentation and the new privatized EPZ model, which combines spatial restructuring, selective state interventions, and links to local formal and informal institutions to deliver a more sophisticated labor control system based on workers' "coerced consent."

Storage Ltd.

Storage Ltd.'s \$124 million plant, established in 1996, assembles and tests high-end HDDs for computer network servers. In the global HDD market, profit margins are thin and early—so competitive firms must maximize ramp-up speed and capital equipment productivity while minimizing labor costs and avoiding poor quality and delivery bottlenecks. The extreme sensitivity of HDDs also

makes high quality production absolutely essential. Assembly manufacturing requires dust- and static-free production areas and expensive semiautomated machinery arranged along computerized assembly lines. However, many steps in production have proven difficult to automate and Storage Ltd. employs more than nine thousand workers, 87 percent of whom are shop floor operators.

Given such exacting and sometimes conflicting production demands, Storage Ltd., like many other high tech manufacturing firms, has embarked on an integrated total quality management (TQM) strategy to maintain control over the labor process.⁴⁷ The firm's main TQM tool in the engineer-driven system is automated statistical process control. Operators at each section scan in the bar-coded production materials and components as they move through assembly so that the centralized computer monitoring system can track individual disk drives and components and trace mistakes down to the individual worker.

The firm's production targets are quite high—1.5 million HDDs per month, putting assembly line operators under intense pressure for continuously improving productivity. Storage Ltd. operates around-the-clock, year-round. And while officially there are three 8-hour shifts, in practice there are only two 12-hour shifts with 4 hours of forced daily overtime. Because the materials they handle are sensitive to static electricity, each worker must also wear a cable attached to her body that she "plugs in" to her workstation. Thus workers stand for much of their 12-hour shift, literally tethered to the assembly line. Workers normally work six and often seven days a week. At the time of the study, large sections of the plant did not get a rest day for three straight months to meet the end of the year targets.

To maintain high levels of worker effort while minimizing worker error, Storage Ltd. uses a range of internal labor control tactics, which one human resource staff member described as "disciplinary management." Disciplinary management relies, on the technical side, on data generated by the computerized assembly line, which helps update the ubiquitous performance boards that hang over each section, tracking individual and group productivity and quality. On the social side, discipline is maintained by strict enforcement of company rules. A group of auditors known as the Quality Control Patrol roam the plant with Polaroid cameras and mete out disciplinary actions for those caught violating standard operating procedures. The pictures of violators, with blacked out faces, are displayed on a large bulletin board outside the canteen as a warning to others. Sleeping on the job, one of the most common offenses, has become such a problem that the penalty was increased from a one-week to a one-month suspension or even immediate dismissal if the offense constitutes, "a deliberate form of sleeping with malicious intent."⁴⁸

But the quality and productivity demands of the high tech labor process do, in turn, place limits on implementing an entirely despotic employment system. Because the firm must meet international quality standards for certification, the firm must train and certify its operators at three different work stations, requiring three months of initial training. The firm therefore hires only full-time employees rather than casual or temporary workers to keep turnover low and to recoup its upfront investments in worker training. The firm also recognizes how demanding these jobs are and tries to protect against production disruption and worker turnover by also providing positive incentives, such as relatively high take-home pay and "unwinding and morale-boosting activities." While base pay is only minimum wage, a large amount of forced (but paid) overtime means a worker's monthly take-home pay is P6,000 to P8,000 or 50 percent higher than that of a minimum wage earner and more than twice that of a Power Tech worker. Workers also receive twice-yearly salary bonuses based on overall company performance; free shuttle bus service; a subsidized meal allowance; access to the company canteen, medical clinic, and family planning program; and all legally mandated benefits, including emergency health insurance, maternity leave, social security, and vacation and sick leave. Finally, company-wide social activities are planned throughout the year, including a Christmas party, dance contests, a summer outing, and a sportsfest.

External Labor Control Strategies

Internal strategies by no means exhaust Storage Ltd.'s repertoire of control and commitment strategies to create a more stable and reliable workforce. Like Power Tech, Storage Ltd. takes active steps to localize its operations in the Philippines to take advantage of location-specific conditions. However, the character of Storage Ltd.'s embeddedness is somewhat different, due in part to the character of its production and the nature of the economic zone. The company's most effective strategies for maintaining their union-free status and a very low turnover rate of only 5 percent a year⁴⁹ are to selectively screen new recruits for low labor market bargaining power and to use its own investigative units to extend control over workers outside the factory.

The firm recruits primarily through jobs fairs in surrounding rural areas because of the lack of alternative employment opportunities there. According to one recruiter, the firm prefers provincial workers, because they are "the shy type with no qualms about following orders. They work harder, are more focused and work more seriously." The basic hiring criteria are sex, marital status, age, and education level. The company's nine thousand workers are remarkably uniform: 88 percent are female, 97 percent are single, and 83 percent between sixteen and twenty-two, with an average age of twenty-one. Fifty-one percent have some college or vocational training and the rest are high school graduates. But while the firm wants educated workers, it does not want ones with high job, pay, or promotion expectations, so it does not hire shop floor workers with more than two years of college. Short interviews are used to avoid union sympathizers and to assess workers' attitudes and levels of potential dependence. The recruiter asks, "Do you know what the rights of workers are?" If the applicant knows too many, she is not

hired. The interviewer also asks questions regarding an applicant's family and role in the household, because the firm prefers hiring the eldest sibling, who is usually responsible for helping the family financially. It is also a plus if her parents are unemployed because as one recruiter commented, "breadwinners stay longer."

Storage Ltd. also maintains a Background Investigation Unit to scrutinize workers and visit the home of the worker's family before workers are made permanent following six months of initial probationary employment. Using a standardized form, they first assess the socioeconomic condition of the family, noting the type of house, number of bedrooms, sources of water and electricity, type of toilet, number and type of household appliances, the total number of people living in the house, and ownership status. They also collect detailed information on all family members, their activities, places of residence, occupations, and whether their workplaces are unionized. The home visit exemplifies the depth and reach of Storage Ltd.'s surveillance systems. While designed to collect micro-level data on workers, it is equally effective in intimidating workers and their families at the crucial period just prior to becoming permanent employees.

The high level of worker vulnerability in the labor market coupled with the material benefits of working at Storage Ltd. help explain workers' consent inside the factory. Although workers universally complained of the overtime and lack of rest days, most had plans to stay at least two years. For many, the job gave them their first taste of independent living away from watchful parents, increased status in their families and communities, and control over income.⁵⁰ Workers were proud to work for a well-known multinational company. They often referred to the work as "clean," particularly in contrast to the physically demanding and low status agricultural or informal-sector work that awaited them in the provinces if they lost their factory jobs. For Nina, a twenty-year-old production operator recruited from the distant province of Panay, Storage Ltd. is her first job:

My job is pretty good. It's not real heavy work. The important thing is I earn money. The only thing that's really hard is the OT [overtime]. . . . Compared with [a nearby food processing plant], it's nicer at Storage Ltd. because they're all contractuals there. But it would be nice if we could have a day off when we asked.

