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# After Deindustrialization: Uneven Growth and Economic Inequality in “Postindustrial” Chicago

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## abstract

This article presents a critical commentary on the development, through restructuring, of the Chicago economy in the period since the onset of deindustrialization in the early 1980s. Adapting an innovative methodology for the measurement of labor-market inequalities over time at the metropolitan scale, the article provides an empirical analysis of the city's new mode of growth. A notable feature is an entrenched and deepening pattern of wage inequality in Chicago, which is distinctive from that evident at the national level. Closer attention should be paid to what have proved to be extended processes of economic transformation at the urban scale, the social and geographic contours of which have yet to be adequately mapped.

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## Remaking Chicago

Deindustrialization, in many ways the most potent political-economic neologism of the 1980s, might well have been coined in Chicago. Here, the dramatic downturn of the manufacturing economy three decades ago represented a defining moment for a city that has widely been portrayed as the paradigmatic industrial metropolis. At the cusp of what would retrospectively be characterized as the (old) industrial era, Berry et al. (1976, 1) remarked that "Chicago is less a place than it is a process," apparently propelled by some "special metabolism" from an onion swamp to manufacturing metropolis in the space of less than a century. But no sooner had this observation been made, the process itself stalled, and the city would have to face the consequences: suddenly, the epitome of the industrial city had become the epicenter of *deindustrialization*, the capital of the "rust belt."

To some observers, deindustrialization was tantamount to a *redefinition* of the city. As the *Chicago Tribune* editorialized on its front page in the midst of the crisis:

[This] is a city in transition from an economic era on the wane to another not yet born and barely foreseeable. . . . Chicago is being eaten away by forces as powerful as those that thrust it upward out of the marshes more than a century ago. ("City on the Brink" 1981, 1)

For Chicago, deindustrialization signaled a wrenching period of socioeconomic dislocation. Citywide unemployment rates surged above the national average, topping 11 percent in 1982. And plant closings by some of Chicago's signature employers added to the misery. In the coming years, U.S. Steel Corporation, Beatrice Foods, Nabisco, Campbell Soup Company, Schwinn, Playskool, Stewart Warner, General Mills, Swift & Co., and Sunbeam were among those that closed major facilities (see Ranney 2003; Rast 1999). The mainstream prognosis at the time was extraordinarily bleak: "According to the available evidence and many experts, there is no reason to think it will ever turn around" (Longworth 1981, 1).

To be sure, the warning signs had been there for some time. In fact, the central city had been steadily losing manufacturing employment to the suburban fringes since 1947 (McDonald 1984). By the 1970s, even though few were forecasting the structural dislocations that were imminent, the cumulative consequences of this unbridled form of industrial

(sub)urbanization were evident. Berry et al. (1976), for example, observed that the city's always-modernizing economy was driving distended processes of urban decentralization at the "suburban frontier," leaving in its wake a central city fissured by intractable forms of social and racial division. Here were clear indications that the Kuznets-curve relationship between income growth and falling inequality was beginning to break down. Berry's conclusions were stark:

Chicago is rapidly trending to two societies. One—the suburbs, the Loop, and the northern lakeshore—is part of a nationwide inter-metropolitan system of interaction, growth, and change. The other—the inner city minority—is cut off, abandoned, localized, benefiting only to the extent that filtering takes place. Reflecting this polarity and contributing to it are the region's industrial dynamics. (Berry et al. 1976, 93)

This is an image of Chicago at the limits of a certain kind of economic modernization. The city's African-American population, in particular, found itself increasingly disconnected from the fast-suburbanizing manufacturing economy (Clavel and Wiewel 1991), just as it was becoming increasingly reliant on the sparse compensations of late-Keynesian forms of social amelioration ("filtering"). While social and racial inequalities have always been a (defining) feature of Chicago's mode of liberal urbanism (Park and Burgess 1925; Drake and Cayton 1945), they were about to combine with emergent forms of economic inequality in an unprecedented manner. Postindustrial growth in Chicago would, however, differ markedly from its predecessor.

This dramatic reorganization of the Chicago labor market, in the wake of deindustrialization, is our concern in this article. Our specific aims are twofold. First, with the benefit of a quarter-century of historical perspective, we revisit the tumultuous period of deindustrialization in the 1980s, locating the crisis of the early 1980s in the wider context of what has been an extended process of economic restructuring and transformation, continuing to this day. Second, using a method pioneered at the national level by Wright and Dwyer (2000, 2003), we examine the distributional consequences of the "no name" mode of growth that has taken shape in Chicago since the early 1980s, specifying in empirical terms the implications of successive rounds of investment and disinvestment for the city's changing wage structure. In this regard, although there are some resemblances to postindustrial stereotypes like the "new economy" model (with its generalized upgrading of jobs and wages, led by the high-tech sector) and the "global cities" model (of job and wage polarization, led by producer services), the anatomy of growth appears on closer inspection to be both temporally unstable and spatially distinctive.

We begin by reviewing the dominant narrative of (post)industrial transformation in Chicago, calling attention to the shifting dynamics of growth in the region over the past 25 years. We then outline our modifications to Wright and Dwyer's methodological approach, which we subsequently deploy to examine the distinct "shape" and composition of the growth of employment in Chicago over the economic cycles since the early 1980s. Finally, we turn our attention to the distributional impacts of Chicago's uneven growth pattern, focusing on the region's increasingly polarized wage structure and its growing contingent workforce.

## What Kind of Transition?

The onset of deindustrialization in the early 1980s represented the nadir of what had been a dominant mode of urban-economic development and the beginning of a painful shift toward a new pattern of unequal and unstable growth. Chicago had not only been a beneficiary of the Fordist economic expansion of the post-World War II period, it was also

a *maker* of this mode of growth and its associated forms of regulation, patterned on the New Deal (Cohen 1990; Abu-Lughod 1999). Fordist before Ford, the “disassembly” methods that were perfected in Chicago’s meatpacking plants were an inspiration for the moving assembly line, while the city was also a key locus for experimentation in systems of Taylorist labor control (Montgomery 1979). Indeed, it has been argued that Chicago effectively internalized the logics of mass production and mass consumption as “a city organized along classical Fordist lines of large-scale and capital-intensive industrialization” (Abu-Lughod 1999, 212). Deindustrialization represented a dramatic rupture in this Fordist mode of urban growth, along with its attendant ensemble of Keynesian-welfarist regulation.

186 In this respect, it is appropriate that deindustrialization looms large in transition stories of Chicago. The question, though, is what *kind* of transition stories are being told. From an orthodox perspective, there are few more succinct accounts than those found in *The Economist*’s two major profiles of Chicago in 1980 and 2006. In the first throes of deindustrialization, the challenge for “the city that survives” was to summon the political courage to embrace the new, internationalizing service economy, together with the incipient logics of neoliberal politics. In light of the “sound economic reasons why manufacturing is moving to the suburbs and the sunbelt,” the inevitable conclusion was that, “Instead of trying to fight market forces, the city needs to find a new role” (“The City that Survives” 1980, 24). A quarter-century later, the magazine was cautiously congratulatory, lauding the city’s postindustrial transition from “brawn to brains,” its comprehensive downtown makeover, and the businesslike public management of the second Mayor Daley (1989–present), while highlighting Chicago’s prominent place in the new economies of culture, knowledge, and finance: “the hog butcher to the world has become the world’s risk manager” (“A Success Story” 2006, S3).

Affirming this transition story, Chicago’s Board of Trade and Mercantile Exchange have been major centers of innovation in futures and options markets, signifying the city’s newfound position in the globalizing financial system. Meanwhile, the city’s long-established prominence in activities like management consulting, temporary staffing, and conventions has contributed to an expansive business-services sector (see Sassen 2004, 2006). But perhaps the most apt illustration of the city’s emerging economic role was the relocation, in September 2001, of the Boeing headquarters from Seattle to a downtown Chicago skyscraper, with access to a heliport and river marina. To promoters of the city’s status as a “world-class” location, Boeing’s arrival validated the sustained effort to reposition Chicago as a command-and-control center in the globalizing economy. Few could have missed the symbolism, however: a world leader in aerospace manufacturing relocated its corporate headquarters to Chicago, one of the nation’s most storied industrial cities, leaving manufacturing behind. Boeing can be seen as a metaphor for Chicago’s increasingly aggressive form of postindustrial development. Determined not to be cast adrift as one of the industrial “has-beens,” Chicago has embraced an economic future that is based on advanced corporate services, real estate, and tourism—having, according to some, “earned its place” as a global city of the postindustrial age (Sassen 2004, 34; “The 2008 Global Cities Index” 2008).

Is this image of postindustrial, globalizing Chicago an appropriate one for the city’s economic evolution? In the period since the initial deindustrialization shock of the early 1980s, the Chicago region has generated more than 1 million new jobs, almost exclusively in the service sector. This robust economic expansion marked a reversal of fortune so dramatic that the Federal Reserve Bank of Chicago (1997, i) was moved to declare that the Midwest had finally “shed its Rust Belt image.” No one would deny that Chicago has come a long way since the *Tribune* declared it an “economic invalid . . . a city on the

brink" (Longworth 1981), during its palpable moment of economic crisis. But did these events merely punctuate a long-run process of urban-economic evolution for this famously resilient city? Certainly, *The Economist* ("The City that Survives" 1980, 5) had anticipated some kind of spontaneous recovery, celebrating the city's historical capacity for revitalization and renewal: "the Great Fire of 1871, the rapid decline of the railroads and stockyards . . . Chicago has survived them all."