Privatizing EPZs

A fundamental difference between Power Tech and Storage Ltd.'s localization strategies is the nature of the zone into which they are located. Storage Ltd., like Integrated Production discussed below, chose to locate in one of the Philippine's twenty-five active special economic zones (SEZs), which are all privately owned and managed, mainly by Filipino real estate developers. The privatization of the zones was central to the national government's revised development strategy in the mid 1990s, which aimed to swiftly liberalize the economy and privatize many

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of the government-run businesses.⁵¹ The policy switch from building large public zones to promoting smaller, private ones also reflects the changing demands of investors and the government's attempt to remain competitive among other investment-hungry countries. While the state wanted to lure larger, more technology-intensive manufacturing, it did not have the resources nor the expertise to built state-of-the-art infrastructure, such as wastewater treatment or communications systems, which are necessary for advanced manufacturing.

In 1995, national zone authority was reorganized and renamed the Philippine Economic Zone Authority (PEZA). In its privatization strategy, PEZA was keen to avoid the "mistakes" made at both Bataan and Cavite, such as creating a high density of firms and an overconcentration of workers around the zone. PEZA thus chose to allow private real estate developers to construct a large number of zones with relatively few locators in less densely populated areas.⁵² Like the public Cavite Economic Zone, the new zones provided no central worker housing. But now both PEZA and the zone developers encouraged firms to provide shuttle bus service from multiple pickup points located near existing but widely dispersed population centers. Wide, provincial recruitment coupled with the firm's free shuttle bus service means that the workforce has less in common and is less concentrated in any one area. Storage Ltd., for example, deploys some seventy-five buses to thirteen different daily pickup points from as far as Metro Manila (one hour away to the north) to Batangas City (two hours away to the south). Workers are encouraged to commute to or live in a boarding house near one of these thirteen pickup points-greatly dispersing the workforce and making union organizing extremely difficult. This housing strategy, devised by the national zone authority, is now commonly used in the other private economic zones.

The new private zones have reduced the amount of direct government oversight by individual federal government agencies, such as the commission on audit and the Department of Labor and Employment. Instead, a single government zone administrator with a small staff acts as a "one-stop shop" for firms dealing with all government bureaucracies. The government administrator at the private zone where Storage Ltd. is located boasted,

we [the government zone authority] have a commitment to locators [foreign firms] that they deal only with one government agency, so if there is a problem, like a minimum wage problem, we deal with it first. We have an understanding with the Department of Labor and Employment and their inspectors; they can't come in here without going through us first.

Privatization thus allows the new zones to step away from the explicit employment and local development mandates of the public zones, as well as insulate themselves from direct, public scrutiny and accountability for conditions within the zone.

The private zone developer also plays a key role, in both recruiting investors and providing for them key services such as infrastructure, security, labor recruit-

ment, and community relations. One of the most important selling points developers can offer to foreign investors is the promise of a "strike-free" zone. Because the zones are privatized, the developers become responsible for ensuring "industrial peace." Given the specter of the Bataan strikes, nearly all foreign electronics investors fear unionization in the Philippines and have made it clear to officials that they will not invest unless the zones are union- and strike-free.⁵³ Security, then, is very tight, and known labor organizers are barred from even entering the zone.

The zone developer also helps in recruiting and labor relations. The developer has organized the only zonewide group of locators, the Human Resource Association, which brings together human resource managers, the government zone administrator, and the zone developer for monthly meetings. Participants exchange information about available workers and recruitment strategies, but also deal with potential labor problems and circulate a black list of "trouble makers" and union sympathizers. Finally, the zone developer helps locators contact and maintain relations with government officials at the provincial and local levels.

Links with local officials is crucial, particularly for recruiting. Job fairs are set up in the provinces with help of local *Barangay* captains (the lowest elected official), mayors, and the Provincial Employment Service Office (PESO), whose staff locally is appointed by the mayor. Mayors and *Barangay* captains are keen participators in recruiting because as elected officials, they want to be viewed as the link that got locals their jobs. Like firms in the CEZ, Storage Ltd. requires a letter of reference from either the mayor or *Barangay* captain and a local police clearance. Although the mayor or captain may not be directly responsible for getting locals their jobs, they are necessary intermediaries for workers and one more figure to which workers owe a personal debt, usually paid back in votes. One mayor's information officer noted they have up to fifty recommendations requests a day and keep a complete and active database on all those for whom the mayor has written letters. In return, the company knows it can rely on the officials if they have any labor organizing problems. The human resource director at Storage Ltd. boasted,

We work with the *Barangay* captains because they practically guarantee their recommendations and whatever happens, they are responsible. They certify that the person is of good moral character and will always be there to help if there is any union activity.

Storage Ltd. thus combines both internal and external labor control strategies to maintain high quality and productivity while minimizing labor turnover and discontent. In this way, Storage Ltd. shares with Power Tech a key attribute: deep social and political embeddedness in its local context. But whereas the despotic regime at Power Tech is mainly *reactive* to labor conflict, Storage Ltd., which requires additional stability for competitive performance, has chosen a more *preventative* approach—one greatly enhanced by the reorganization of the zone and

the selective intervention of both the national and local governments. By exploiting workers' labor market vulnerabilities, the firm has created a workforce that is more likely to be dependent on and committed to their jobs, despite the tightly controlled working conditions. For these select workers, earning a steady wage at a high-profile multinational firm has provided them a measure of status in their communities and control over their own lives, yet not at the expense of management's control over the workplace. This asymmetrical agency, which allows a sense of external autonomy despite the confines of internal control, has led to the paradoxical condition of coerced consent.

INTEGRATED PRODUCTION

The third case study centers on Integrated Production, a wholly owned subsidiary of an American semiconductor firm with thirteen hundred employees producing and testing advanced integrated circuits, or IC chips, in a state-of-the-art \$200 million plant. To an even greater degree than Storage Ltd., Integrated Production relies on a flexible, automated assembly and test process integrated into a sophisticated manufacturing information system. But unlike Storage Ltd., Integrated Production prefers educated, urban workers and promotes worker consent by combining its "hard" engineering-intensive labor process with a "soft" strategic human resource approach that stresses positive incentives, loyalty, and ritual participation.54 However, the reorganized labor process falls far short of fulfilling the promise of worker-centered high performance.⁵⁵ This "peripheral" human resource management (HRM) strategy, embedded in a selectively regulated labor market and an antiunion political context, rewards individual commitment to the firm while eschewing substantive worker participation and reenforcing a hierarchical corporate culture dedicated to preventing workers' collective organization.