Deindustrialization did not signal the end of the industrial economy, even in Chicago. Rather, it both reflected and triggered a series of long-run processes of political-economic transformation. As Abu-Lughod (1999, 16) put it, reflecting on the Chicago case, "Deindustrialization, or rather a restructuring of industrialization, has initiated a new cycle of economic transformation." The qualitative *form* of economic growth was changing. There were just fewer than 1 million manufacturing jobs in the Chicago metropolitan area in 1979, 37 percent of which were to be lost in the ensuing seven years. Despite modest recoveries in the late 1980s and early 1990s, the normatively and substantively "lean" manufacturing workforce barely exceeded two-thirds of its 1979 level in these two subsequent peaks: one-third of the employment base, in other words, had been shed permanently. During the high-technology boom of the 1990s, much of which passed Chicago by, the manufacturing sector experienced continuous restructuring as an asymmetrical industrial relations regime was institutionalized. And then came the slowdown of the late 1990s, the 2001 recession, and the "job-loss recovery." The still-unwinding manufacturing sector lost a further 166,500 jobs in the seven-year period from 1998, a loss of 25 percent. In terms of the *rate* of manufacturing job shedding, this retro-deindustrialization phase of 2000–2002 was just as severe as the 1980–1982 original: Chicago's factories laid off one in seven of their workers in each period. Moreover, in recent years, the growth of the service sector has also faltered: while there have been overall job gains in big-box retailing and health care, significant losses have been registered in a range of business-services, transportation, information, finance, and technology sectors.

Conventional narratives of postindustrial evolution do not adequately capture either the causes or the consequences of this far-reaching transformation. Broadly speaking, manufacturing has been following a path of the long-run decline in employment, while services have been experiencing secular growth, but this has been far from a smooth, evolutionary "transition." The two sectors have been embroiled in a form of *combined and cumulative restructuring*, with profound implications both for socioeconomic sustainability and for the distribution of jobs and incomes. As we will show, two of the best-known stylized facts concerning the distributional consequences of postindustrial growth generally hold true. The retrenchment of manufacturing is associated with a "disappearing middle" phenomenon, leading to the erosion of job and employment security around what was once the core of the income distribution. Employment in services, on the other hand, tends to be associated with a bipolar growth pattern, in the form of both wages and job quality. Precise calibrations of the historical path of these (interconnected) restructuring trajectories have, however, been few and far between, while the process of mapping the sociospatial consequences of successive rounds of uneven growth remains in its infancy.

It is to these tasks that we now turn, beginning with a detailed presentation of our methodology and a commentary on the challenges of measurement. Here, we explain the steps that were necessary to adapt the innovative methodology developed by Erik Olin Wright and Rachel Dwyer for the analysis of changing job distributions at the urban scale. Since this is the first attempt to apply this approach at the subnational scale, methodological transparency is, we believe, essential. This should provide a basis for replicating and developing this analytical approach in other geographic contexts, where the results

will likely be significantly different. Our preliminary analysis suggests that urban inequality profiles are highly distinctive—the New York pattern, for example, differs markedly from those found in Philadelphia and Los Angeles—a point to which we return in the conclusion. Our next step is to outline the methodological strategy, after which we present a close reading of the “Chicago pattern,” distinguishing it from U.S.-level patterns of growth over the past 25 years and interweaving a commentary on the changing form of economic inequality at the urban scale with a broader discussion of the causes and consequences of this especially intense form of restructuring.

## Methodology: Measuring Unequal Growth

188 Using national-level data from the Merged Outgoing Rotation Groups of the Current Population Survey (CPS), Wright and Dwyer (2000, 2003) compared the major employment expansions of the 1960s and 1990s, decomposing net job growth into a series of “job-quality” deciles (or, in later iterations, quintiles) based on the median earnings of full-time workers across industry-occupation groups. Wright and Dwyer’s analysis, the first of its kind to compare systematically the anatomy of job growth over time, provides strong support for the argument that the economic growth pattern of the 1990s was distinctive. Nationally, the “long boom” of the 1990s was associated with a clear pattern of “asymmetrical polarization,” characterized by strong growth in the top quintile, moderately strong growth at the bottom, and anemic growth in the “middle.” While top-tier jobs have been numerically dominant in every U.S. expansion since the 1960s, the “top-heaviness” of the 1990s boom was unprecedented. In another break with the established pattern, bottom-quintile jobs accounted for double the share of overall job growth in the 1990s, compared to the 1960s, confirming claims that the shift toward a low-wage economy of “McJobs” jobs has indeed been a substantial and structural one (see Barker and Christensen 1998; Appelbaum, Bernhardt, and Murnane 2003; Peck and Theodore forthcoming).

The logical corollary of these employment-polarization trends, of course, is the “disappearing middle” phenomenon, which Wright and Dwyer revealed was a much stronger feature of the 1990s than it was of the 1980s, when the phenomenon was first identified (Bluestone and Harrison 1982; Harrison and Bluestone 1988). Wright and Dwyer provided strong support for the thesis that this “hollowing out” of the labor market has largely been a product of the decline of the (durable) manufacturing sector, reinforced by the propensity of new growth sectors like retailing, personal services, business services, and information technology to generate employment opportunities that are simultaneously skewed toward the top and bottom of the distribution. The high-paying jobs that dominated the 1990s expansion, they noted, required training and skill levels that placed them beyond the reach of most workers who were displaced by job loss in the middle of the distribution. Finally, Wright and Dwyer documented a dramatic racialization of employment inequality in the 1990s, shaped significantly by the high concentration of Latino (and immigrant) workers in low-paying jobs, a hiring trend that effectively remarginalized African-American workers.

Our approach to measuring changes in job quality closely followed the methodology developed by Wright and Dwyer, though sample-size limitations required considerable modification for analysis at the urban scale. The Wright-Dwyer methodology has three components: a scheme for coding industry-occupation groups; a set of restrictions on the jobs and workers included in the measurement; and a data-analysis scheme based on grouping industry-occupation types into equally sized, wage-sorted quintiles. Figure 1 summarizes these three components.

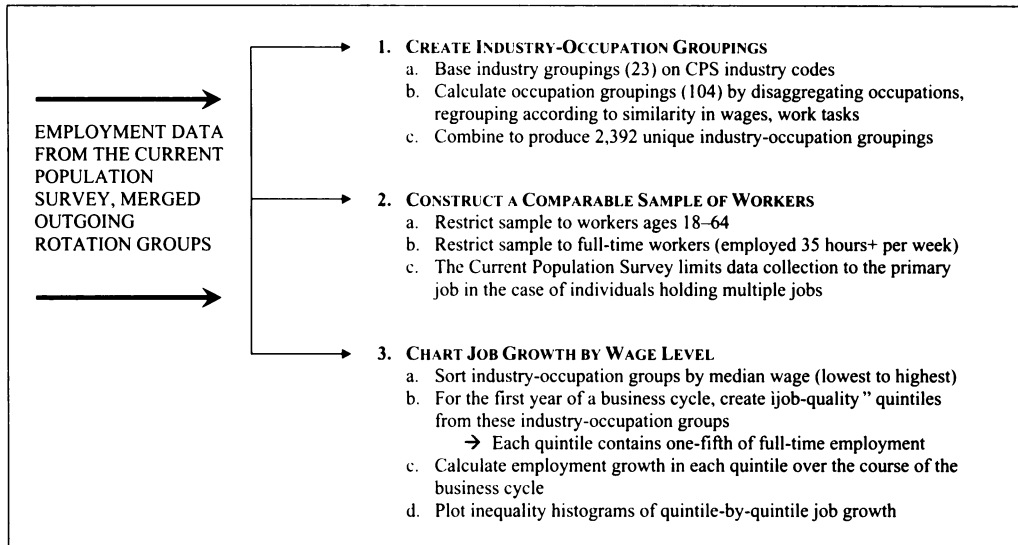


Figure 1. Measuring inequality. Source: Derived from Wright and Dwyer (2000, 2003).

In developing their methodology for use at the national scale, Wright and Dwyer had the advantage of a large sample size. At the metropolitan scale, the task is to reduce the number of industry-occupation cells and increase the cell sizes while maintaining meaningful distinctions between industrial and occupational groups. This called for three basic modifications of the methodology. First, we reduced the number of cells by simplifying Wright and Dwyer's coding scheme. We focused on reducing the number of occupational, rather than industrial, groupings.<sup>1</sup> Following Wright and Dwyer's approach, we examined the median, standard deviation, and coefficient of variation (standard deviation/mean) for hourly wages for the two-digit occupation codes provided by the CPS,<sup>2</sup> then divided two-digit occupational groups into their constituent three-digit occupational groups, and then regrouped these into new occupational groups of similar wage levels, occupational tasks, and total employment size. The result was 20 industrial and 27 occupation codes, or 540 unique industry-occupation groups.<sup>3</sup>

Second, we doubled the size of the industry-occupation cells by combining two years of reporting data into a single year for analytical purposes. For example, we treated 1983

<sup>1</sup> We reduced the number of industry codes by three. Because of sample-size issues, we omitted Wright and Dwyer's "high tech domain" classification and compiled automotive and repair services; private household services and personal services, except private household; and entertainment and recreational services into a single industry group, "personal and repair services."

<sup>2</sup> Because our frame of reference is Wright and Dwyer's national-level analysis, we based our coding scheme on national-level occupational wages and employment, rather than on data from the Chicago Consolidated Metropolitan Statistical Area (CMSA). Doing so also means that the methodology will be applicable to other subnational geographies.

<sup>3</sup> The CPS industry and occupation coding schemes changed in 2003, although both new and old codes are reported for the years 2000–2002. To update industry groupings, we ran cross-tabulations between our industry codes and the revamped industry codes for the 2000–2002 period, which allowed us to maintain a consistent industry coding scheme across the entire 22-year time frame of the study. For occupations, we applied the same approach used to simplify Wright and Dwyer's occupational codes for the 1980s and 1990s. Because the new CPS occupation codes capture greater variance in wages than did the old codes, we were able to expand our coding scheme to 34 unique occupational groups for the 2000–2004 period.



and 1984 as a single year, 1983–1984. By rolling up years and simplifying the industry-occupation codes, we were able to assign nearly 90 percent of all workers to cells of 10 or more, a figure that compares favorably with the Wright-Dwyer approach. After running several tests, we concluded that this coding list was sufficient to capture the variance in the Chicago economy and that our results compared well to other data sources on the region's industry-occupation mix.

Third, we matched the years of analysis to the beginnings and ends of business cycles. In principle, our use of two-year groupings could blunt the potential for this analysis to capture growth over the course of a business cycle. In practice, it may actually help. Placing fixed dates on the beginnings and ends of expansions and recessions is a practical necessity, but one that often muddies the waters analytically. Recessions are times of creative destruction. Although the 1990 recession officially ended in early March 1991, national employment did not return to prerecession levels until May 1993 (U.S. Bureau of Labor Statistics, seasonally adjusted employment, 1990–1993). Similarly, manufacturing layoffs in the Midwest began in earnest in mid-2000—well before the official recession start date of February 2001. By taking a longer view on these periods of upheaval, our methodology provides a surer reading of employment conditions at the beginning and end of the business cycle.<sup>4</sup>

To verify the validity of our approach, we reproduced Wright and Dwyer's analysis of job growth at the national level over the 1980s and 1990s. The results were strikingly similar, with the only difference of note being that our necessarily coarser employment classification tends to reassign a small portion (approximately 5 percent) of the fourth-quintile growth to the top quintile for the 1990s. It also redistributes 5 percent of the second-quintile growth to other quintiles.<sup>5</sup> Our analysis indicates that, nationally, some 14.5 million new full-time jobs were created during the "long boom" of the 1990s,<sup>6</sup> the most extended economic expansion ever recorded in the United States. Figure 2 indicates that the "shape" of this expansion is appropriately characterized by Wright and Dwyer's term "asymmetric polarization." Job growth was especially strong in the top quintile, which accounted for fully 40 percent of the net growth in jobs in the 1991–2000 period, but the second most significant source of growth in employment was the bottom quintile, which accounted for an additional 20 percent of net growth in jobs. This right-skewed, U-shaped employment distribution is consistent with the long-established argument that there has been a bipolar quality to U.S. employment growth in the past two decades (see Harrison and Bluestone 1988; Reich 1992; Mishel, Bernstein, and Allegretto 2007); it is notable, however, that this pattern was not evident in the 1980s, when the employment distribution was a more muted, w-shaped one. It may be too soon to draw conclusions about the post-2000 labor market, a phase not covered in Wright-Dwyer's study, but the

<sup>4</sup> We based our measure of median wages for industry-occupation groups on the first year of the economic periods in question. To assess entire business cycles at the national level, Wright and Dwyer based their analysis on a business cycle-long aggregation of median wages. This approach is well fitted to describing general patterns of job growth across the many varied regions of the United States. But our analysis had different goals, mainly the assessment of metropolitan economic change and year-by-year analyses of the dynamics of economic growth. Changes in industrial and occupational composition and in pay are much more drastic in metropolitan regions than in the United States as a whole. Smoothing out wage rates over long business cycles would hinder, rather than aid, our analysis.

<sup>5</sup> For the 1980s, these shifts were reversed. Our method reassigns approximately 5 percent of the top-quintile job growth to the fourth quintile and close to 10 percent of the second-quintile growth to the first quintile.

<sup>6</sup> Wright and Dwyer (2003, 301) estimate full-time job growth of slightly more than 15 million for the period. The difference is attributable to our combination of the years 1999 and 2000 into a single reporting year, which reduced the estimated employment at the peak of the boom.

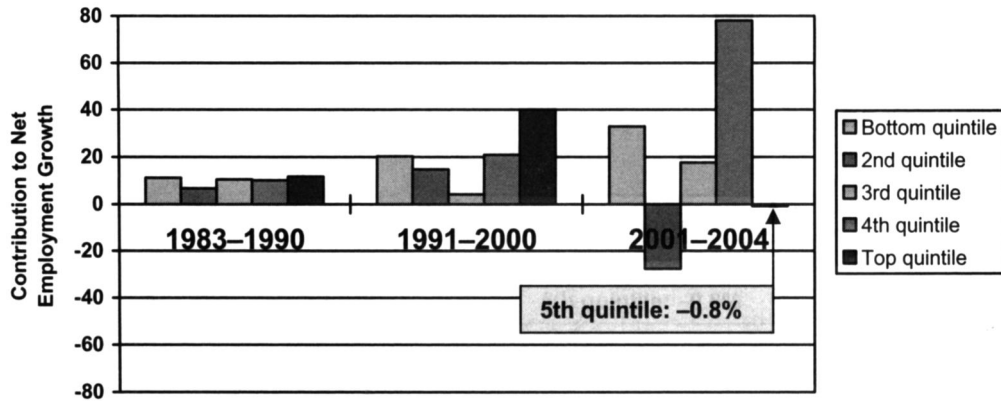


Figure 2. Distribution of employment change, United States, 1980s, 1990s, and 2000s. Source: Authors' calculations from the Current Population Survey, Merged Outgoing Rotation Groups. Larger growth shares in the 2001–2004 economic period indicate greater relative divergence in the fortunes of each wage quintile, not larger net employment growth or loss.

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evidence in Figure 2 suggests that the distribution of employment may be shifting again. The second quintile suffered heavy losses, particularly in manufacturing and less skilled finance, insurance, and real estate (FIRE) jobs, yielding a distribution that appears as a distorted N-shape in Figure 2. This distinctive distribution may portend an emerging phase of growth that is different from that of the 1990s, a form of “symmetric polarization” in which top-quintile growth is attenuated and the hole in the middle widens, while bottom-quintile jobs account for a significant share of growth.

The great advantage of this analysis is that it provides a means of locating individual industries and occupations within broader patterns of inequality. Table 1, which lists the fastest-growing (or, where growth is negative, contracting) industry-occupation groups for the five job-quality quintiles in the Chicago region, illustrates the potential of this approach. The growth of low-wage jobs, it shows, was led by food service jobs and entry-level clerical positions in the very manufacturing industries that had shed their production jobs. Job losses in the second job-quality quintile were led by lower-tier administrative jobs in the business services and FIRE sectors, which suffered heavily in the 2001 recession and its aftermath. At the top of the distribution, our analysis shows that the business-services sector was adding a substantial number of highly skilled jobs at the same time that it was shedding employment in the lower quintiles. Taken together, these tabulations capture the paths through which restructuring at the industry level—specifically, the simultaneous addition and subtraction of different occupational groups as competitive strategies shift—contributes to the economy-wide polarization of employment.

Before we proceed further, it is important to note some of the limitations of this kind of analysis. To ensure the comparability of data, we, like Wright and Dwyer, included only full-time positions. The exclusion of part-time jobs tends to inflate wage levels across the board, disproportionately removing workers from the bottom quintiles and from the service sector. (In 1983, 16.1 percent of the Chicago MSA workforce was employed part-time, a figure that slipped to 14.3 percent in 2004.)<sup>7</sup> The resulting undercount of low-wage workers is compounded by the fact that a rising share of employment in the

<sup>7</sup> While this drop appears to be somewhat counterintuitive, it mirrors the findings of Wright and Dwyer for the country as a whole.

Table I

### Characteristics of the Employment Distribution in Chicago (wage estimates in 2006 dollars)

Job Quality Quintiles	Three Most Rapidly Growing/Contracting Employment Categories in Each Quintile			Median Hourly Earnings 2001–2002
	Share of Employment 2001–2002 (%)	Share of Employment 2003–2004 (%)	Number of Jobs 2003–2004 (thousands)	
Bottom quintile	20.7	21.0	741	
				Food preparation and serving occupations
				Office and administrative support occupations, lower tier
				Business operation and financial specialists
Second quintile	19.3	18.5	652	
				Office and administrative support occupations, middle tier
				Transportation and material moving occupations, lower tier
				Office and administrative support occupations, middle tier
Third quintile	20.8	20.6	725	
				Installation, maintenance, and repair workers
				Sales occupations, middle tier
				Sales occupations, upper tier
				Health care practitioners and technical occupations
Fourth quintile	20.6	21.0	744	
				Transportation and material moving occupations, upper tier
				Business operation and financial specialists
				Business operation and financial specialists
Top quintile	18.6	18.8	664	
				Computer and mathematical occupations
				Architecture and engineering occupations

Source: Authors' calculations from the Current Population Survey, Merged Outgoing Rotation Groups.