As sophisticated design-intensive chips, integrated circuits require expensive automated machinery, and production is increasingly dependent on engineers and technicians. Like Storage Ltd., production takes place in dust- and static-free clean rooms, where programmable machinery and a computerized information system track production and allow for customization. But the plant is far more automated—only 55 percent of all employees are production workers, and the firm employs a far higher percentage of engineers and technicians—about 20 percent of the workforce compared with Storage Ltd.'s 8 percent. These technical workers dominate key participatory fora, such as the Total Productivity Maintenance (TPM) teams, due in large part to the technical complexity of production. While shop floor operators are theoretically included as equal members on TPM teams, they do not have the specialized skills and autonomy of technical workers, so they in fact play only a minor role in ensuring high quality and productivity and generally work under strict supervision. Workers are expected to primarily but continuously feed and monitor up to seven machines and check the statistical pro-

cess control readouts. If indicators fall outside the specified performance bands, operators are not allowed to troubleshoot the problem themselves, but must call over an engineer. One operator explained,

We're always audited.... We have to follow the specifications; they're like our bible. For example, if you fail to write something down and you're audited, then you get an ITR (inspection trouble report).... They audit all machines, twice a day, ... When an audit is about to begin, we yell to each other, "Audit! Audit's coming!" So it's tense and stressful.

Strategic HRM

While the firm successfully utilizes flexibly automated production, it is still vulnerable to production disruptions and dependent on shop floor operators to handle machines that can cost over \$1 million each. And like Storage Ltd., it must invest in at least three months of worker training and certification to meet international quality standards. But unlike Storage Ltd., the firm's HRM strategy focuses on complementing the rigors of production with positive incentives and behavioral trainings to promote consent.

At the most aggregate and general level, the firm's HRM strategy is to create a "good work environment" and get employees to internalize firm values and goals. The firm conducts substantial initial behavioral training that focuses on building a "quality culture." The head of the training staff noted, "each worker must sign a Personal Commitment to Quality that states that the worker will 'live by quality values.' . . . This is meant to dramatize and ritualize their commitment to quality."

The HRM strategy has been effective in building consent in part because of its overall compensation and attention to workers' concerns. First, operators are monthly paid salaried employees, a notch up in status from daily paid workers at other firms, such as Power Tech and Storage Ltd. Still, Integrated Production pegs their base rate at the regional minimum wage so the starting salary is only 10 percent above the take home pay of a daily paid minimum wage earner: about P5,700 per month. Added to this base rate are performance-based supplements, including fifty shares of company stock upon hire and additional stock as a yearly bonus. On a large electronic board hanging prominently in the canteen, the stock quote direct from the New York Stock Exchange flickers continuously by. Workers also received vacation and sick leave, medical insurance, a daily meal subsidy, free shuttle bus service, and had access to an education reimbursement plan and a stock purchasing option. But the benefit most boasted about by workers is the free computer entitlement after one year as a permanent employee, worth \$1,200, over 75 percent of an operator's yearly base salary.⁵⁶

Workers are also given a sense of control and comfort. For example, many workers use the restrooms without prior permission and take untimed meal breaks. The firm also provides an assortment of social activities, such as company outings and pizza parties that boost satisfaction and build positive identification with the firm. As the employee relations manager boasted, the firm is, "really like an American company [in America]—there's really toilet paper in the bathroom, really free coffee all the time."

In addition, the firm's Employee Relations staff uses a sophisticated communications system to allow workers a "voice" and to head off potential problems. The system includes an "open door" policy for worker consultation, monthly employee meetings with the general manager, suggestion boxes, and an Employee Appeals form for lodging official complaints. The system is effective because although it addresses worker issues and provides individual voice, it does not fundamentally challenge management's control over the labor process. The firm consciously avoids creating a forum for collective worker action and has specifically shunned even management-dominated organs such as Labor Management Councils, which would require worker-elected representatives.

Integrated Production also takes a very "proactive" stance toward heading off any union activity. The HR manager spoke quite explicitly about their anti-union attitude, stating flatly: "A semicon company's worst nightmare is a union . . . and it is the primary task of HR is to assure there will be no union." A centerpiece of their union prevention strategy is a Labor Relations Training program for all supervisors, with explicit goals of unifying leadership style and keeping unions out. The training does include useful elements for worker protection, such as a briefing on labor laws and workers' rights. But a central focus of the training is a section entitled, "Determinants of Unionism," which details, in a thirty-page training manual, "warning signs" of a union organization drive and how to handle and report such activity.⁵⁷

Recruiting and External Strategies

In part because of its high quality standards and high capital investments, Integrated Production puts a strong emphasis on recruiting. Like many other electronics firms, it hires no temporary or contractual workers. But rather than screening for labor market vulnerability like both Power Tech and Storage Ltd., Integrated Production focuses on education and "attitude." The firm does prefer young women, but also requires two or more years of college and does not screen urban, experienced, or married workers. For operators, the firm relies mainly on current employee referrals, sometimes from another operator, but more frequently from those higher up. The screening process is also much longer and more rigorous than at the other two firms: Instead of simple five minute interviews (as at Storage Ltd.), shop floor workers must pass four exams testing math skills, speed, accuracy, and abstract thinking that take about two hours to complete. If an applicant passes all the exams, she then goes through a series of four separate interviews with a manager, two supervisors, and finally, a human resource staff member. Consequently, workers differ demographically from those at the other two firms: While 85 percent of shop floor workers are female, most are from urban areas, and

95 percent of the operators have finished two or three years of college, with a large portion of workers as four-year college graduates. Thus, these workers had more contacts in and exposure to a larger labor market; had more labor market options because of their higher educational attainment; and could seek alternative employment (with similar base wages) in white-collar service work, such as teaching, nursing, banking, and retail trade.

In large part because these women have more labor market leverage and higher career aspirations, the firm chooses to focus on providing positive incentives to promote consent and keep turnover low. Still, the firm has not been entirely successful: The turnover rate, at over 9 percent a year, is in fact higher than at Storage Ltd. As worker interviews revealed, this may be because many felt it was below their social and educational status to be "just an operator."

One worker explained,

They really prefer college level, unlike in other companies.... There are many who are college graduates, degree holders: there are BSN [B.S. in Nursing] and Accounting and there are teachers. It's a pity, if it were me... well, there's internal hiring anyway, that's what they are waiting for.... But now, they're not hiring.

Another worker, when asked if she wanted to stay at her job, replied:

No not really, I don't want to be an operator all my life. I want to have a higher position.... I'd like to be a clerk in the office. It's much nicer, you know, paper work.... When you're in the office, they perceive you differently. If you're just a production operator, they can say that you're just wasting your education.