Note: FIRE = finance, insurance, and real estate.

lower reaches of the labor market is effectively “off census,” given the significant increases—especially since the early 1990s—in various forms of “informal” work, labor-only subcontracting, day labor, and other forms of contingent employment (Theodore and Peck 2002; Peck and Theodore forthcoming). These data limitations mean that the overall level of inequality is likely to be understated, if anything, according to our measures, especially in more recent periods. (The bottom quintile in the following inequality histograms would be significantly larger if part-time and “unregulated” work were to be included; one may even visualize an additional, “off-the-chart” bar to the left of the bottom quintile, which could exceed the size of the fifth quintile of the formally measurable labor market.) Moreover, the muting effect on inequality profiles is likely to be greater in Chicago than in the nation as a whole, given the known scope and intensity of the growth of the “irregular” low-wage labor market in the city.<sup>8</sup>

## Polarized Growth, Chicago Style

What kind of transformation has Chicago experienced, in the period “after” deindustrialization? Here we use inequality histograms to trace the “shape” of successive waves of growth and restructuring, beginning with the immediate “postcrisis” period.

### The 1980s

Figure 3 breaks down the 1980s expansion into an initial recovery phase, following the “double-dip” recession of the early 1980s, and a later, more mature, period of the business cycle. The initial recovery was disproportionately associated with job growth in the bottom half of the labor market, the lowest quintile alone accounting for 61 percent of net job gains (compared to 16 percent nationally). The largest share of this bottom-end growth came from the retail sector, although the middle-quintile segment was also sustained by job creation from FIRE, transportation, and nondurable manufacturing. This finding confirms Bluestone and Harrison’s (1982) early diagnosis, which argued that the highest rates of growth in contingent and low-wage jobs were occurring in deindustrializing regions.

During the first major wave of deindustrialization, from 1979 to 1986, the Chicago metropolitan area lost 358,000 manufacturing jobs and the economy-wide workforce shrank by 12 percent. During the same period, per capita incomes—which rose by a national average of 3.7 percent—fell by 6.6 percent in the city of Chicago.<sup>9</sup> Particularly heavy losses were sustained in the primary metal and metal fabrication sectors and in industrial, electronic, and transport equipment, which together shed 247,000 jobs. Overall, manufacturing accounted for 87 percent of net job loss in the Chicago-area economy during this period of contraction, more than three times its (28 percent) share of total employment in 1979.

Throughout most of the 1980s, Chicago’s manufacturing sector experienced declines in employment across every one of its constituent subsectors. This said, the onset of

<sup>8</sup> Various aspects of the structural expansion of low-wage and contingent employment in Chicago have been documented in recent years (see Peck and Theodore 2001, 2008; Theodore 2003; Venkatesh 2006). A persistent downward drag in pay and conditions has been generated—by way of institutionally and racially stratified forms of competition, crowding, and coercion—that has swelled the ranks of “uncounted” workers. These developments, which have been extensively explored in case studies, clearly cannot be dismissed as some labor-market “subculture”; they are part and parcel of the broader patterns of economic restructuring that we describe here. Statistical exclusions and discontinuities, however, prevent their formal incorporation in the ensuing analysis, the “whole economy” reach of which is constrained by the availability of consistent, longitudinal data.

<sup>9</sup> Income data are for 1979–1985 (Wiewel 1990).

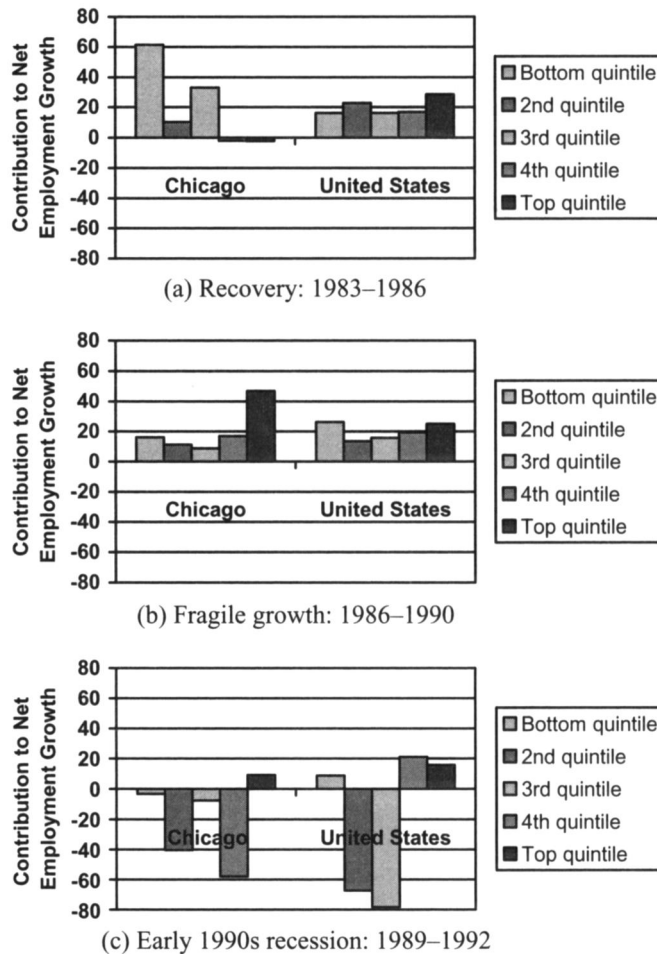


Figure 3. Employment growth 1983–1990—net change by wage quintile, Chicago CMSA and United States. Source: Authors' calculations from the Current Population Survey, Merged Outgoing Rotation Groups.

deindustrialization was not the terminal event that many foresaw at the time. While durable manufacturing, the backbone of the city's Fordist economy, suffered severe losses in the first half of the 1980s, the sector also contained pockets of resilience (Wiewel 1990). By the end of the decade, the downsized—but also reorganized and restructured—manufacturing sector would be rooted in industries such as professional and scientific instruments, as well as industrial machinery and equipment.

Still, the net consequences of economic restructuring in the 1980s were unmistakable: growth sectors were primarily associated with white-collar occupations, while losses were heavily concentrated in the blue-collar workforce, with the result that “new” jobs were paying 40 percent to 50 percent less per hour than those the economy was shedding (Center for Urban Economic Development 1989; Wiewel 1990). To the extent that “good” jobs were generated during the period, in Chicago at least, these jobs appeared only toward the end of the 1980s expansion. In the second half of the 1980s, as Figure 3 reveals, top-quintile jobs contributed more than any other segment to net employment

growth, even outstripping the national rate of growth. In Chicago, it was professional and managerial jobs in durable manufacturing, FIRE, and business services that were driving the expansion, adding 118,000 net new jobs to the top quintile of the labor market in the last five years of the 1980s expansion.

### The 1990s

The period of weak positive employment growth at the end of the 1980s, however, proved to be short-lived. Soon, the national economy was back in recession. Between July 1990 and February 1991, the United States shed 1.1 million jobs, approximately 45 percent of which were in the manufacturing sector. And it was manufacturing that again bore the brunt of the downturn in Chicago. Here, 115,000 jobs were lost across the bottom four quintiles of the labor market, with the heaviest losses occurring in the durable manufacturing and transportation sectors, which underwent a generalized contraction that affected a range of occupations from machinists to administrative staff to middle-level management (see Figure 3). The 8-percent contraction in manufacturing employment between 1989 and 1992 was again led by engineering-related industries, such as transportation equipment, metal fabrication, instruments and related products, and industrial machinery.

At least compared to the previous recession, the “leaner” manufacturing sector weathered the early 1990s downturn relatively well. The distinctive feature of this “postindustrial” recession was the generalization of employment vulnerability to the once-secure white-collar segments of the job market. Corporate “downsizing” would subsequently become a characteristic of a permanently restructuring labor market (see New York Times 1996; Bluestone and Harrison 2000; Peck 2002). In Chicago, it was the fourth quintile of the employment structure that bore the heaviest job losses in this historically distinctive recession—comprising executives, middle- and upper-tier managers, and senior administrators across the durable manufacturing, construction, transportation, public administration, and even FIRE sectors.

The subsequent recovery, which began in 1991, was at first a relatively weak one, both for Chicago and for the nation as a whole. Although growth wavered slightly in the middle of the decade, this proved to be a midcourse correction, rather than the beginning of a slowdown. The strongest gains in employment, profitability, and productivity were concentrated in the second half of the decade (see Pollin 2003). Significantly, distributional outcomes also varied across the long boom of the 1990s: in the first half of the expansion, job growth was dominated by the top quintile, and more so in Chicago than in the country as a whole (see Figure 4). If the national expansion was markedly U-shaped, the Chicago pattern was much more asymmetrical, if not J-shaped. The most buoyant segments of the labor market were for managerial and professional workers in construction, business services, and professional services, followed some distance behind by durable manufacturing.

Chicago’s manufacturing sector achieved no more than anemic growth during the “boom” years of the 1990s, adding only 2.6 percent to its workforce between 1993 and the decade’s peak manufacturing year of 1998. This growth in the manufacturing sector was profoundly uneven and masked many instances of continued job loss at the industry level.<sup>10</sup> More fundamentally, the terms of employment were being progressively remade across the sector.

<sup>10</sup> Some sectors did markedly better than the manufacturing-sector average, with plastics and rubber products, computer and electronic products, transportation equipment, and electrical equipment leading the way. On the other hand, many industries continued to contract during the 1990s expansion, including chemicals, textiles and apparel, furniture, and primary metal manufacturing.

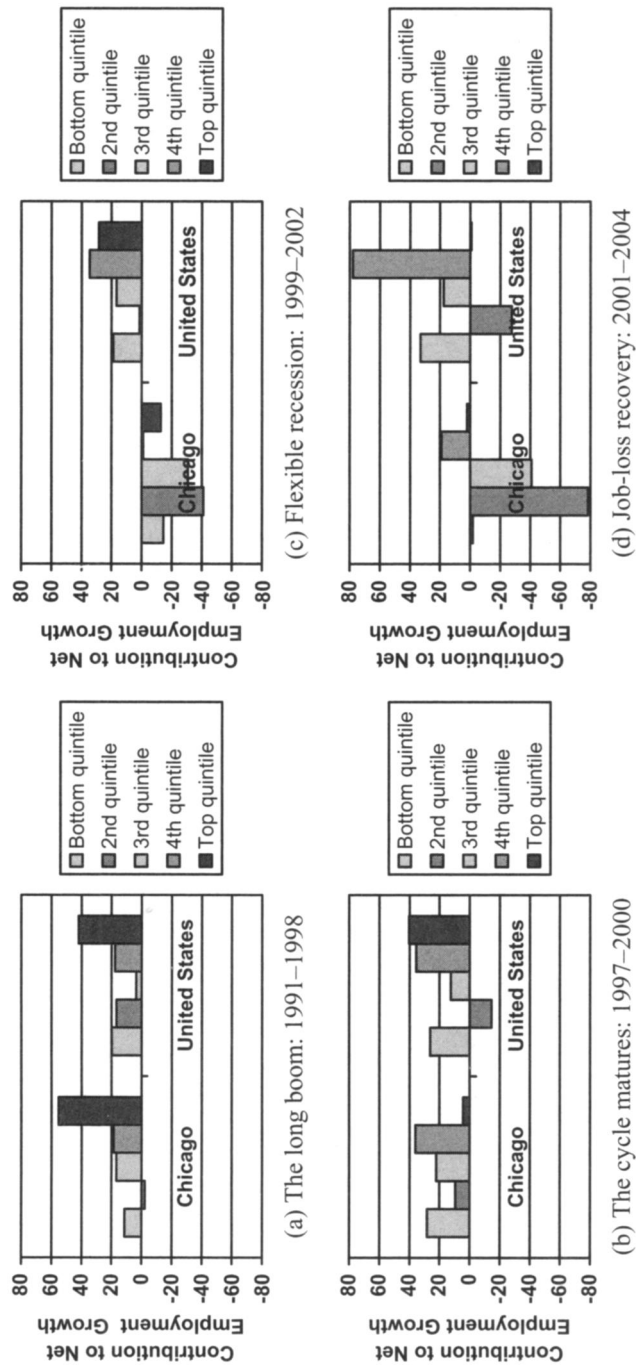


Figure 4. Employment growth 1991–2004—net change by wage quintile, Chicago CMA and United States. Source: Authors' calculations from the Current Population Survey, Merged Outgoing Rotation Groups.

One indication of the changes in employment was the rapid growth in temporary work throughout the manufacturing sector. Union resistance had held temporary work at bay during the 1980s, but during the 1990s, the number of production workers who were placed by temporary agencies surged. In 1990, a negligible 0.6 percent of the region's production workers were temporaries; at the time, 12 out of every 13 temporary-agency workers in Chicago were in white- or pink-collar occupations (see Theodore and Peck 2002). In the early 1990s recession, the temporary worker penetration rate jumped to 1.5 percent of production workers, before climbing steadily to 5.0 percent over the ensuing decade. By 2002, one in three of Chicago's (substantially enlarged) temporary workforce were blue-collar placements, many factories having "temped out" entire production functions—such as loading, packing, or light assembly work—while others had moved to filling permanent positions from a "pool" of temporaries (Peck and Theodore 2001). Near the peak of the economic cycle, in 1998, more than half of all "vacancies" in the city's manufacturing sector were for temporary workers, when it was estimated that 9 out of every 10 employers were using temporary workers (Gunset 1998). The full extent of these changes tends to be masked by "stock" measures of employment, since temping disproportionately affects the "flow" of vacancies (remaking employment relations in port-of-entry positions), together with a wide range of high-turnover occupations. Moreover, in the census, blue-collar temporary workers who are placed by agencies are counted as service-sector employees.

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### The 2000s

It was clear that Chicago was following a distinctive economic development path during the 1990s. The city participated only fitfully in the vaunted technology boom of the second half of the decade (see Weber, Gogoi, Palmer, and Crockett 2000), which across the country was tilting the employment structure strongly in favor of the top half of the income distribution (Wright and Dwyer 2003). Chicago shared some of the benefits of this pattern of growth, but its employment distribution was truncated in comparison: employment growth in the top quintile faltered badly, while the lowest quintile made the second largest contribution to net gains in jobs during this period. With the technology boom in full force in other parts of the country and the new-economy bubble as inflated as it would get, the leading edge of Chicago's labor-market expansion was instead defined by sales, cleaning, administrative support, and laboring jobs in the retail, transportation, and education sectors. A *Business Week* survey of the city at the peak of the dot-com boom concluded that "Chicago is slipping as a business capital," its financial and technology sectors "lagging badly" in comparison to other U.S. cities (Weber, Gogoi, Palmer, and Crockett 2000, 162). Chicago's failure to identify and develop "sunrise" industries that could propel the local economy in the 21st century was interpreted by many as a new chapter in the old "rust-belt story." But with the bursting of the dot-com bubble, it became clear that high-technology development was not the sustainable growth engine that many observers had imagined.

In the wake of the dot-com bust, the 2001 recession, and the ensuing "job-loss recovery" (2001–2004), cities like Chicago were forced, again, to confront some of the same basic problems of deindustrialization: the loss of manufacturing jobs, polarized growth in employment, and an unstable economic base incapable of generating sustained income gains for much of the workforce. The city had not, in fact, fashioned a miraculous escape from the spiral of deindustrialization. A further round of deindustrialization was under way, well before the National Bureau of Economic Research declared that the national economy was in recession. As Figure 4 reveals, the city suffered generalized employment decline in the recession of 2001, followed by a profoundly uneven



“recovery,” marked by a net job loss and a continued decline across the bottom three-fifths of the employment distribution.

The current decade has been associated with further rounds of industrial restructuring. Every sector of manufacturing in the metropolitan area has registered employment losses, some of which have been precipitous. Table 2 compares this second “cold bath” with its predecessor. If the deindustrialization phase of the early 1980s permanently removed about one-third of the sector’s employment capacity, the post-1998 phase removed an additional quarter as heavy job losses have been sustained by the computers and electronic products, primary metal manufacturing, and electrical equipment industries—which together shed 66,000 jobs between 1998 and 2005. While manufacturing has again been the principal contributor to the stagnation of Chicago’s post-1998 labor market, there have also been losses in some nonmanufacturing segments of the economy, such as in the dot-com and telecommunications sectors, and in some parts of retailing.

198 By 2005, less than 12 percent of the Chicago metropolitan area’s workforce was directly employed in manufacturing, compared to 45 percent in 1963. While it should be noted that a not-insignificant proportion of services employment, from the temping out of assembly work to the outsourcing of janitorial and security work, represents jobs that were “relocated” from the industrial sector, the refashioning of these once-stable manufacturing positions into temporary jobs can itself be counted as a substantial cost of deindustrialization. Chicago’s consolation has been such that it now has one of the most diverse, or “balanced,” metropolitan economies in the United States, according to the bond-rating agency, Moody’s (Roeder 2003). Lacking a single “propulsive” industry or even a dominant cluster of industries, Chicago has sought to make a virtue of its increasingly diversified economic base, with localized strengths in fields as varied as commodity trading, conventions and business travel, logistics, tourism, and islands of specialized manufacturing.

## The Costs of Deindustrialization

Having developed a profile of employment change during the recoveries of the past 25 years, we now turn our attention to some of the distributional consequences of the restructuring of the Chicago economy. Although the 1980s expansion was long by contemporary standards, it was relatively weak. Nationally, it generated markedly less growth in the gross domestic product per worker and smaller productivity gains than did the recoveries of the 1960s and 1970s (Kotz 2003). This period also brought wage stagnation. At the expansion’s peak, average real hourly wages were lower than they had been in 1981 (at \$16.32, compared to \$16.78) and far lower than they had been at their historic high of \$19.16 in 1972 (in 2006 dollars). Moreover, the fact that both poverty rates and income inequality continued to rise, even in the midst of a sustained economic expansion, suggested that the benefits of growth were flowing to an increasingly narrow segment of the income spectrum.