Asked further if she was embarrassed to be a production operator, she replied, "Not really, I'm proud of my wages, they're high. And I'm proud that I am at Integrated Production." Thus like the workers at Storage Ltd., these workers also subjectively evaluated their work and level of commitment according to external factors: their labor market choices, their backgrounds, and the status they gained from their firm's reputation.

While Integrated Production focuses most of its consent strategy on internal matters, the firm's HRM policies are also locally embedded. Before production even began, the firm negotiated directly with the Philippine government to gain exemption from national labor laws to implement its compress workweek based on twelve-hour, round-the-clock shifts, which the firm deemed critical to its work organization.⁵⁸ As a multinational firm considering a \$200 million investment, the firm had enormous bargaining leverage with the government. And although the Department of Labor scrutinized the company's petition, the firm was supported by two other government agencies, Department of Trade and Industry and PEZA, which are responsible for luring and managing direct foreign investments.

And like Storage Ltd., the firm chose to locate in one of the new, privatized EPZs, this one situated in the province of Cavite. The firm was drawn by the zone's high tech infrastructure and promises of labor quiescence. As discussed in the case of Power Tech, Cavite has a notorious history of antiunion violence. In addition to the one public zone, Cavite also has a number of privately run zones that have attracted investments from some of the largest global electronics corporations, including Intel, Analog Devices, and Hitachi Metals. Here too, the private zone developers play a critical role in ensuring local industrial peace and helping firms navigate the intricacies of local politics. A local elected official admitted that he and other officials were on the payroll of the private developer as "civilian guards." According to other local informants, the title "civilian guard" is a euphemism for the developer's private army of "armed goons" and that local officials "make the best kind of goons" because they have the infrastructure, arms, and legitimate monopoly on the use force to intimidate union organizers.

Thus Integrated Production, like Storage Ltd., relies heavily on its automated, computerized assembly process rather than worker autonomy and participation to deliver flexible, high quality production. Yet while it maintains strict control over workers in production, it combines this labor process strategy with a strategic human resource approach, which emphasizes internal positive incentives. For this reason, its localization strategy is not as extensive as that of Storage Ltd., although it does take advantage of the union prevention policies of both the zone developer and the local and provincial governments. For many workers, who have more urban backgrounds, better educations, and thus slightly more labor market options than workers at Storage Ltd., the jobs as production operators may not be entirely fulfilling. In response, Integrated Production promotes worker commitment by providing permanent, high status employment; a comfortable work culture; and high profile benefits. Yet at the same time, the firm also individualizes employment relations, thwarts collective organization, and leaves undisturbed a hierarchical management structure. The firm has thus created a relatively stable work and labor relations system based in large part on individualized, "purchased consent."

LABOR CONTROL AND THE POLITICAL APPARATUS OF FLEXIBLE ACCUMULATION

Taken together, the three cases demonstrate significant and varied departures from Burawoy's image of despotic peripheral production—both in terms of the labor process and the political apparatuses of production. Yet adapting his approach to include internal and external institutions of labor control across the three domains of production, reproduction, and consumption provides a useful framework for a critical analysis of recent industrial restructuring, its impact on workers, and the changing role of the state under increased globalization.

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Regarding the labor process and worker control in the domain of production, the three case studies show that firms may voluntarily chose a consent-based production regime even when operating in a developing country that lacks both the formal capacity to discipline large firms and a substantial welfare state that might raise workers' bargaining leverage with employers. At Power Tech, the use of direct coercion at the point of production has helped generate its own instability, a risk that the two more advanced manufacturers, which require greater precision and more worker stability, have not been willing to tolerate.

This does not mean, however, that the more advanced firms have chosen a "high road" or worker-centered high performance solution to meet their needs for higher quality and stability. In contrast to arguments promoting a high performance model, high tech commodity production does not seem to require radical shifts from traditional, top-down, hierarchical organization or genuine participation by broadly skilled and involved shop floor workers.⁵⁹ Rather, productivity and quality gains at both Storage Ltd. and Integrated Production have been made mainly by marrying traditional scientific management tools, such as time and motion studies and statistical process control, with automation and real time manufacturing information systems to "marginalizing uncertainty" in production.⁶⁰ While more complex technologies do require the presence of technical skill on the shop floor, technicians and engineers fill this niche, not production operators. In fact, line automation and computerization has reduced the need for some operator skills, like soldering, and *narrowed* previous participatory roles, like manually collecting statistical process control data.⁶¹ Despite much rhetoric of team production and greater worker autonomy, there seems to be clear evidence at both Storage Ltd. and Integrated Production that the labor process in advanced production is subject to greater standardization and quantification, through statistical process control, best practices, and strict ISO quality certification guidelines.

Another area in which the case studies fall far short of the high performance model is in their strategic human resources. Integrated Production, arguably the least despotic in its internal labor control practices, does bundle its technologyand engineer-led production strategy with a soft, HRM strategy aimed in many ways at "purchasing" the cooperation and commitment of its workforce. However, the firm's approach differs markedly from claims about HRM-led high performance work systems in its lack of participatory avenues for workers and absence of an empowerment-based strategy to boost workers' creative and discretionary input. Rather, the firm's internal human resource strategies focus instead on individualizing the employment relationship, bolstering management's hierarchical control, and actively preventing collective organizing by workers.

These cases confirm the findings of other studies of both semiconductor and HDD manufacturers in other countries that many leading firms have chosen to meet the new competitive demands for fast production ramp up, strict quality control, and uninterrupted production with a strategy based on stable frontline work-

ers, cheap technical and engineering labor, and, most significantly, "managerial freedom over shop floor organization."⁶²

But the variation across the three case studies and firm actions in other domains outside the factory also demonstrate that the expansion of management prerogative does not necessarily lead to an inexorable push toward a single, new kind of production regime. Rather, work organization and labor control strategies may still vary across firms depending, in large part, on the character of a firm's product, production process and market, and its parent firms' accumulation strategies. Conditions in local labor markets and the character of the EPZ also contribute to variation. Therefore, rather than reflecting uniformly "despotic" or "hegemonic" production regimes, the Philippine electronics industry might be best characterized by what Vallas and others have called "flexible accumulation."63 Here, firms actively restructure work, employment relations, and labor markets through the greater separation between "professional" and "production" workers, decentralized but hierarchical production networks, and greater attention to social and cultural factors that have often been treated as exogenous to production. While Vallas focuses on how firms influence tastes and market demand rather than treat them as exogenous, I focus in this article on the political apparatuses of flexible accumulation, or how firms go beyond the domain of production and actively engage the locally specific domains of reproduction and consumption to secure the production stability and labor control needed under the more complex demands of advanced manufacturing.

Keys to this expanded understanding of the political apparatus of production are the firms' "soft" human resource policies, their labor market strategies to secure an appropriate labor supply and elicit worker commitment, and the state's role in reproducing these social relations through selectively regulating labor and reorganizing export processing zones. Both Integrated Production and Storage Ltd. bolster worker commitment not by focusing on participation on the shop floor, but by targeting their strategic human resource policies on workers' needs in the other two domains of politics outside production. In terms of reproduction, the firms provide many welfare benefits that the Philippine state cannot, such as medical care, maternity benefits, access to birth control, and training and education subsidies. In terms of consumption politics, the firm's organize social activities, such as recreational outings outside of work, and provide subsidies for housing, daily meals, and even sacks of rice for workers and their families.

These "soft" human resource strategies help elicit consent in part because the firms maximize their labor market leverage over workers through selective recruiting. As the cases show, the local labor market is not the power-neutral market exchange process of human capital theory, but a power-laden and contingent negotiation process between firms and workers, which is greatly affected by other actors and local conditions.⁶⁴ In the Philippines, not only is the aggregate labor market slack, but workers and job seekers are also quite segmented,

particularly by age, gender, education, and region of origin. Due to continued labor market disadvantages for young rural women, employers can secure welleducated, English-speaking workers at comparatively bargain basement prices. This is best demonstrated by Storage Ltd., which complements its intense internal plant control by leveraging existing social, economic, and gender inequalities in the labor market to secure worker dependence and attachment. Thus, the power inequalities in the labor market may allow employers to have their cake (high quality and commitment) and eat it too.⁶⁵ Storage Ltd.'s deep localization strategies, focusing on worker recruitment, housing, and community surveillance also refute the notion that foreign direct investment is somehow frictionless and that locations are completely substitutable. In fact, all firms must engage to some degree with the locality, particularly in terms of building a stable workforce.

Yet, the fact that firms *must* engage the locality does not dictate *how* they interact with their surroundings. For example, all three firms worked to some extent with local-level officials or zone developers in the organization of their production and labor control regimes. But whereas Power Tech chose to bring in the coercive power of outside actors in *reaction* to worker organizing, Storage Ltd. and Integrated Production chose more *preventative* strategies of noncoercive engagement with local leaders to control labor through selective recruiting.

Indeed, the vital importance of political stability to foreign investors and the Philippine state's own dependence on foreign investment means that the state plays a critical role in providing the appropriate conditions for production and shaping localization strategies. The clearest demonstrations of the state's role are in the reorganization of the export processing zones and the political construction of local labor markets.⁶⁶

At a national level, the state actively reduces workers' labor market bargaining power through its promotion and privatization of EPZs and promises of "industrial peace." In the case of Integrated Production, which had an extremely powerful bargaining position vis-à-vis the Philippine state, the firm could gain exceptions to national laws regarding working hours rather than adapt their production to local rules. The weak position of the Philippine state has meant it must often grant such concessions and cannot impose restrictions, such as local content laws, which might arguably help the Philippines climb up the value-added ladder.

Through its national zone authority, the state has also strategically reorganized the zones and consciously disorganized and decentralized worker housing to thwart union organizing and dampen the development of greater collective bargaining power. At the same time the state is also complicit in firms' labor control strategies through its *inactivity* and *non*enforcement of the Philippine Labor Code, which guarantees workers' rights to organize and bargain collectively. Finally, at the subnational level, provincial and local governments have been even more active in directly suppressing union activities, in aiding direct labor recruit-

ing in rural areas, and providing local institutional levers for worker control and labor market regulation.

CONCLUSIONS AND POLITICAL IMPLICATIONS

The "success" of siting advanced manufacturing in areas of the world that have often been considered "peripheral" to the global economy offers a number of double-edged lessons for the Philippines and possibly other developing countries. First, while the multinational electronics firms have helped generate employment, it is imperative to also judge the quality and character of the jobs created. Many multinational firms and some in the Philippine state that push foreign direct investment argue that high tech electronics brings inherently high quality jobs. But as clearly demonstrated by firms such as Storage Ltd., high tech and competitive performance is not incompatible with "sweated" labor and hierarchical employment relations. Even less despotic high tech firms such as Integrated Production fall far short of the promise of worker empowerment under "high performance." Thus, for countries like the Philippines, which compete with one another for investments, high tech production may not provide the benefits for workers that are often associated with advanced manufacturing in core countries.

Second, while the case studies demonstrate the increasing embeddedness of high tech production and the need for localization strategies suited to a particular context, it does not mean that similar localization strategies—attuned to local politics, labor market conditions, and local systems of social control—could not be replicated in other places. High capital investments and embeddedness may make it less likely that firms will simply pick up and leave in the short to medium term, but localization is becoming an increasingly *modular* strategy that may make it easier in the long run for firms to establish high-end production in new areas that meet other minimum investment requirements.

For workers' organizations and unions, the new forms of work organization present a particularly difficult dilemma. It is true that the majority of workers in the industry are permanent employees and, that the firms themselves are somewhat vulnerable to production disruptions. But it seems that firms recognize this potential far more than workers and accordingly, take active steps to head off potential worker organizing. All firms in the study, particularly in their strategies to manufacture commitment, tap into many sociopolitical forces outside the factories to construct more subtle forms of labor control. This means that unions face a far more complex situation than sheer coercion. The heterogeneity of firm strategies also means that workers even within one industry may not necessarily share the same work experiences. Thus, although workers across the industry share some potential political opportunities, they appear unlikely to act collectively in the present climate. Labor unions, faced with young, inexperienced workers in very vulnerable labor market positions, will have a very difficult time convincing

workers that risking their relatively high-status, decent-paying jobs is worth the long-range and uncertain benefits of unionization, particularly in the face of certain company and government opposition.

In fact, the key site of struggle might be located at a different level. The increased need for advanced manufacturers to regulate local labor markets may create a political opening or site of leverage for labor away from production. Considering the complicit role of the state in creating the institutional context for large multinational investment, workers and their allies might better focus on changing the conditions and bargaining relations that are affected by state policy. Workers and unions are likely going to have to act on a number of levels if they hope to improve the bargaining leverage. This might include pressuring the national government for improved training and education, better housing, and more community investment. In terms of their own actions, workers and union might also work more closely with existing community or church organizations with established ties to the local population and local governments.

Unfortunately, workers and their allies still face difficult disciplinary pressures that dampen their potential effectiveness. First, the Philippines faces increasingly stiff international competition for high tech investment. Even if workers and their political allies are effective at the local or national level, the pressure to improve conditions, increase wages, or enforce existing laws and the threat of production disruption from potential work actions may be enough to send high-end manufacturing investment elsewhere. The level of investment and the sophistication of electronics production in the Philippines make it less likely that all production will suddenly leave.⁶⁷ But recent trends in foreign direct investment show that electronics firms and other manufacturers have stepped up their investments in China, particularly since China's entrance into the World Trade Organization.⁶⁸ Despite the Philippines' educated and English-speaking workforce, China's growing technical competency, improved infrastructure, production stability, and inexpensive labor provide a potent draw to even advanced electronics manufacturers. While workers and their allies in the Philippines may be able to extract some concessions from high tech employers that are already invested and locally embedded, there is a clear limit to how much they can demand, given the increasingly credible threat of relocation to China.