The more recent rounds of unequal growth have further entrenched income disparities in Chicago, and the postindustrial dynamic of wage polarization appears to have intensified. In the middle of the income distribution, the picture is one of stagnation; the median full-time worker in 2004 earned 3 percent less than in 1983. Lower-income workers, however, have faced far greater losses. Full-time workers at the 25th percentile in 1983 earned \$12.65 per hour; in 2004, they earned \$11.75, or 7 percent less (in 2006 dollars). The losses were heaviest at the bottom of the income distribution. A worker in the 10th percentile of earners was paid \$9.10 per hour in 1983 but just \$8.00 per hour in 2004. For these low-wage workers, the net effect of three successive phases of economic

**Table 2**  
**Two Cold Baths: Manufacturing Employment in the Chicago MSA, 1979–1986 and 1988–2005**

Sector (SIC)	Employment 1979 (thousands)	Employment Change 1979–1986 (%)	Sector (NAICS)	Employment 1998 (thousands)	Employment Change 1998–2005 (%)
Electronics and other electric equipment	132	–34	Fabricated metal product manufacturing	98	–20 <sup>a</sup>
Primary metal industries	130	–51	Machinery manufacturing	69	–32 <sup>a</sup>
Industrial machinery and equipment	119	–48	Computer and electronic product manufacturing	67	–50
Fabricated metal products	116	–32	Food manufacturing	59	–16 <sup>b</sup>
Printing and publishing	81	–9	Primary metal manufacturing	52	–39
Food and kindred products	73	–24	Printing and related support activities	46	–15 <sup>a</sup>
Chemicals and allied products	52	–36	Chemical manufacturing	45	–4
Transportation equipment	49	–50	Plastics and rubber products manufacturing	43	–13
Instruments and related products	36	–46	Electrical equipment, appliance, and component manufacturing	35	–35
Rubber and miscellaneous plastics products	35	–21	Miscellaneous manufacturing	33	–16 <sup>c</sup>
Paper and allied products	30	–26	Transportation equipment manufacturing	27	–18
Miscellaneous manufacturing industries	29	–43	Paper manufacturing	25	–18
All manufacturing	971	–37	All manufacturing	660	–25
Total employment	3,437	–12	Total employment	4,271	0

Sources: U.S. Bureau of Labor Statistics, Quarterly Census of Employment and Wages, Metropolitan-level SIC data, Chicago CMSA; U.S. Bureau of Labor Statistics, Quarterly Census of Employment and Wages, Reconstructed NAICS Base Data, Chicago CMSA.

Note: SIC = Standard Industrial Classification; NAICS = North American Industry Classification System.

<sup>a</sup> Authors' estimates; data suppressed 2001–2005.

<sup>b</sup> Authors' estimates; data suppressed 1998–2000.

<sup>c</sup> Authors' estimates; data suppressed 2005.

Table 3

*Change in Wage Distribution, Chicago MSA, 1983–2004 (hourly wages in 2006 dollars)*

Percentile of Earner (full-time workers, age 18–64)	1983 Wage	2004 Wage	Change
10th percentile	\$9.10	\$8.00	–12%
25th percentile	\$12.65	\$11.75	–7%
50th percentile	\$18.20	\$17.60	–3%
75th percentile	\$25.30	\$25.70	2%
90th percentile	\$33.70	\$36.95	10%

Source: Authors' calculations from the Current Population Survey, Merged Outgoing Rotation Groups Data, 1983 and 2004.

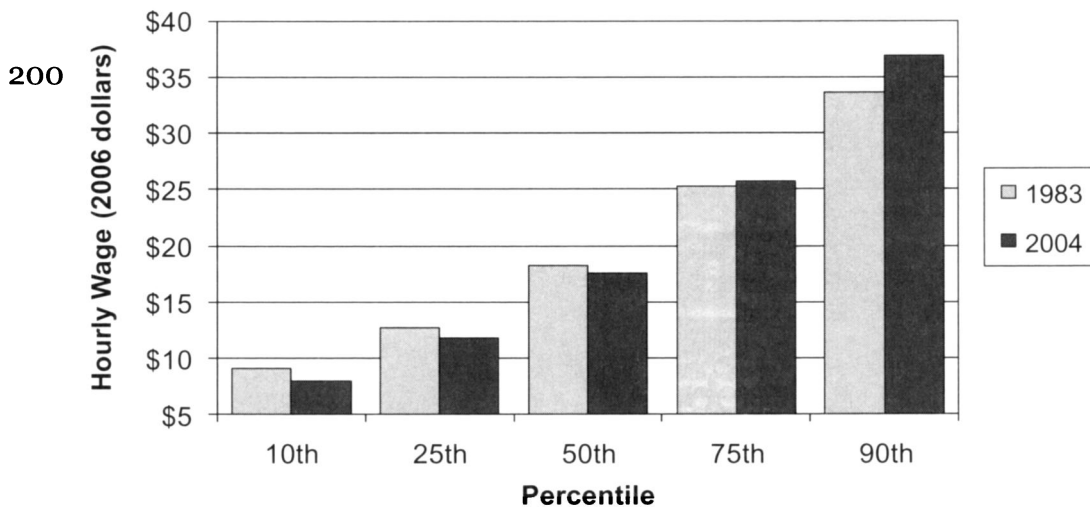


Figure 5. Hourly earnings of full-time workers in the Chicago CMSA, 1983 and 2004.

expansion was a 12-percent decline in wages (see Table 3). These trends were reversed in the upper half of the income distribution, and particularly at the top. In 2004, the wealthiest workers—those in the 90th percentile, with an hourly wage of \$36.95 per hour—earned 10 percent more per hour than did their equivalents in 1983 (see Figure 5). The nonwage incomes of this group of highly paid workers, not measured here, also increased sharply over this period, further stretching the wealth distribution.

We can therefore conclude that even as the distributional form of successive phases of growth and retrenchment in Chicago has differed, there has been a consistent trend toward the widening of income inequalities over time. In 1983, a typical employee in the bottom quintile of the earnings distribution, a retail sales worker, earned 43 percent of the median income of a typical worker in the top quintile, a bottom-tier technical specialist (e.g., a programmer or financial analyst) in the FIRE sector. In 2004, the median income of these lower-tier retail workers had slipped to 36 percent of these high-end service workers.<sup>11</sup>

<sup>11</sup> The reshuffling of the CPS occupational codes prevented us from making direct comparisons past the end of the 1990s business cycle.

Inequalities have also widened *within* the manufacturing workforce. In 1983, a typical second-quintile worker, a machine operator in durable manufacturing, earned 55 percent of the wages of highly skilled professional specialists within the industry. By 2000, the median income of these shop-floor workers was just 42 percent of the median income of professional specialists in the manufacturing sector.

In fact, across the Chicago labor market as a whole, the closer one moves toward the bottom of the wage distribution, the steeper the drop-off in hourly wages from 1983 to 2004. Notably, this decline in real wages occurred within the context of robust job growth at the bottom of the labor market. So, even though low-end, entry-level jobs have been one of the primary sources of employment growth during the previous quarter century, this “rising tide” singularly failed to lift wages. To the contrary, a swelling population of workers—disproportionately, workers of color—has become “trapped” in the increasingly crowded zone at the bottom of the labor market, where the terms of employment have deteriorated significantly. Nowhere have these changes been experienced with greater intensity than among Chicago’s African-American population. Some of the first victims of deindustrialization (Wilson 1987), African-American workers have experienced a dramatic deterioration in both their chances for and conditions of employment. The employment rate of less well-educated African-American men, in particular, has fallen precipitously in central cities—and more sharply in Chicago than almost anywhere else in the country—in the period since the 1980s (Kirschenman and Neckerman 1991; Offner and Holzer 2002; Peck and Theodore 2008), as an entire demographic group has been “left behind” by a restructuring labor market. The same processes have, in turn, positioned recent immigrants, especially from Latin America, at the front of the queue for insecure, low-wage jobs—their often undocumented status rendering them uniquely vulnerable to exploitative employment practices (Massey, Durand, and Malone 2003; Wright and Dwyer 2003).

Among the most important factors at work in this regard has been the erosion of the inflation-adjusted value of the minimum wage, which fell in real terms by 13.4 percent (from \$6.78 per hour in 1983 to \$5.87 per hour in 2004—in 2006 dollars). Most of the expansion in low-wage jobs occurred within this zone of minimum-wage erosion. The falling real value of the minimum wage has lowered the floor under the wage-setting process and eroded the bargaining power of workers at somewhat higher income levels (Pollin, Brenner, and Luce 2001). This decline in real wages persists well into the middle of the wage spectrum, where other institutional factors regulate wage setting (for example, in the range of \$10 to \$15 per hour). Here, falling union density and the rise of contingent work have played an important role in undermining wages.

Like many industrial cities, Chicago has experienced a dramatic decline in union density since the early 1980s, part of the broader shift away from collective representation and bargaining, especially in manufacturing (see Hirsch, Macpherson, and Vroman 2001). Our data show that this decline has been particularly intense in the first and second wage quintiles of the Chicago labor market—that is, in jobs paying a median wage of \$16 per hour or less. Between 1984 and 2002, union density fell from 29 percent to 16 percent in the lowest quintile of earners and from 22 percent to 16 percent in the second quintile. Deunionization has been a key component of the wider processes of deindustrialization that have been under way in Chicago since the late 1970s. Capital flight shifted formerly unionized jobs out of the region, and unions were put on notice that the threat of the runaway shop was real. The bargaining power of unions has suffered ever since, setting the stage for concession bargaining, wage and benefit givebacks, whipsawing, and a rolling program of aggressive anti-union campaigns by local employers (Mehta and Theodore 2005).

These trends have been exacerbated by the growth in various forms of contingent work, which have contributed to the erosion of both pay levels and workplace conditions, especially for low-wage workers and those in entry-level positions. Contingent work is a factor in many industries that employ low-wage workers, including retail trade, business services, and construction, but some of the fastest rates of growth in contingent work have been recorded in the manufacturing sector. In the Chicago area, temporary agencies supply a large number of workers to fill manufacturing positions as laborers, machine operators, hand packers and packagers, and material movers (see Peck and Theodore 1998, 2001; Theodore 2003). In Chicago, the CPS shows that between 1984 and 2002, the size of the blue-collar temporary workforce ballooned by 790 percent, while the “regular” labor force of production workers in manufacturing fell by 24 percent. Nationally, the average hourly wages of production workers who are employed by the temporary staffing industry are approximately 30 percent lower than those of direct-hire workers in the same occupation (see Kilcoyne 2005; Peck and Theodore 2007).<sup>12</sup> So, in addition to providing numerical flexibility to manufacturers, the temporary staffing industry has provided a means of cutting wages and shedding benefits costs.