At the local level, the slack labor market will continue to wield a strong disciplinary hand over workers. As the Philippine country director for the International Labor Organization commented about the lack of union organizing, "In a labor surplus economy like the Philippines, the squeaky wheel doesn't get greased, it gets replaced."

NOTES

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4. Eileen Appelbaum, Thomas Bailey, Peter Berg, and Arne L. Kalleberg, *Manufacturing Advantage: Why High-Performance Work Systems Pay Off* (Ithaca, NY: Cornell University Press, 1999), 7-9, 25-46; Peter Cappelli and David Neumark, "Do 'High-Performance' Work Practices Improve Establishment-level Outcomes?" *Industrial & Labor Relations Review* 54, no. 4 (2001): 737-75; Paul Osterman, *Securing Prosperity* (Princeton, NJ: Princeton University Press, 1999), 90; Thomas Kochan, Russell Lansbury, and John Paul MacDuffie, *After Lean Production: Evolving Employment Practices in the World Automobile Industry* (Ithaca, NY: Cornell University Press, 1997).

5. Dieter Ernst, "From Partial to Systemic Globalization: International Production Networks in the Electronics Industry" (working paper no. 98, Berkeley Roundtable on the International Economy [BRIE], Berkeley, CA, 1997); Raphael Kaplinsky, "Technique and System: The Spread of Japanese Management Techniques to Developing Countries," *World Development* 23, no. 1 (1995): 57-71; Auret Van Heerden, "Export-Processing Zones: The Cutting Edge of Globalization?" (paper prepared for the International Institute for Labour Studies, Geneva, Switzerland, May 1998); Richard Florida and Martin Kenney, *Beyond Mass Production: The Japanese System and Its Transfer to the U.S* (New York: Oxford University Press, 1993).

6. On restructuring in industrialized countries, see Jody Knauss, "Modular Mass Production: High Performance on the Low Road," *Politics & Society* 26, no. 2 (1998): 273-96; Nicolas Bacon, "High Involvement Work Systems and Job Insecurity in the International Iron and Steel Industry," *Canadian Journal of Administrative Sciences* 18, no. 1 (2001): 5-17; Paul Osterman, "Work Reorganization in an Era of Restructuring: Trends in Diffusion and Effects on Employee Welfare," *Industrial and Labor Relations Review* 53, no. 2 (2000): 197-96. On reorganization of work in developing countries, see Kevin Middlebrook, "The Politics of Industrial Restructuring: Transnational Firms' Search for Flexible Production in the Mexican Automobile Industry," in *Social Reconstruction of the World Auto Industry*, ed. Fredric Deyo (New York: St. Martin's, 1996), 200-32; Harley Shaiken, "Lean Production in a Mexican Context," in *Lean Work: Power and Exploitation in the Global Auto Industry*, ed. Steve Babson (Detroit, MI: Wayne State University Press, 1995), 247-59.

7. Data and analysis are based on eleven months of interview- and observation-based field research conducted in the Philippines in 1999. For the case studies, I conducted more than fifty open-ended interviews with Human Resource Managers, CEOs, supervisors, engineers, and other staff. I observed technical and behavioral trainings, applicant interviews, recruiting and background investigations, and shop floor production. I arranged interview with workers directly and with assistance of local researchers, conducted seventy-five 1- to 2-hour interviews at workers' homes or boarding houses. Interviews were also conducted with local government officials, public and private zone administrators, labor recruiters, union officials, and local clergy. For more detail, see Steven McKay, "Securing Commitment in an Insecure World: Power and the Social Regulation of Labor in

the Philippine Electronics Industry" (Ph.D. diss., University of Wisconsin–Madison, 2001), 43.

8. All firm names are pseudonyms.

9. Andrew Jonas, "Local Labour Control Regimes: Uneven Development and the Social Regulation of Production," *Regional Studies* 30, no. 4 (1996): 323-38.

10. Burawoy, Politics of Production, 126.

11. Ibid., 15.

12. Ibid., 265.

13. Ernst, "From Partial to Systemic Globalization," 1; David McKendrick, Richard Doner, and Stephan Haggard, *From Silicon Valley to Singapore: Location and Competitive Advantage in the Hard Disk Drive Industry* (Stanford, CA: Stanford University Press, 2000), 87.

14. Steve Babson, "Ambiguous Mandate: Lean Production and Labor Relations in the United States," in *Confronting Change: Auto Labor and Lean Production in North America*, 2nd ed., ed. Humberto Juarez Nunez and Steve Babson (Detroit, MI: Wayne State University Press, 1999), 23-50; Steven Vallas, "Why Teamwork Fails: Obstacles to Workplace Change in Four Manufacturing Plants," *American Sociological Review* 68, no. 2 (2003).

15. Richard Edwards, *Contested Terrain: The Transformation of the Workplace in the Twentieth Century* (London: Heinemann, 1979), 52; Michael Burawoy, *Manufacturing Consent*, (Berkeley: University of California Press, 1979), 77.

16. Ching Kwan Lee, *Gender and the South China Miracle: Two Worlds of Factory Women* (Berkeley: University of California Press, 1998), 107.

17. This position is consistent with neoinstitutionalists that recognize that states under globalization still matter, but mainly through national-level policies. See J. R Hollingsworth and Robert Boyer, eds., *Contemporary Capitalism: The Embeddedness of Institutions* (Cambridge: Cambridge University Press, 1997).

18. See Sean O'Riain, "The Flexible Developmental State: Globalization, Information Technology, and the Celtic Tiger," *Politics & Society* 28, no. 2 (2000): 157.

19. Lee, Gender and the South China Miracle, 12.

20. Andrew Mair, "Strategic Localization: The Myth of the Postnational Enterprise" in *Spaces of Globalization*, ed. Kevin Cox (New York: Guilford), 64-88; Ruth Milkman, *Japan's California Factories: Labor Relations and Economic Globalization* (Los Angeles: Institute of Industrial Relations, University of California, Los Angeles, 1991), 72.

21. Burawoy, Politics of Production, 14.

22. Jamie Peck, *Work-Place: The Social Regulation of Labor Markets* (New York: Guilford, 1996), 179.

23. Jonas, "Local Labour Control Regimes," 335. As Jonas explains,

Whereas capital-in-general is interested in the free and unlimited exchange of labor power, particular capitals are sensitive to the local contexts in which that exchange takes place. As such, they develop labor control strategies which limit the "freedom" of labor and regulate the conditions under which it enters the labor process.

24. Ibid., 328.

25. Diane Elson and Ruth Pearson, "Nimble Fingers Make Cheap Workers: An Analysis of Women's Employment in Third World Export Manufacturing," *Feminist Review* 7 (spring 1981): 144-66; M. Fernandez-Kelly, *For We Are Sold, I and My People: Women and Industry in Mexico's Frontier* (Albany: State University of New York Press, 1983); for a review see also H. Amirahmadi and W. Wu, "Export Processing Zones in Asia," *Asian Survey* 35, no. 9 (1995): 828-49.

26. Ken Ohara, "Bataan Export Processing Zone: Its Development and Social Implications," in *Free Trade Zones and Industrializations of Asia*, ed. Ken Ohara (Tokyo: Pacific

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Asia Resource Center, 1977); Cornelia Aldana, A Contract for Underdevelopment: Subcontracting for Multinationals in the Philippine Semiconductor and Garment Industries (Manila, the Philippines: IBON Databank Philippines, Inc., 1989); Daisy Perez, "The Situation of Filipino Women Workers in Export Processing Zones and Industrial Enclaves in the Philippines," in We in the Zone: Women Workers in Asia's Export Processing Zones (Hong Kong: Asia Monitor Resource Center, Ltd, 1998), 98-134.

27. J. W. Henderson, Globalisation of High Technology Production: Society, Space, and Semiconductors in the Restructuring of the Modern World (London: Routledge, 1989).

28. The incentives allowed 100 percent foreign ownership, duty and tax free production, unrestricted repatriation of profits, and the right to borrow money locally with Philippine government guarantees. See Edberto M. Villegas, *The Political Economy of Philippine Labor Law* (Quezon City, the Philippines: Foundation for Nationalist Studies, 1989).

29. By the early 1980s, electronics also began to play a major role in Philippine exports. In 1976, electronics exports were just US\$115 million or 3 percent of total Philippine exports. But by 1982, exports had reached 1 billion dollars, a tenfold increase in just six years, and electronics had already become the countries top exporting sector (Central Bank figures cited in Aldana, *A Contract for Underdevelopment*, 124).

30. World Bank, "Philippines: Managing Global Integration, volume II" (rep. no. 17024-PH, Background Papers, Poverty Reduction and Economic Management Sector, East Asia and the Pacific Office, World Bank, 1997).

31. Gwendolyn Tecson, "The Hard Disk Drive Industry in the Philippines" (The Information Storage Industry Center, rep. 99-01, University of California, San Diego, 1999), 1.

32. Semiconductor and Electronics Industry of the Philippines, Inc., "The Philippine Electronics Industry: Driver of the Philippine Economy", July 2001, http://www.siepi.org.ph.

33. These women workers were almost exclusively young (97 percent below age thirty), single (81 percent), and relatively well educated (over half with high school certificates and 30 percent having gone through college). See *National Commission on the Role of the Filipino Women, Women Workers in the Philippines* (Manila, the Philippines: National Commission on the Role of the Filipino Women, 1985).

34. From November 1980 to September 1981, one-fifth of the entire zone workforce was either laid off or on forced vacation leave and in 1983, over two thousand workers lost their jobs entirely. See Ma. Teresa Diokno, "The Failure of EPZs in the Philippines," in *Transnational and Special Economic Zones: The Experience of China and Selected Asian Countries*, ed. Teresa Carino (Manila, the Philippines: De La Salle University Press, 1989); Kim Scipes, *KMU: Building Genuine Trade Unionism in the Philippines, 1980-1994* (Quezon City, the Philippines: New Day Publishers, 1996).

35. Noel Vasquez, *Mobilizing Surplus Labour through International Exchange: Philippine EPZs, Overseas Employment and Labour Subcontracting* (Manila, the Philippines: Brotherhood of Asian Trade Unionists and Ateneo Center for Social Policy, 1987); Leopoldo Dejillas, *Trade Union Behavior in the Philippines 1946-1990* (Manila, the Philippines: Ateneo de Manila University Press, 1994); Scipes, *KMU*.

36. Originally named the Cavite Export Processing Zone (CEPZ), the zone was renamed the Cavite Economic Zone or CEZ in 1995.

37. For example, in the winding section, until the mid-1990s, the company still used entirely foot-pedal powered machines. Recent upgrades have not eliminated foot power, only integrated "push button" or motor-driven winding to be used, "when your feet get tired."

38. ISO 9002 is a set of quality standards for all aspects of production and service developed by the International Standardization Organization in Geneva, Switzerland, in 1987. ISO 9002 certification requires a company to follow strict standards and procedures for measuring quality in each part in production. ISO 1400 is a similar certification based on implementing an environmental management system.

39. According to the Ecumenical Institute for Labor Education and Research (EILER), a research group affiliated with the Kilusang Mayo Uno (KMU) Labor Center, a living wage in 1999 for a family of six was P424 per day or P10,504 per month.

40. Philippine Economic Zone Authority (PEZA), "Economic Indicators" (Manila, the Philippines: PEZA, 2001).

41. For example, between 1988 and 1995, five Cavite mayors were murdered, all of them political opponents of Remulla. The governor denied any involvement and when confronted with the murders responded: "Statistics—people are always dying. Mayors are no exception." See Sheila Coronel, "The Killing Fields of Commerce," in *Boss: 5 Case Studies of Local Politics in the Philippines*, ed. Jose F. Lacaba (Manila: Philippine Center for Investigative Journalism and Institute for Popular Democracy, 1995), 5.

42. For details on the history of Cavite politics and the manipulated conversion from an agricultural to an industrial based economy, see Coronel, "The Killing Fields of Commerce," 1-30; John McAndrew, *Urban Usurpation: From Friar Estates to Industrial Estates in a Philippine Hinterland* (Manila, the Philippines: Ateneo de Manila University Press, 1994); John Sidel, *Capital, Coercion, and Crime: Bossism in the Philippines* (Stanford, CA: Stanford University Press, 1999), 51.

43. Salvaging is the term used in the Philippines for the murder and public disposal/ display of a victim's body often used as an intimidation tactic, see Sidel, *Capital, Coercion, and Crime*, 23-80.

44. The head administrator of the Industrial Relations Department (IRD) explained that firms are looking for women (because they are "industrious and patient"), between eighteen to twenty-two years of age (because "young ones have better eyes and dexterity"), and at least high school graduates. Both the zone administrator and the IRD chief noted that while garment producers often are willing to hire older workers, "even 25 year-olds," the electronics companies' main hiring criteria is "trainability" and will often accept underage workers. The population of zone workers reflect these criteria: 73 percent of all workers are female, 71 percent of workers finished high school, while nearly 17 percent had either some college or has finished a college degree. On the other hand, over 95 percent of the over six hundred foreign management personnel are male. See Cavite Economic Zone (CEZ)/Philippine Economic Zone Authority (PEZA), unpublished monthly reports, 1999.