202 In these and other ways, the workplace has become a site of strategic experimentation, institutional reinvention, and cost cutting in the period after deindustrialization. In an effort to contain labor costs, employers across a range of industries have recalibrated their commitments to sustained employment and workforce benefits in favor of business-friendly flexibility and the bottom line. These forms of after-Fordist regulatory undercutting have driven down wages across the swelling lower reaches and in the “hollow middle” of the labor market, both in good economic times and in bad, resulting in a deeply entrenched pattern of wage polarization. Fitful bouts of growth, combined with pockets of episodic and structural decline, have remade the economic profile of the Chicago metropolitan area over the past three decades, as the propulsive role of manufacturing has progressively given way to a sprawling form of unstable, decentered growth. One of the few “constants,” alongside the prolonged ebbing of durable manufacturing, has been the consolidation of a regressive regime of income redistribution.

## Conclusion: Transforming Chicago

In Chicago, the first wave of deindustrialization powerfully symbolized the changing bargain between capital and labor, signaling a sea-change in once-settled expectations concerning the connections between economic growth and social equity. The deep manufacturing job losses of the 1980s presaged a prolonged restructuring of the industrial sector, substantial growth in services, and a broad renegotiation of the relationship between growth and equity. In this sense, deindustrialization in the 1980s signified not only the final throes of Fordist manufacturing, but also a foundational moment in the establishment of a new pattern of economic growth, together with a radically new regime of socioeconomic redistribution.

The long view of deindustrialization described here raises searching questions about the storied U.S. boom of the 1990s, the 2001 recession, and the weak expansion of the 2000s. First and foremost, the new-economy boom of the 1990s must be problematized not only for its polarizing tendencies, but also for its fragility and distinctive geography.

<sup>12</sup> In addition to reducing workers’ pay, temporary employment arrangements further weaken workers’ bargaining power in the workplace. The precariousness of employment, ease of dismissal, and labor relations laws that curtail the exercise of collective bargaining rights operate effectively to exclude most temporary workers from union protections (Mehta and Theodore 2003).

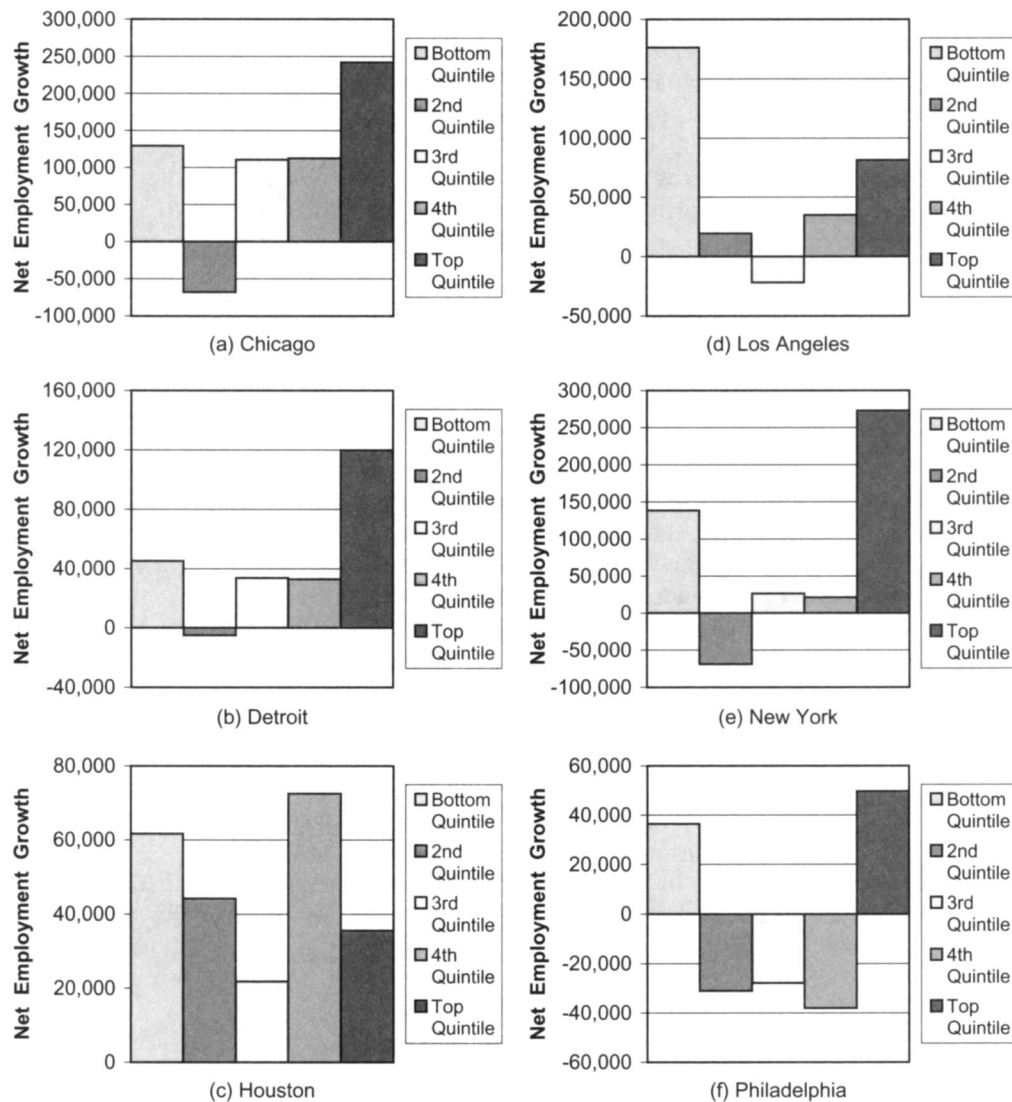


Figure 6. Urban inequality profiles for the 1990s expansion, selected CMSAs, 1991–2000. Source: Authors' calculations from the Current Population Survey, Merged Outgoing Rotation Groups. Note variation in scale.

Although we do not have the space to develop these arguments here, it is clear from our exploratory analysis of the growth and restructuring trajectories of other cities that not only is there a distinctive “Chicago pattern,” but there are also pronounced geographies of economic inequality at the urban scale that have yet to be adequately mapped, let alone understood. Figure 6, for example, compares Chicago’s experience of the 1990s boom with that of five other U.S. urban regions. While polarization is a characteristic of all these urban distributions, there is a marked difference between the L-shaped distribution found in Los Angeles (which was heavily tilted toward low-wage jobs), and the J-shaped pattern displayed by New York City, between which Chicago appears to be an intermediate case. Further contrasts are evident in the broadly distributed pattern of growth displayed by

Houston (which in this company emerges—uncharacteristically—as a beacon of relative equality) and the “hollowed-out” forms of growth displayed by Detroit and, even more vividly, by Philadelphia. Substantively, these data indicate that generalized accounts of “unequal growth” are, in fact, the composite outcomes of multiple regional trajectories, the specificities of which will likely reflect distinctive industry/occupation mixes, particular geographic conjunctures of restructuring tendencies, localized patterns of labor-market regulation, and so forth. Methodologically, they call attention to the need for further research at the urban and regional scales, especially comparative work, including further applications of the approach developed here.

In Chicago, in a more exaggerated fashion than across the country as a whole, the vaunted wage and employment gains of the 1990s were slow to develop and quick to dissolve. The bipolar growth model constructed during the decade was characterized by two discrete phases. In the first, from 1992 to 1998, the Chicago economy generated approximately 400,000 net new jobs, fully nine-tenths of which fell in the upper-wage quintiles 3–5. But the flipside of this surge in high-wage employment was the breakdown in job creation and income growth for mid-wage earners (particularly those in Quintile 2).

- 204 Openings for lower-wage workers during the longer, first phase of the boom were confined to the bottom quintile, together with an expansion in off-the-charts employment in the informal, unregulated, and undocumented economies. The labor-market tightening that so often is cited as the defining characteristic of the period was confined to the tail end of the expansion and quickly abated as the economy slowed. The last business cycle was built on the same foundations of service-sector employment and job-market flexibility, but was remarkable by virtue of the anemic rate of employment growth following the 2001 recession. Absent an unexpected return to the historically high growth rates of the late 1990s, it was difficult to see how the economy could generate meaningful gains for lower-wage workers. The frailty of the 2000s expansion and the economic collapse of late 2008 suggest that such conditions will not return for some time.

Ongoing job retrenchment in the manufacturing sector is centrally implicated in these continuing processes of uneven growth and wage polarization. Over the past quarter century, job losses, wage cuts, and increased temporary employment in Chicago’s manufacturing industries have been catalysts for the decline in mid-wage jobs in the local economy. Still, the potential role of manufacturing employment in mitigating economic inequality should hold a prominent place on policy agendas, since there is still considerable potential (much of it largely unexploited) to fashion innovative interventions to replace some of the missing rungs of the urban job-market ladder (see Bernhardt, Dresser, and Rogers 2001). By the same token, transformed labor-market rules are not the inevitable result of the decline in manufacturing. Their more proximate cause lies with the sustained institutional de/reregulation of the labor market in the period since the early 1980s. The falling real value of the minimum wage, sustained declines in union density, and the rise of contingent work as a structural component of Chicago’s “revitalized” economy have all eroded the supports upon which many low-wage workers have traditionally counted to safeguard earnings and job security. In previous accounts of deindustrialization, capital flight was singled out for its leading role in exposing workers to the whip of market discipline. Subsequently, deunionization and contingent work have exacerbated these trends, by enhancing the ability of employers to discipline workers *in place*. What may have begun as ad hoc experimentation with cost-cutting strategies in footloose industries has since diffused to a range of place-based service industries. Now, many of the industries—like retailing, construction, personal services, and even business services—that have led the way in cutting wages and making employment arrangements flexible are able to do so *even absent* credible threats of exit. Although Chicago’s search

for a new mode of growth remains essentially unresolved, these employment practices point to the transformed “rules of the game” upon which future job creation will be based. Chicago, it seems, is still discovering what comes after deindustrialization.

## references

- A success story. 2006. *The Economist*, 18 March, S3–S4.
- Abu-Lughod, J. L. 1999. *New York, Chicago, Los Angeles: America's global cities*. Minneapolis: University of Minnesota Press.
- Appelbaum, E.; Bernhardt, A. D.; and Murnane, R. J., eds. 2003. *Low wage America: How employers are reshaping opportunity in the workplace*. New York: Russell Sage Foundation.
- Barker, K., and Christensen, K. 1998. Controversy and challenges raised by contingent work arrangements. In *Contingent work*, ed. K. Barker and K. Christensen, 1–20. Ithaca, N.Y.: ILR Press.
- Bernhardt, A.; Dresser, L.; and Rogers, J. 2001. Taking the high road in Milwaukee: The Wisconsin Regional Training Partnership. *WorkingUSA* 5:109–30.
- Berry, B. J. L.; Cutler, I.; Draine, E. H.; Kiang, Y.-c.; Tocalis, T. R.; and de Vise, P. 1976. *Chicago: Transformations of an urban system*. Cambridge, Mass.: Ballinger.
- Bluestone, B., and Harrison, B. 1982. *The deindustrialization of America: Plant closings, community abandonment, and the dismantling of basic industry*. New York: Basic Books.
- . 2000. *Growing prosperity: The battle for growth with equity in the twenty-first century*. Boston: Houghton Mifflin.
- Center for Urban Economic Development. 1989. *Economic audit of Chicago: An identification of target industries*. Chicago: Center for Urban Economic Development, University of Illinois at Chicago.
- City on the brink: An editorial. 1981. *Chicago Tribune*, 10 May, 1, 12.
- Clavel, P., and Wiewel, W. 1991. Introduction. In *Harold Washington and the neighborhoods: Progressive city government in Chicago, 1983–1987*, ed. P. Clavel and W. Wiewel, 1–33. New Brunswick, N.J.: Rutgers University Press.
- Cohen, L. 1990. *Making a new deal: Industrial workers in Chicago, 1919–1939*. New York: Cambridge University Press.
- Drake, S. C., and Cayton, H. R. 1945. *Black metropolis: A study of Negro life in a northern city*. Chicago: University of Chicago Press.
- Federal Reserve Bank of Chicago. 1997. *Assessing the Midwest economy: Looking back for the future*. Chicago: Federal Reserve Bank of Chicago.
- Gunset, G. 1998. Factory jobs not extinct. *Chicago Tribune*, 15 October, B1.
- Harrison, B., and Bluestone, B. 1988. *The great u-turn: Corporate restructuring and the polarizing of America*. New York: Basic Books.
- Hirsch, B. T.; Macpherson, D. A.; and Vroman, W. A. 2001. Estimates of union density by state. *Monthly Labor Review* 124(7):51–55.
- Kilcoyne, P. 2005. Occupations in the temporary help services industry. *Occupational employment and wages*, May 2004:6–9. Washington, D.C.: U.S. Department of Labor.
- Kirschenman, J., and Neckerman, K. M. 1991. “We’d love to hire them, but . . .”: The meaning of race for employers. In *The urban underclass*, ed. C. Jencks and P. Peterson, 203–32. Washington, D.C.: Brookings Institution.
- Kotz, D. 2003. Neoliberalism and the U.S. economic expansion of the 1990s. *Monthly Review* 54:15–33.

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- Longworth, R. C. 1981. City on the brink: "How much time do we have? . . . No time." *Chicago Tribune*, 10 May, 1, 12.
- Massey, D.; Durand, J.; and Malone, N. J. 2003. *Beyond smoke and mirrors: Mexican immigration in an era of economic integration*. New York: Russell Sage Foundation.
- McDonald, J. F. 1984. *Employment location and industrial land use in metropolitan Chicago*. Champaign, Ill.: Stipes.
- Mehta, C., and Theodore, N. 2003. Organizing temps: Representational rights and employers' responsibilities under Sturgis and Jeffboat. *WorkingUSA* 7:21–43.
- . 2005. *Undermining the right to organize: Employer behavior during union representation campaigns*. Chicago: Center for Urban Economic Development, University of Illinois at Chicago.
- Mishel, L.; Bernstein, J.; and Allegretto, S. 2007. *The state of working America 2006/2007*. Ithaca, N.Y.: ILR/Cornell University Press.
- Montgomery, D. 1979. *Workers' control in America: Studies in the history of work, technology and labor struggles*. Cambridge, U.K.: Cambridge University Press.
- New York Times. 1996. *The downsizing of America*. New York: Times Books/Random House.
- 206 Offner, P., and Holzer, H. 2002. Trends in employment outcomes of young black men, 1979–2000. Discussion Paper No. 1247-02. Institute for Research on Poverty, Madison, Wisc.
- Park, R. E., and Burgess, E. W. 1925. *The city: Suggestions for investigation of human behavior in the urban environment*. Chicago: University of Chicago Press.
- Peck, J. 2002. Labor, zapped/growth, restored? Three moments of neoliberal restructuring in the American labor market. *Journal of Economic Geography* 2:179–220.
- Peck, J., and Theodore, N. 1998. The business of contingent work: Growth and restructuring in Chicago's temporary employment industry. *Work, Employment and Society* 12:655–74.
- . 2001. Contingent Chicago: Restructuring the spaces of temporary labor. *International Journal of Urban and Regional Research* 25:471–96.
- . 2007. Flexible recession: The temporary staffing industry and mediated work in the United States. *Cambridge Journal of Economics* 31:171–92.
- . 2008. Carceral Chicago: Making the ex-offender employability crisis. *International Journal of Urban and Regional Research* 32:251–81.
- . Forthcoming. Labor markets from the bottom up. In *Handbook of employment and society: Working space*, ed. S. McGrath-Champ, A. Herod, and A. Rainnie. Cheltenham, U.K.: Edward Elgar.
- Pollin, R. 2003. *Contours of descent: U.S. economic fractures and the landscape of global austerity*. New York: Verso.
- Pollin, R.; Brenner, M. D.; and Luce, S. 2001. Intended vs. unintended consequences: Evaluating the New Orleans living wage proposal. PERI Working Paper No. 9. Available online: <http://ssrn.com/abstract=333241>
- Ranney, D. 2003. *Global decisions, local collisions: Urban life in the new world order*. Philadelphia: Temple University Press.
- Rast, J. 1999. *Remaking Chicago: The political origins of urban industrial change*. DeKalb: Northern Illinois University Press.
- Reich, R. B. 1992. *The work of nations: Preparing ourselves for 21st century capitalism*. New York: Vintage Books.
- Roeder, D. 2003. Moody's: Chicago economy most balanced in U.S. *Chicago Sun-Times*, 23 June, 57.
- Sassen, S. 2004. A global city. In *Global Chicago*, ed. C. Madigan, 15–34. Urbana: University of Illinois Press.

- . 2006. Chicago's deep economic history: Its specialized advantage in the global network. In *Chicago's geographies: Metropolis for the 21st century*, ed. R. P. Greene, M. Bouman, and D. Grammenos, 75–86. Washington, D.C.: Association of American Geographers.
- The 2008 global cities index. 2008. *Foreign Policy* 169:68–76.
- The city that survives—Chicago: A survey. 1980. *The Economist*, 29 March, 5–28.
- Theodore, N. 2003. Political economies of day labour: Regulation and restructuring of Chicago's contingent labour markets. *Urban Studies* 40:1811–27.
- Theodore, N., and Peck, J. 2002. The temporary staffing industry: Growth imperatives and limits to contingency. *Economic Geography* 78:463–93.
- Venkatesh, S.A. 2006. *Off the books: The underground economy of the urban poor*. Cambridge, Mass.: Harvard University Press.
- Weber, J.; Gogoi, P.; Palmer, A.T.; and Crockett, R. 2000. Chicago blues. *Business Week*, 16 October, 162–72.
- Wiewel, W. 1990. Industries, jobs, and economic development policy in metropolitan Chicago: An overview of the decade. In *Creating jobs, creating workers: Economic development and employment in metropolitan Chicago*, ed. L. B. Joseph, 27–58. Chicago: Center for Urban Research and Policy Studies, University of Chicago.
- Wilson, W.J. 1987. *The truly disadvantaged: The inner city, the underclass, and public policy*. Chicago: University of Chicago Press.
- Wright, E. O., and Dwyer, R. 2000. The American jobs machine: Is the new economy creating good jobs? *Boston Review* 25:21–26.
- . 2003. The patterns of job expansions in the USA: A comparison of the 1960s and 1990s. *Socio-Economic Review* 1:289–325.