45. Perez, "The Situation of Filipino Women Workers," 127; Marie Aganon, R. P Ofreneo, R. del Rosario, M. S. P. Ballesteros and R. E. Ofreneo, "Strategies to Empower Women Workers in the Philippine Economic Zones," *Philippine Journal of Labor and Industrial Relations* 18, nos. 1 and 2 (1998): 106-59.

46. Workers' Assistance Center, *Ang Kakagayan ng mga Manggagawa sa Cavite Export Processing Zone* (The Condition of Workers in the Cavite Export Processing Zone) (Rosario, the Philippines: Workers' Assistance Center, 1996).

47. Total Quality Management (TQM) systems vary, but most focus on continuously improving quality—in product, process, and people—as the basis for global competitiveness. The main goals of TQM include reducing product and process variation, surpassing customer expectations for price, quality and delivery time, and reducing "slack time" in design, production and administration. Common TQM tools are the systematic quantification and measurement of variation through statistical process control, employee suggestions systems and off-line quality teams. See Richard Hackman and Ruth Wageman, "Total Quality Management: Empirical, Conceptual, and Practical Issues," *Administrative Science Quarterly* 40, no. 2 (1996): 309-44.

48. The term refers to workers who find hiding places to sleep, while arranging with other workers to act as lookouts. It demonstrates the lengths that management will go to punish collective and deliberate resistance.

49. Overall, Storage Ltd.'s turnover rate was 14 percent in 1999, but this included probationary employees, who had been with the firm less than six months. Among regular or permanent employees, the quit rates dropped dramatically and the turnover rate here is the quoted five percent. Permanent employees make up 70 percent of the workforce.

50. For similar findings, see Diane Wolf, *Factory Daughters: Gender, Household Dynamics, and Rural Industrialization in Java* (Berkeley: University of California Press, 1992), 171; Carla Freeman, *High Tech and High Heels in the Global Economy* (Durham, NC: Duke University Press, 2000), 138.

51. Paul Hutchcroft, *Booty Capitalism: The Politics of Banking in the Philippines* (Quezon City, the Philippines: Ateneo de Manila University Press, 1998), 206.

52. Whereas the CEZ has 216 firms and 56,000 workers, the private zone where Storage Ltd. was located had only 17 locators and 16,000 workers.

53. The director of the government's Center of Industrial Competitiveness noted, "The Japanese are now our biggest investors. But there is only one fear the Japanese have, problems with uninterrupted production. Many locators want a 'guarantee' of no strikes. Without it, they won't locate here."

54. K. Legge, *Human Resource Management* (Basingstoke, UK: Macmillan, 1995). Patterned after its corporate parent, Integrated Production work system closely resembles the Silicon Valley variant of the American human resource model. See Eileen Appelbaum and Rosemary Batt, *The New American Workplace: Transforming Work Systems in the United States* (Ithaca, NY: IRL Press, 1994); Harry Katz and Owen Darbishire, *Converging Divergences: Worldwide Change in Employment Systems* (Ithaca, NY: Cornell University Press, 2000).

55. Thomas Kochan and Paul Osterman, *The Mutual Gains Enterprise* (Boston: Harvard Business School Press, 1994).

56. This rather generous incentive is designed primarily to reduce turnover: workers are required to remain with the firm for another full year in order to receive the computer completely free of charge.

57. These range from, "the grapevine suddenly goes dead," to "employees begin using new technical terms such as protected activity, showing of interest, demand for recognition and unfair labor practices." The manual also details, "typical organizing techniques," and a list of "views and opinions you may communicate to employees." Most of these views and opinions concern the cost of unionism for the company and for employee "freedom."

58. An HR staff member confided that when assembly was still conducted in California, the long hours, fast pace, and high demands on workers earned it the nickname, "the sweat-shop of Silicon Valley."

59. John Paul MacDuffie, "Human Resource Bundles and Manufacturing Performance: Organizational Logic and Flexible Production Systems in the World Auto Industry," *Industrial and Labor Relations Review* 48, no. 2 (1995): 197-221; Appelbaum et al., *Manufacturing Advantage*, 167.

60. Rick Delbridge, *Life on the Line in Contemporary Manufacturing: The Workplace Experience of Lean Production and the "Japanese" Model* (Oxford: Oxford University Press, 1998), 179.

61. For similar finding in pulp and paper mills, see Steven Vallas and John Beck, "The Transformation of Work Revisited: The Limits of Flexibility in American Manufacturing," *Social Problems* 43, no. 3 (1996): 501-22; on technological change in American semiconductor fabrication plants, see Melissa Appleyard, and Clair Brown, "The Influence of

Employment Practices on Manufacturing Performance in the Semiconductor Industry," *Industrial Relations* 40, no. 3 (2001): 436-71.

62. McKendric et al., *From Silicon Valley to Singapore*, 232; Jennifer Chun, "Flexible Despotism: The Intensification of Insecurity and Uncertainty in the Lives of Silicon Valley's High-Tech Assembly Workers," in *The Critical Study of Work*, ed. Rick Baldoz, Charles Kroeber, and Philip Kraft (Philiadelphia: Temple University Press, 2001), 127-154.

63. Steven Vallas, "Rethinking Post-Fordism: The Meaning of Workplace Flexibility," *Sociological Quarterly* 17, no. 1 (1999): 68-101; see also David Harvey, *The Condition of Postmodernity* (Cambridge: Basil Blackwell, 1989); Beth Rubin, "Flexible Accumulation: The Decline of the Contract and Social Transformation," *Research in Social Stratification and Mobility* 14 (1995): 297-323.

64. Chris Tilly and Charles Tilly, "Capitalist Work and Labor Markets," in *The Handbook of Economic Sociology*, ed. Neil Smelser and Richard Swedberg (Princeton, NJ: Princeton University Press/New York: Russell Sage Foundation, 1994), 283-312; Peck, *Work-Place*, 46.

65. As Rubery and Wilkinson note,

Segmented labor markets . . . provide the opportunity to employers to tailor their labor market strategies to their needs without necessarily sacrificing the benefits of an established and committed workforce . . . the domestic circumstances of married women, for example, provides the basis for a flexible, committed but cheap labor force: primary workers at secondary prices.

See Jill Rubery and Frank Wilkinson, "Introduction," in *Employer Strategy and the Labour Market*, ed. Jill Rubery and Frank Wilkinson (Oxford: Oxford University Press, 1994), 31-32.

66. Miriam Wells, *Strawberry Fields: Politics, Class and Work in California Agriculture* (Ithaca, NY: Cornell University Press, 1996), 13.

67. "When You Can't Transplant Plant," The Economist, February 15, 2003, 64.

68. In 2002, China received over \$53 billion in foreign direct investment, surpassing the United States for the first time as the world's top foreign direct investment destination. See "Is the Wakening Giant a Monster?" *The Economist*, February 15, 2003, 63-65.

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